



Annual Report

2022-2023



TEZPUR UNIVERSITY

Annual Report

2022-23

(Approved by the Board of Management of Tezpur University
vide Res. No. B.116/2023/6/2.1, dtd. 28 November 2023)



Specialized Knowledge Promotes Creativity

TEZPUR UNIVERSITY

Napaam, Tezpur 784028, Assam

www.tezu.ernet.in

CONTENTS

From the Vice Chancellor's Desk	1
Gist of the Annual Report 2022-23	5
Tezpur University: An Overview	7
Academic Profile	11
Research and Development Profile	15
Finance Profile	17
Students' Profile	21
Office of The Proctor	27
Training and Placement Cells	29
<i>Training and Placement Cell (Engineering)</i>	29
<i>Training and Placement Cell (Non-Engineering)</i>	33
The Statutory Bodies	--
The Board of Management	38
The Planning Board	40
The Academic Council	45
The Finance Committee	45
The Building Committee	46
Academic Departments and Centres	--
<i>School of Engineering</i>	--
Dean, School of Engineering	50
Department of Applied Sciences	54
Department of Civil Engineering	64
Department of Computer Science and Engineering	70
Department of Design	84
Department of Electronics and Communication Engineering	88
Department of Electrical Engineering	102
Department of Energy	110
Department of Food Engineering and Technology	124
Department of Mechanical Engineering	136
<i>School of Humanities and Social Sciences</i>	--
Dean, School of Humanities and Social Sciences	152
Department of Assamese	156
Department of Cultural Studies	164
Department of Education	170
Department of English	180
Department of Foreign Languages	184
Department of Hindi	188
Department of Law	194
Department of Linguistic and Language Technology	200
Department of Mass Communication and Journalism	210

Department of Social Work	218
Department of Sociology	224
Centre for Endangered Languages	230
Chandraprabha Saikiani Centre for Women Studies	232
Dr. Ambedkar Chair	237
<i>School of Management Sciences</i>	--
Dean, School of Management Sciences	243
Department of Business Administration	245
Department of Commerce	253
Centre for Disaster Management	261
Tezpur University Intellectual Property Rights Cell	263
<i>School of Sciences</i>	--
Dean, School of Sciences	269
Department of Chemical Sciences	271
Department of Environmental Science	291
Department of Mathematical Sciences	303
Department of Molecular Biology and Biotechnology	311
Department of Physics	331
Centre for Petroleum Biotechnology	333
Centre for Yoga and Sports Sciences	346
Centre for Distance and Online Education	348
Centre for Multidisciplinary Research	352
Central Facilities	--
Alumni Cell	363
Central Library	365
Centre for Inclusive Development	369
Centre for Innovation, Incubation and Entrepreneurship	374
Centre for Public Policy and Governance	376
Centre for University-Industry Interface	378
Computer Centre	380
Engineering Cell	384
Health Centre	388
Horticulture Section	390
International Students Office	392
Internal Complaints Committee	394
Internal Quality Assurance Cell	396
Sophisticated Analytical Instrumentation Centre	398
Teaching Learning Centre	400
Technology Enabling Centre	404
Programmes Organized by Tezpur University	412
Statistics of the Year	416



Professor Shambhu Nath Singh
Vice-Chancellor



Tezpur University

(A Central University)

Tezpur 784028, Assam
India

- *Visitor's Best University Award 2016*
- *NIRF India Rankings 2016: 05*
- *Accredited with 'A+' Grade by NAAC*
- *THE Asia Rankings 2018: 100*

Phone: 03712-267003(O)

Fax : 03712-267006

E-mail : vc@tezu.ernet.in

Prof. Shambhu Nath Singh
Vice Chancellor

From the Vice Chancellor's Desk

With great pleasure and humility, I endorse the Annual Report of Tezpur University highlighting our major activities and achievements for the year 2022 – 2023.

Established in 1994 with an aspiration to create an institution that would 'Develop Human Excellence and Inculcate Leadership through Hard work and Creativity', Tezpur University has completed the glorious twenty-nine years of its existence. Since its inception, each activity of the University has remarkably resonated with its vision and has been successfully mediating between Industry-Academia enterprises while addressing regional and local issues amidst global requirements.

Since we are a fully residential campus, we faced significant challenges in reviving the usual physical mode of teaching and learning in November 2022 after a global setback caused by the COVID-19 pandemic for almost two years. It was never easy to transition from online again to offline mode of classes and other pedagogical activities all of a sudden on a residential campus, as society was not yet fully convinced about the containment of the Pandemic. However, the COVID-19 Task Force constituted by the University and the office of the Dean, Students' Welfare (DSW) in association with students, parents, and faculty members, could seamlessly complete the phase-wise reclamation of students through meticulous planning and execution. The physical and mental well-being of the students is one of the top priorities of the University mechanism. Activities such as Annual Events as well as club-specific events conducted by the DSW office in association with the Tezpur University Students Council (TUSC) have a positive impact on the students' growth and development. The Proctor's office constitutes an Anti-Ragging Squad that takes care of the newly admitted students and ensures that no untoward incident takes place and no student is harassed by any means.

The University presently runs 76 academic programs (PhD, MTech, MA, MSc, MBA, Integrated MA, Integrated MCom, Integrated MSc, Integrated BScBEd, PG Diploma, Certificate courses, and professional courses such as MBA (Executive), Master of Tourism and Travel Management, Master of Design, MCA, LLM, etc.) in 27 departments and 13 centres for a total of 4,601 students where 2,060 are female students (44.8%) while 2,541 (55.2%) are male students. The Centre for Distance and Online Education (CDOE) has been successfully conducting various courses since its inception in 2011. All the departments offer open elective (OE) courses based on the Choice Based Credit System (CBCS) in their academic curriculum to fortify interdisciplinarity and collaborative learning. A total of 19 international students from more than 17 different countries are enrolled in various academic programmes across departments. Total faculty members

and staff in both teaching and administrative parlance are currently 536. The Government of India provisions of reservation and rosters are strictly adhered to in every respect including students' admission as well as teaching and non-teaching staff recruitment. Among 274 faculty members, 14.2% are SC, 8% are ST, and 25.5% are OBC while among 262 non-teaching employees, 16.8% are SC, 9.5% are ST and 33.6% are OBC. With over 1,45,843 collections comprising books, periodicals, journals, theses, dissertations, manuscripts, etc., the University's Central Library is a rich repository of knowledge and information. The Library is fully modernized with a Radio Frequency Identifier (RFID) system, automated with the KOHA open-source software, which is an integrated multi-user library management system that supports all its In-house operations. The library maintains the research publications in the Knowledge Repository (Institutional Repository) and Theses and Dissertations in Electronic form in the ETD server.

The University's publication record during the reporting period is quite encouraging with 558 journal papers, 30 books, 155 book chapters, and 63 conference proceedings among other forms of publications. Many faculty members are members of prestigious bodies and have been engaged as editors, members of the editorial board, and reviewers of several highly acclaimed journals and publication houses.

Despite several challenges in a post-Covid situation, the University hosted a number of important activities including the 20th Convocation which was held on 30th December 2022 in physical mode where Padmashree Professor Sankar Kumar Pal, Member, European Academy of Sciences and Arts, National Science Chair, SERB, Govt of India was the Chief Guest while Professor Shekhar C Mande, Distinguished Professor, Bioinformatics Centre, Savitribai Phule Pune University was the Guest of Honour and Governor of Assam and Chancellor Shri Jagadish Mukhi was an esteemed invitee. During the 20th Convocation, a total of 1362 students including students from the Centre for Distance and Online Education, received the degrees and diplomas while a total of 48 Gold Medals were awarded to the toppers of different UG and PG programmes.

The 44th meeting of the Academic Council and the subsequent BoM resolution approved the strategies for implementation of NEP-2020 through the Four-Year Undergraduate Programme (FYUGP) from the next academic year is another remarkable attainment. The University's Centre for Multidisciplinary Research was established in 2020 to offer a PhD programme in conformity with the NEP-2020's provisions for encouraging an interdisciplinary approach to research in Higher Education Institutions.

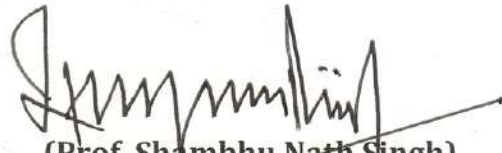
Several significant MoUs including three international MoUs with the Dalhousie University, Canada, Mongolian National University of Education (MNUE), and Universiti Teknologi Malaysia, Malaysia have been signed and functionally executed during this reporting period. Some other MoUs with University of Auckland, Vietnam Military Medical University, Queen's University Belfast, Management and Science University Malaysia, University of Malaya, Public Works (Building & NH) Department, Govt. of Assam, EBRAIM, Indian Oil Corporation Limited, Foundation for Integrated Support and Solution (FISS), Indian Army's HQ 4 Corps, B. Borooah Cancer Institute Guwahati, Defence Research Laboratory Tezpur, ICAR Ranchi, Assam Cricket Association, Indian Institute of Tropical Meteorology Pune, CSIR-Central Building Research Institute Roorkee, State Institute of Panchayat and Rural Development Guwahati, NERIWALM Tezpur, TIMES Hospital Tezpur, Swagat Super Speciality Surgical Hospital Guwahati, Pabhoi Greens Pvt.

Ltd. Biswanath Assam, Information and Library Network Centre Gandhinagar, and Regional Centre for Biotechnology Faridabad are also functional currently.

Respecting the protocols and guidelines for safeguarding environmental and ecological diversity, the University has been practicing bio-waste management, waste segregation, solar energy in select establishments, periodical plantations and cleanliness drives, etc. The University has provided uninterrupted power, potable water as well as wi-fi facility to its more than five thousand residents. Also, the University's Animal Protection Committee has conducted several vaccination programs during the reporting period.

While concluding my remarks, I humbly acknowledge the support received from UGC and MoE, GoI as well as every student, staff, and faculty member of the University during this reporting period. I wish all the stakeholders of the University a highly productive and rewarding year ahead.

Dated: 28.11.2023
Tezpur



(Prof. Shambhu Nath Singh)
Vice Chancellor

GIST OF THE ANNUAL REPORT 2022-23

Academic Departments	: 27
Academic Centres	: 13
Academic Programmes	: 76
Students	: 4601
Female Students	: 2060
Male Students	: 2541
International Students	: 19
Teachers	: 274
Female teachers	: 73
Male teachers	: 201
Teachers (General)	: 141
Teachers (SC/ST/OBC/EWS)	: 133 (SC-39, ST-22, OBC-70, EWS-02) (including 7 PWD)
Non-teaching employees	: 262
Female employees	: 32
Male employees	: 230
Non-teaching employees (General)	: 104
Non-teaching employees (SC/ST/OBC/EWS)	: 158 (SC-44, ST-25, OBC-88, EWS-01) (including 9 PWD)
Total Departments under UGC-SAP (DRS II)	: 03
Total Departments under DST-FIST	: 07
Departments under Centre of Excellence (under DST's National Mission for Sustaining the Himalayan Ecosystem)	: 01
Books added in the Central Library to the total collection	: 3522 books totaling 113121
National & International MoUs signed (both ongoing & new)	: 36
Sponsored ongoing projects	: 202
New projects sanctioned during the year	: 22
International collaborative research projects (Ongoing)	: 13
Total outlay of research projects (both ongoing and new)	: Rs. 25,56,76,023
Total amount earned through consultancy projects	: Rs. 48,03,827
Patents published & granted	: Published: 05, Granted: 06
Journal papers published	: 558
h-index	: 101
Books authored	: 30
Book chapters authored	: 155
Papers published in Conference Proceedings	: 63
Seminar/Workshop/Symposia/Lectures Organized	: 94

TEZPUR UNIVERSITY: AN OVERVIEW

Tezpur University, established on 21st January 1994 by an Act of Parliament of India, received a major morale boosting as the University was accredited with A+ grade by the National Assessment and Accreditation Council (NAAC). The University scored a Cumulative Grade Point Average (CGPA) of 3.41 on a 4-point scale in its 4th cycle of Accreditation. It has been praised for several strengths by the 6-member NAAC Peer Team who visited the University during 1 - 3 August 2022.

During the year reported (2022-23), the University offered 76 different programmes through 27 departments under four schools viz. School of Humanities and Social Sciences, School of Sciences, School of Management Sciences and School of Engineering. The University, also through Centre for Distance and Online Education, offered 06 programmes.

The University adopted Common University Entrance Test (CUET) for selection of candidates for admission in the year 2022. Admission was on merit, based on the score secured in the CUET PG/UG 2022, except in BTech, MBA, MSc in Molecular Biology and Biotechnology programmes.

For BTech, selection for admission was made based on All India Rank (CRL) of the JEE (Main) conducted by the NTA. Sixty percent of the total seats were filled up by the candidates from NE states as per approval of the statutory authority. Admissions to the remaining seats were made through the Central Counselling conducted by the JoSAA.

GATE-qualified candidates were directly admitted to the MTech Programmes based on merit of GATE scores. For admission to MBA programme, candidates were selected based on the scores of National tests such as MAT/CAT/XAT/ATMA/GMAT/CMAT and Personal Interview. Candidates of PhD programmes were selected based on the performance in NET/JRF/GATE/TUEE 2022 and in Personal Interview conducted by the concerned Departments.

A total of 13,651 applications were received through online mode for various programmes of studies. The number of candidates admitted to various programmes was 1,577 out of an intake capacity of 1,989, of which 44.77% were female students. The University reserved seats for the OBC (NCL), SC, ST, EWS and PWD categories as per the Govt. of India rules.

As on December 2022, the total strength of the students in the university was 4,601 and the percentage of reserved category students on the campus were 23.67% (OBC-NCL), 10.76% (SC), 7.63% (ST), 6.80% (EWS) and 0.63% (PWD). Some of the reserved seats could not be filled in after special admission drive also. The total number of foreign students at the University was 19. Overall, 78.70% of the students were from the state of Assam, while 20.89% students were from the rest of the country and 0.41% International students.

The University timely conducted its annual Convocation. The 20th Convocation was held on 30th December 2022, where Professor Sankar Kumar Pal, Padma Shri, Member, European Academy of Sciences and Arts, National Science Chair, SERB, Govt of India was present as the Chief Guest. Professor Shekhar C Mande, Distinguished Professor, Bioinformatics Centre, Savitribai Phule Pune University was present as Guest of Honour. Governor of Assam & Chancellor Shri Jagadish

Mukhi presided over the convocation. A total of 1,362 passed-out students from across the departments, including from Centre for Distance and Online Education, were eligible to receive the degrees and Diplomas in the Convocation. There were 70 students who were awarded PhD degrees in the Convocation.

During the year, the University continued its best efforts to create a conducive atmosphere for research activities. During the year 2022-2023, the University had forwarded 166 research proposals for consideration of approval to the funding agencies. A total of 202 externally funded research projects were ongoing with a financial outlay of Rs. 7,063.61 lakhs plus ₹105,428.75, £31,500 and 50,000 US\$ during the year, while 22 new projects were sanctioned. The ongoing research projects included 13 international collaborative projects of which 02 projects were under Indo-UK, 01 with Indo-Russian, 01 with Indo-Brazil, 02 with Nottingham University, 02 with CEFIPRA (Indo-French), 01 with Indo-Hungary, 01 with Indo-ASEAN, 01 with Indo-Sweden, 01 with ERASMUS (Indo-Greece-Italy) and 01 with Indo-USA. During this period, three departments were supported by DRS-II under the UGC-SAP. The University earned ~Rs. 2,11,87,250/- through consultancy during the fiscal year. This amount was earned as consultancy fee by individual faculty as well as by the departments of various Schools.

The students, researchers, and faculty members of the University by bringing honors to the university, kept up their exemplary work and contributed to the cause of the society. Some of the notable achievements are highlighted here. Dr Juri Dutta of Department of Assamese was bestowed with prestigious Sahitya Akademi Translation Award 2022, Prof Rupam Kataki of Department of Energy was awarded Indian Roads Congress Medal, Prof Pabitra Nath of Department of Physics was awarded JSPS Invitational fellowship program 2022, Dr Kusum Kumar Bania of Department of Chemical Sciences was awarded Dr JN Baruah Memorial Award, Dr Manashita Borah of Department of Electrical Engineering was awarded Fulbright fellowship to mention a few.

Our students during the mentioned period performed well in Academic, Co-curricular and Extension activities. A team of research scholars of Department of Electronics and Communication Engineering won 2nd position in the Dare to Dream Innovation Contest 3.0 organised by DRDO, Govt. of India. Ms. Koel Mandal, a research scholar was awarded best PhD thesis, Mr. Anshuman Borgohain, a research scholar was the lead author of a research article on dwarf galaxy formation study that was published in *Nature* under the supervision of Dr Rupjyoti Gogoi of Department of Physics. Mr Chinmoy Biswas, an NCC cadet was awarded Bir Chilarai Award 2022 while another NCC cadet-Ms. Prerna Talukdar was selected for coveted Republic Day Camp (RDC) 2023.

During the year 2022-23, the University received a total amount of Rs. 13,345.00 lakh under Grants-in-aid: Recurring, Salary, and Creation of Capital Assets. The University also generated Rs. 1,838.34 lakh as Internal Receipts which is a part of Grants-in-Aid: Recurring. Thus, the total fund available during the year was Rs 15,941.04 lakh. Against the same, an amount of Rs 15,936.60 lakh was spent during the year 2022-23. In addition, the University has received Rs 1,694.68 lakh towards grants for Extramural Research Projects, out of which Rs 2,680.24 lakh was utilized for such designated research projects.

With regard to infrastructure development, the University had constructed a 180 capacity RCC three-storied hostel for girls. In addition, a 40 capacity RCC two-storied hostel is under construction while 09 building projects including academic buildings and hostels under HEFA funding are currently under construction through PWD.

Tezpur University could implement crucial elements of National Education Policy 2020 to create a dynamic and forward-looking educational framework. The University has adopted Curriculum and Credit Framework for Undergraduate Programmes (CCFUP) to be implemented from the Academic Year 2023-24. Accordingly, the integrated masters' programmes of the University are now synchronized with the requirements of the CCFUP integrating the 4-year degree programme within it. Academic Bank of Credit (ABC) has been implemented and grade cards of all students from 2020 to 2022 have been uploaded in the National Academic Depository (NAD). Centre for Multidisciplinary Research (CMDR) was set up to widen up multidisciplinary research. The University is constantly aligning itself with the mandates of NEP 2020.

In terms of other activities like extension and outreach, skill development efforts, placement reports, achievements, etc. carried out by the University and its brief accounts have been reported in different sections of this Annual Report.

ACADEMIC PROFILE

The Academic Section deals with admissions, examinations, result declarations and other academic matters. This office has also been involved in conducting proceedings of a number of committees viz, Academic Council, Research Committee, Students Disciplinary Committee, Anti Ragging Committee, etc. and took action on the decisions of the committees. The Academic Council meetings were organised on 13 June 2022 and 20 December 2022, while Research Committee meetings were held on 10 November 2022 and 30 March 2023 with Controller of Examinations as the Member Secretary.

Programme of study

During 2022-23, 76 different programmes were offered for admission in 27 Departments. The programs were:

- *PhD Programmes:* Chemical Sciences, Environmental Science, Molecular Biology & Biotechnology, Mathematical Sciences, Physics, Computer Science & Engineering, Civil Engineering, Electronics & Communication Engineering, Energy, Food Engineering & Technology, Mechanical Engineering, Electrical Engineering, Applied Sciences, Business Administration, Commerce, English, Hindi, Mass Communication and Journalism, Education, Sociology, Social Work, Assamese, Linguistics and Language Technology, Women Studies and Multidisciplinary Research.
- Centre for Multidisciplinary Research was established for offering PhD programme in conformity with the NEP-2020.
- *MTech Programmes:* Information Technology, Electronics Design & Technology, Bioelectronics, Food Engineering & Technology, Mechanical Engineering, Civil Engineering, Energy Technology, Computer Science & Engineering.
- *MSc Programmes:* Physics, Chemistry, Mathematics, Molecular Biology & Biotechnology, Environmental Science.
- *MA Programmes:* English, Linguistics & Language Technology, Cultural Studies, Mass Communication & Journalism, Sociology, Hindi, Social Work, Education, Communication for Development, Assamese.
- *5-years Integrated MSc Programmes:* Physics, Chemistry, Mathematics, Life Science.
- *5-years Integrated MCom Programme:* Commerce
- *5-year Integrated MA Programme:* English
- *4-year Integrated BScBEd Programmes:* Physics, Chemistry, Mathematics.
- *BTech Programmes:* CSE, ECE, EE, ME, Civil Engg., FET, and Lateral entry in EE and FET.
- *Other Professional programmes:* MBA, MBA (Executive), MCA, LLM, MCom, Master of Tourism and Travel Management (MTTM), BEd and Master of Design (MDes). MDes is a new programme offered by Department of Design.
- *PG Diploma Programmes:* PG Diploma in Translation (Hindi), PG Diploma in Women's Studies, PG Diploma in Child Rights and Governance.
- *Certificate Programmes:* 1-year certificate in Chinese and one semester certificate in NSE Certified Capital Market Professional. The NSE Certified Capital Market Professional (NCCMP) programme has been offered as a self-financing Part Time course.

Admission

Selection of candidates for admission was on merit, based on the score secured in the CUET (PG/UG)-2022 (except in BTech, MBA, MSc in Molecular Biology and Biotechnology programme). The candidates were admitted provisionally considering the marks of the prefinal semester of qualifying examinations subject to the condition that they would submit the necessary pass certificates in subsequent months.

For BTech programme, selection for admissions was made based on All India Rank (CRL) of the JEE (Main) conducted by the NTA. Sixty percent of the total seats were filled up by the candidates of NE states on the production of Permanent Residence Certificate (PRC) issued by the Competent Authority of NE states. Counselling and admission of the shortlisted candidates for NE reserved seats were held at Tezpur University, and reservation was followed as per GoI rules. Admission to the remaining seats was made through the Central Counselling conducted by the JoSAA.

GATE-qualified candidates were directly admitted to the MTech programmes based on merit of GATE scores. Some Non-GATE candidates were also admitted to the MTech programmes based on the performance in the CUET(PG). For admission to MBA program, candidates were selected based on the score of National tests such as MAT/CAT/XAT/ATMA/GMAT/CMAT and Personal Interview. Admission to MSc in Molecular Biology and Biotechnology was made based on the score of GAT-B-2022 conducted by NTA.

Candidates of PhD programmes were selected based on the performance in TUEE 2022 and PI conducted by the concerned Departments.

Twelve students were admitted under the Defence Quota as per Govt of India policy and 07 international students were admitted through ICCR on a supernumerary basis.

A total of 13,651 applications were received through online mode for various programmes of studies. The number of candidates admitted to various programmes was 1,577 out of 1,989 intakes, of which 44.77% were female students. The University reserved seats for the OBC (NCL), SC, ST, EWS and PWD categories as per the Govt. of India rules.

As on December 2022, the total strength of the students in the university was 4,601 and the percentage of reserved category students on the campus were 23.67% (OBC-NCL), 10.76% (SC), 7.63% (ST), 6.80% (EWS) and 0.63% (PWD). The total number of foreign students at the University was 19.

Overall, 78.70% of the students were from the state of Assam, while 20.89% students were from the rest of the country and 0.41% International students.

Classes, Examinations and Results

Classes of newly admitted students in the Academic session 2022-23 were conducted from 1 November 2022. The delay in starting the new session was due to late declaration of CUET results. However, the classes of the second semester were conducted from 03 March 2023. Classes of the Intermediate and final year students were held from August 2022, and their next semester started as per scheduled date.

The Spring Semester (Even Semester) End Examinations, 2022 were conducted during the

period from 22 May 2022 to 06 June 2022 for continuing students and from 16 June 2022 to 28 June 2022 for 2nd Semester. The results were declared on 05 July 2022 for continuing students and 18 July 2022 for 2nd Semester. The Autumn Semester (Odd Semester) End Examinations, 2022 (except first semester) were conducted during 02 December 2022 to 22 December 2022, and the results (except 1st semester) were declared on 09 January 2023. The examination of the first semester was conducted during 20 February 2023 to 27 February 2023 and results were declared on 07 March 2023. The delay in declaring the results of the first semester students was due to delay in starting the academic session, which started on 1 November 2022. As many as 1,279 nos. of final (last) semester students appeared in the Spring semester examinations in the year 2022, and 97.39% of the students passed the examinations.

Convocation

The 20th Convocation was held on 30 December 2022 and Professor Sankar Kumar Pal, Padma Shree, Member, European Academy of Sciences and Arts, National Science Chair, SERB, Govt of India, Indian Statistical Institute as Chief Guest, Professor Shekhar C Mande, Distinguished Professor, Bioinformatics Centre, Savitribai Phule Pune University as Guest of Honour and Governor of Assam & Chancellor Shri Jagadish Mukhi were present at the ceremony and addressed to the dignitaries and awardees

A total of 1,362 passed-out students, including passed out from Centre for Open and Distance Learning, were eligible to receive the degrees and Diplomas in the Convocation a total 48 Gold Medals were awarded to toppers of UG and PG programmes in the Convocation. The Best Graduate Medal was awarded to Mr Rajdeep Ghosh (Roll no. CSB18012) of BTech in Computer Science & Engineering programme and the Best Postgraduate Medal was awarded to Ms Naina Hatibaruah ((Roll no. PHI17003) of Integrated MSc in Physics programme. There were 70 students who were awarded PhD degrees in the Convocation.

Free Studentship and Fellowship/Scholarship

As many as 27 (twenty-seven) students belonging to the BPL family were awarded free studentship in the Autumn Semester 2022. As per the free studentship guidelines, they were exempted from paying any fees except a caution deposit, medical insurance fees and hostel menial charge and hostel mess advance.

A total of 91 PhD students were awarded the non-NET fellowship. During the year as many as 404 PhD students (fresh and continuing) availed the non-NET fellowship from the University. Twenty-one students of MTech programmes have received a GATE scholarship in the year 2022-23. 52 students of MSc in Molecular Biology and Biotechnology were awarded DBT stipend. Applications of many students were forwarded to NSP for Ishan Uday Scholarship, Post Metric Scholarship for SC, ST and OBC students, Merit cum means scholarship, Post Metric scheme for minority students, PG scholarship for university rank holders, etc. for award of the scholarship. Approximately a total of 453 students received the scholarship from the funding agencies under NSP portal.

PERSONNEL OF THE OFFICE

Controller of Examinations

Sankar C Deka, PhD

(since 16 August 2022)

Professor, Department of Food Engineering and Technology
Email: sankar@tezu.ernet.in

Lakhi Boral, PhD
(till 15 August 2022)
Email: boral@tezu.ernet.in

Deputy Registrar

Anamika Pegu (Officiating)
Email: anamikapegu@tezu.ernet.in

Assistant Registrar

Sobhan Mahanta
Email: soma@tezu.ernet.in

Section Officer

Biren Sharma
Email: birens@tezu.ernet.in

Assistant

Ajanta Pathak
Email: pathaka@tezu.ernet.in

Dwipendra C Das
Email: rdas@tezu.ernet.in

Steno (Gr. II)

Arunjyoti Das
Email: arundas@tezu.ernet.in

LDC

Prohelika Hazarika
Email: rimjhim@tezu.ernet.in

MTS

Debajyoti Saikia
Email: debajyoti@tezu.ernet.in

Bhola Sharma
Email: bhola14@tezu.ernet.in

Rupjyoti Das
Email: rupjyoti@tezu.ernet.in

RESEARCH AND DEVELOPMENT PROFILE

The office of the Dean, R&D facilitates the implementation and smooth creation of extramural research projects funded by the various Government and non-Government funding agencies like UGC, DST, DBT, MeitY, MoEF&CC, NEC, AICTE, DAE, DRDO, ISRO, ICMR, ICAR, CSIR, INSA, ASTEC, UNICEF, IUAC, Ministry of Earth Science, Ministry of Food Processing Industries, MNRE, ONGC and others. This office takes the responsibility of advertisement and appointment of project staff; permits conduct of field trips/visits as required by the project staff and PIs and/or Co-PIs; grants permission to attend workshops/seminars/symposiums/conferences as well as to visit different research laboratories by using the project grant. In addition to management of extramural research projects sanction to individual PI, this office also manages the departmental, individual, and institutional research projects such as UGC-SAP, UGC-BSR startup grants, DST-FIST and DBT funded schemes. Dean R&D also facilitates the Tezpur University Ethical Committee, Tezpur University Animal Ethical Committee and Tezpur University Biosafety Committee meetings. This office has also been involved in implementation of projects approved by ONGC-CPBT, an example of Academy-Industry collaboration at Tezpur University.

It may be mentioned that the Dean, R&D keeps the account of research and development activities of the University, liaisons between the researchers of the University and the funding agencies, facilitates R&D activities and contributes towards creating a conducive atmosphere for research activities. During the year 2022-2023, this office has forwarded 166 research proposals for consideration of approval to the funding agencies. At present a total of 202 externally funded research projects are ongoing with a financial outlay of Rs 7,063.61 lakhs plus €1,05,428.75, £31,500, and \$50,000. During the year 2022-2023, 22 new projects were sanctioned. The ongoing research projects include 13 international collaborative projects of which 02 projects are under Indo-UK, 01 with Indo-Russian, 01 with Indo-Brazil, 02 with Nottingham University, 02 with CEFIPRA (Indo-French), 01 with Indo-Hungary, 01 with Indo-ASEAN, 01 with Indo-Sweden, 01 with ERASMUS (Indo-Greece-Italy), and 01 with Indo-USA. During this period, 03 departments were supported by DRS-II under the UGC-SAP. The faculty members have published several research papers in peer-reviewed national and international journals. Further, these projects have augmented the research skills of the project staff and have created trained manpower to cater to the need of the society.

The office also facilitates consultancy taken up by the faculty members as per the University guidelines. As per record, total amount sanctioned through consultancy projects during 2022-2023 was approximately Rs 2.11 Crore.

In addition, the office also deals with various fellowship matters such as UGC-NET JRF, NFOBC, NFST, NFST, MANF, DS Kothari, SVSGC, CSIR-JRF/SRF, DST-INSPIRE, DBT-JRF etc. Different fellowships received during 22-23 are as under:

- UGC-NET (JRF) : 21
- NFST : 07
- CSIR-JRF : 05
- NFSC : 02
- MANF : 02
- NFOBC : 03
- SVSGC : 11

Personnel of the Office

Dean, Research and Development

Dhanapati Deka, PhD, FRSC
Professor, Department of Energy
Email: dhanapati@tezu.ernet.in

Section Officer

Himadri Das
Email: himdas@tezu.ernet.in

Assistant

Raj K Das
Email: raj@tezu.ernet.in

Kalpak K Baruah
Email: kalpak.baruah31@gmail.com

Senior Administrative Assistant

Swagat Chutia, PhD
Email: swagat.energy@gmail.com

MTS

Partha P Basumatary
Email: parthab@tezu.ernet.in

FINANCE PROFILE

The Annual Accounts of the University are maintained in five parts: Part-I deals with Recurring and Salary Funds, Part-II for transactions related to Funds under Non-Recurring and Other Schemes, Part-III for Earmarked Funds and Extramural Research Projects, Part-IV for transactions related to Debts and Deposits Account and Part-V for maintenance of Provident Funds. The accounts for the year 2022-23 have been prepared in such formats as prescribed by the Ministry of Education, Govt. of India with the concurrence of the Comptroller and Auditor General of India, on double entry book-keeping system of accounting on accrual basis with relevant Indian Accounting Standards.

Opening balance at the beginning of the financial year 2022-23 was Rs 757.70 lakh. During the year 2022-23, the University received a total amount of Rs 13,345.00 lakh under Grants-in-aid: Recurring, Salary, and Creation of Capital Assets. The University also generated Rs 1,838.34 lakh as Internal Receipts which is a part of Grants-in-Aid: Recurring. Thus, the total fund available during the year was Rs 15,941.04 lakh. Against the same, an amount of Rs 15,936.60 lakh was spent during the year 2022-23 and Rs 103.24 lakh was pulled back by RBI on 31st March 2023, leaving an unspent balance of Rs. (-) 98.80 lakh as on 01 April 2023. In addition, University has received Rs 1,694.68 lakh towards grants for Extramural Research Projects, out of which Rs 2,680.24 lakh was utilized for such research projects.

The following statement represents the Receipts and Expenditure for the year 2022-23 at a glance.

RECEIPTS			EXPENDITURE		
Particulars	Amount	Total Amount (in Lakh)	Particulars	Amount	Total Amount (in Lakh)
A) Opening Balance		757.70	A) Expenditure		
B) Grants Received			I. Recurring Expenditure	5,294.41	
I. Grants-in-Aid (Recurring)	2,698.00		II. Salary Expenditure	9,721.50	
II. Grants-in-Aid (Salary)	9,772.00		III. Expenditure for Creation of Capital Assets	920.69	
III. Grants-in-Aid (Creation of Capital Assets)	875.00	13,345.00			15,936.60
			Pulled back by RBI		103.24
C) Internal Receipts		1,838.34	Closing Balance		(-) 98.80
Grand Total:		15,941.04	Grand Total:		15,941.04

PERSONNEL OF THE FINANCE OFFICE

Finance Officer

CMA Dr Braja B Mishra
MCom, LLB, FMSPI, FICAI, DCO, PGDFM, PGDIM,
MBA (Finance), Ph.D.
Email: fotu@tezu.ernet.in

Deputy Registrar (Finance)

Kumarjit Dutta
Email: kumarj@tezu.ernet.in

Assistant Registrar (Finance) Offi.

Sarat Ch Konwar
Email: saratk@tezu.ernet.in

Section Officer (Finance)

Samar Kakati
Email: sk@tezu.ernet.in

PA to Finance Officer

Baby Newar
Email: baby@tezu.ernet.in

Junior Accountant

Apurba Medhi
Email: apurbam@tezu.ernet.in

Junior Accountant

Biswajit Saha
Email: bishu@tezu.ernet.in

Upper Division Clerk

Lakhya J Gogoi
Email: lakhyag@tezu.ernet.in

Upper Division Clerk

Brindaban Borah
Email: brind@tezu.ernet.in

Upper Division Clerk

Ashish Dutta
Email: ashish@Tezu.ernet.in

Junior Accountant

Utpal Pal
Email: utpaltu@tezu.ernet.in

Junior Accountant

Alakananda Baishya
Email: alka@tezu.ernet.in

Upper Division Clerk

Deniel Bori
Email: deniel@tezu.ernet.in

Upper Division Clerk

Durlav Pegu
Email: durlav@tezu.ernet.in

Lower Division Clerk

Manoj Chakraborty
Email: manojc@tezu.ernet.in

Multi-Tasking Staff

Bharat Ch Bhuyan
Email: bharat@tezu.ernet.in

Multi-Tasking Staff

Bikash J Das
Email: bikids@tezu.ernet.in

Multi-Tasking Staff

Ananda Rabha
Email: rabhaa@tezu.ernet.in

STUDENTS' PROFILE

The office of the Dean Students' Welfare provides ample scope, opportunities, and facilities for the all-round development of personality and leadership qualities among the students. The University boasts of a vibrant student community actively involved in sports, cultural, literary along with other co-curricular and extracurricular activities.

Students Discipline

The office of the Dean, Students' Welfare has been looking after the matters of students' discipline. Like the previous years, the Anti-Ragging committees, Anti Ragging squads continued their constant vigil to keep the University Ragging Free. We are quite pleased to inform that in this period of report too, the University has no incidence of disruption of academic activities due to students' unrest involving the administration and faculty members. This was made possible because of an active and highly dedicated grievance redressal mechanism which is put in place and available both online as well as offline.

Students Activities

Student community of the University is quite proactive in pursuing sports, cultural, literary, and other extracurricular activities. Sports and cultural events are organized regularly in the campus wherein we can see spontaneous participation of a large number of students. A brief note on the cultural and sports activities are as follows:

The Cultural section of the University is quite resourceful and very proactive to nurture the talents of the students by providing the best facilities. Music Practice Room is available at the Students' Activity Centre. Kalaguru Bishnu Prasad Rabha Auditorium, Community Hall, Chandra Prabha Saikiani Bhawan are some of the facilities for practice and performance. There are different instruments like Guitar, Drum Set, Synthesizer, Dhol, Bor Dhol, Kobi Dhol, Madol, Doba, Bahi, Gogona, Khram, Khuti Taal, etc. available for the use of the interested students. Additionally, a Portable Music system with two Mics, Clapbox (Cajon), Pepa, Keyboard, Bor Taal, Drum Sticks have been purchased in this financial year.

Sports Activities

To encourage the students to take part in sports and games along with their studies, the University has created impressive facilities and a support system. Some of the major facilities which are in place are as follows:

- Football ground with floodlights facility
- One 400-meter track cum cricket field with floodlights facility
- Two Basketball courts with floodlights facility
- Two Volleyball courts with floodlights facility
- Two Tennis court with floodlights facility
- One Indoor Stadium (Badminton Court with YY Yonex Synthetic Mat)
- A gymnasium with world class Weider product, USA, and Afton product
- One Swimming Pool

Annual Meet 2022-2023

The Annual Meet 2022-2023 of Tezpur University was organized by the Students Council during 27 January - 11 February 2023. There were both group and individual competitions. The group competitions were either Inter-Departmental or Inter-Hostel. Some of the major competition events were Dances, Drama, Song, Literary, Debate, Photography, Fine Arts, Wall Magazine, Cultural procession etc.

Best Performers Annual Meet 2022 -2023

Cultural Activity

EVENT	POSITION	NAME/HOSTEL
MUSIC	Best Singer	Prashanti Roy
DANCE	Best Dancer	Nabashree Kalita
SKIT	Best Actor (Male)	Gyandeep Dowarah
	Best Actor (Female)	Kasturi Sharma
	Best Script	Tanmoy Barman
ONE ACT PLAY	Best Actor (Comic)	Mousumi Pathak
	Best Original Script	Faruk Aziz
	Best Supporting Actor (Male)	Deepjyoti Deka
	Best Supporting Actor (Female)	Anwasha Das
	Best Director	Abhijit Deka
	Best Actor (Male)	Tanmoy Barman
BIHU	Best Actor (Female)	Harshita Hazarika
	Best Dhulia	Priyanuj Saikia
	Best Pepa-Badak	Hirak Jyoti Das
	Best Bihua	Abhigyan Kalita
	Best Bihuwati	Sagarika Barman



Students' participation in cultural events of Annual Meet

SPORTS ACTIVITY

The 25th Annual Meet, 2022-23 of Tezpur University started in the month of January 2023 with Football, Cricket, Archery, Volleyball, Basketball, Badminton, Table Tennis, Chess, Kho Kho, Carrom, Lawn Tennis Competitions. Finally, the concluding session was held from 27 January - 11 February 2023 with Track & Field events, Weightlifting, Powerlifting, Best Physique, Arm Wrestling, Tug of War along with March Past Competitions.

Vice Chancellor (i/c), Prof. Dhruba Kumar Bhattacharya lighted the main lamp followed by hoisting of the University flag. Earlier, the Assistant Director of Physical Education, Mr RR Singh handed over the torch to Professor Bhattacharya, which was carried by the Assistant Director of Physical Education (ADPE) along with the captains of the winning teams, Outdoor and Indoor Games Secretary.

Shri Deba Kumar Mishra, Deputy Commissioner graced the Inaugural Ceremony of the 25th Annual Meet as Chief Guest and was felicitated by the University fraternity on this occasion. Mr Dipu Dutta, Mr World Silver Medalist 2022 attended the ceremony as the Guest of Honour.

The University Sports Teams participated in the following events:

Date	Event	Venue	AIU/Others	Achievement
22-25 November 2022	Basketball	University of Science and Technology, Meghalaya	AIU	Lost in Pre quarter final
27-31 December 2022	Badminton (Men)	APS Reva University, MP	AIU	Lost in 1 round
27-31 December 2022	Badminton (Women)	OP Jindal University, Chhattisgarh	AIU	Lost in pre quarter final
14-17 November 2022	Football (Men)	BIT Misra Ranchi, Jharkhand	AIU	Lost in 1 round
26-29 December 2022	Aquatic (Men)	KIIT Bhubaneswar	AIU	9 Positions in backstroke
24-27 November 2022	Kabaddi (Man)	MSC Baripada, Odisha	AIU	Lost in 1 round
26-29 December 2022	Yoga (Women)	KIIT Bhubaneswar	AIU	Participated no rank
26 February - 7 March 2023	Cricket (Men)	KIIT Bhubaneswar	AIU	Lost in 1 round
24-27 February 2023	Chess (Women)	University of Science and Technology, Meghalaya	AIU	Team rank 12 th

CULTURAL ACTIVITY

5-8 January 2023	Cultural, Literary & Visual Arts	University of Science & Technology Meghalaya (USTM), Meghalaya	AIU North-East Zone (The TU Team consists of 49 members)	1st - Quiz 2 nd - Classical Instrument (Non-Percussion - Solo) 2 nd - Installation 2 nd - Cultural Procession 3 rd - Folk/Tribal Dance 3 rd - Indian Group Song 3 rd - Western Vocal (Solo)
24-28 February 2023	Cultural, Literary & Visual Arts	Jain Deemed-to-be University, Bengaluru	AIU National (The TU Team consists of 30 members)	1 st - Indian Group Song 3 rd - Quiz 3 rd - Western Vocal (Solo) 3 rd - Folk/Tribal Dance

Events Organized by Students' Activity Centre, Tezpur University

Event	Date
Silpi Divas	17 January 2023
25 th Annual Meet 2022-23	27 January – 11 February 2023
Hockey Exhibition Match (TU vs LNIPE Guwahati)	11 March 2023
Taekwondo Coaching Class for Kids & Students	April 2022 - March 2023
Badminton Coaching Class for Kids & Students	November 2022 - March 2023





Tezpur University team participated in the National AIU-Unifest 2023 held in Jain Deemed-to-be University, Bengaluru

Overall Best Performers of 25th Annual Meet 2022-23 (Sports)

GAMES	BEST PLAYER
KABADDI (MEN)	S. Ganesh
KABADDI (WOMEN)	Preetishree Gogoi
VOLLEYBALL (MEN)	Saurab Debnath
VOLLEYBALL (WOMEN)	Gyamar Rina
BASKETBALL (MEN)	Chandrim Konwar
BASKETBALL (WOMEN)	Himashree Sakia
BEST ATHLETE (MAN)	S. Ganesh
BEST ATHLETE (WOMAN)	Himashree Sakia
STRONG MAN, 2022-23	Kaustav Das
STRONG WOMEN, 2022-23	Priyanka Saikia
BEST LIFTER (MAN)	Kunal Jyoti Das
BEST LIFTER (WOMEN)	Nongmaithem Sophya Devi
CHAMPION OF THE CHAMPION (YOGA)	Rajashree Sarmah
CHAMPION OF THE CHAMPION 2022-23 (MEN)	Mausum Dutta
CHAMPION OF THE CHAMPION 2022-23 (WOMEN)	Gayatri Dolakakhoria
MR TU (MEN MODEL PHYSIQUE 2022-23)	Abhinab Dutta
MISS TU (WOMEN MODEL PHYSIQUE 2022-23)	Priyanka Saikia
MR TU 2022-23	Deepankaj Bhattacharya
BEST COMMANDER MEN (MARCH-PAST)	Mrinanga Swargiary
BEST COMMANDER WOMEN (MARCH-PAST)	Vaishnavi Singh

Personnel of the Office

Dean, Students' Welfare

Manabendra Mandal, PhD

Professor, Department of Molecular Biology and Biotechnology

Email: dsw@tezu.ernet.in

Associate Dean, Students' Welfare (Cultural & Literary)

Juri G Konwar, PhD

Assistant Professor, Department of Cultural Studies

Email: jgcon@tezu.ernet.in

Associate Dean, Students' Welfare (Sports)

Nabin Sarmah, PhD

Assistant Professor, Department of Energy

Email: nabin@tezu.ernet.in

Assistant Director of Physical Education

Rajkumar R Singh

Email: rrsingh@tezu.ernet.in

Sports Officer

Bahniman Sarmah

Email: bahinam@tezu.ernet.in

Cultural Officer

Mridusmita Dutta

Email: mridus8@tezu.ernet.in

Clinical Psychologist

Asish P Bora

Email: asishpb@tezu.ernet.in

Assistant

Saurav Jyoti Borah

Email: sborah@tezu.ernet.in

MTS

Dudu Tamuli

Email: dtamuli@tezu.ernet.in

Jiban Damai

Email: jiban@tezu.ernet.in

Biren Bora

Email: biren73@tezu.ernet.in

Sahed Ali

Email: sahedali21@gmail.com

OFFICE OF THE PROCTOR

The Proctor's office, established on 24 September 2018, plays a pivotal role in overseeing student discipline and conduct regulations. The primary functions of the office include managing matters related to maintaining order and ensuring proper behaviour among students of Tezpur University. The office actively supports anti-ragging initiatives and coordinates with the anti-ragging squads of the University.

Significant Activities

The Proctor's office looks after the matters related to regulations on discipline and proper conduct of students of Tezpur University. The office disposed several cases with regard to students' conduct during the year 2022-23.

PERSONNEL OF THE OFFICE

CHIEF PROCTOR

Papori Baruah, PhD
Professor, Department of Business Administration
Email: papori@tezu.ernet.in

PROCTOR

Raza R Hoque, PhD
Professor, Department of Environmental Sciences
Email: rrh@tezu.ernet.in

Joya Chakraborty, PhD
Professor, Department of Mass Communication and Journalism
Email: jc@tezu.ernet.in

Office Assistant

Nihal Sarmah, BSc
Email: nihal@tezu.ernet.in

TRAINING & PLACEMENT CELL (ENGINEERING)

The Training and Placement Cell acts as an effective institutional arrangement primarily aimed at training and placement of students in the best-known corporate entities in the country. It establishes linkages with various corporations and facilitates placement events on campus as well as off-campus. One of the major activities of the Cell is to groom the students to make them industry-ready and enhance their chances of employability. The Cell is also playing an active role in placing many students through Internships, initially with a stipend and later regularized in the payroll of the company. During the reporting period, six technical training sessions with durations ranging from a week to a fortnight, and eight career counselling sessions by industry experts were organized by the Training & Placement Cell of the School of Engineering. The Placement Cell of SoE had another successful year of placement for the batch of 2023, wherein 38 organizations participated, and the highest salary package offered was Rs. 20 LPA by Atlan. The other organizations where our students got placed are Bharat Electronics Limited, Atlan, Antares Technologies, Techvariable, Cognizant Technologies Solution, Akash Byjus, Zaloni Technologies, TCS, and Capgemini Technology Services India Ltd, Alstom, ITC infotech Limited, Tata Technologies Ltd, L&T Technology, L&T Limited, Federal Bank, Hexaware, Hitachi, Pmanifold, VFSTR and so on.

WORKSHOP/SYMPOSIUM/SEMINAR/INVITED TALK ETC. ORGANIZED

<i>Title of Event/Talk</i>	<i>Date/Period</i>
Workshop on Arrival of Induction Publicity Vehicle (IPEV) by Air Force Station, Tezpur with a total number of 267 participants	19 September 2022
An interactive session resourced by Dharma Saikia, Unit Head, Tata Consumers, An alumnus, MSc Food Processing and Technology 2008 batch with total number of 350 participants	27 October 2022
A soft Skill training on Communication Skills resourced by Dr Somiya Misra	04 November 2022
A soft Skill training on General Aptitude and Soft Skills resourced by Dr Somiya Misra	05 November 2022
A soft Skill training on Group Discussion and PI resourced by Dr Somiya Misra	06 November 2022
An interactive session resourced by Bhaskarjit Sarmah, Vice-President, Blackrock with a total number of 145 participants	29 November 2022
Seven days of technical training, Hands-on IOT resourced by Rupesh Mandal	16 – 22 December 2022
Three days technical training, AutoCad resourced by Alakunta Surendra	17 – 19 December 2022
Two days of technical training, Solidworks resourced by Alakunta Surendra	20 – 21 December 2022
Two days of technical training, CATIA resourced by Alakunta Surendra	22 – 23 December 2022
Three days of technical training, Data Science resourced by Bhaskarjit Sarmah	23 – 25 December 2022
Two days of technical training, Creo resourced by Alakunta Surendra	24 – 25 December

	2022
Bhaba Atomic Research Centre interactive session resourced by O P Singh & Dr Meenakshi with a total number of 344 participants	06 February 2023
An Interactive session on Changing World Order and Opportunities for NE youth, resourced by Atul Kulkarni, Management and Strategy Consultant with a total number of 404 participants.	12 May 2023

DISTINGUISHED VISITORS

- Naveen Kumar, I/C General Manager, Bharat Electronics Ltd.
- MT Murali, Addl. General Manager, Bharat Electronics Ltd.
- Bruno Ekka, Coordination Officer, Numaligarh Refinery Ltd. (NRL)
- Dr AC Deb, Scientist, Bhabha Atomic Research Centre (BARC)
- Rituparna Datta, SO/G, Bhabha Atomic Research Centre (BARC)
- Apurba Misra, HR, Amul
- Bhaskarjit Sarmah, Vice-President, Blackrock

NOTABLE PLACEMENTS

<i>Name of the Organization/Company</i>	<i>Designation Offered</i>	<i>No. of Students Placed</i>	<i>Academic Programme</i>	<i>Department/ Centre</i>
Akash Byjus	Assistant Lecturer	01	BTech Civil, ME, ECE	CE, ME, ECE
Byjus	Business Development	07	BTech Civil, ME, ECE	CE, ME, ECE
Allegion	GET	04	BTech CSE, EE	CSE, EE
Alstom	GET/PGET	04	BTech EE, MTech ELDT	EE, ECE
AIVY India Pvt. Ltd.	UI/UX Designer	01	MDes	Design
Amalgamated Plantations	Production Trainee Engineer	02	BTech EE, MTech FET	EE, FET
Amul	Territory Sales In charge	02	BTech FET, MTech FET	FET
Antares Tech	Associate Designer	01	MCA	CSE
Atlan	Software Engineer	01	BTech ECE	ECE
Bay Haven Digital	Business Development	01	BTech Civil	Civil
Bharat Electronics Ltd.	Deputy Engineer	06	BTech ECE	ECE
Capri AI	Back-End Developer	01	BTech CSE	CSE
CDAC	Internship	05	MTech CSE, IT, BTech ME	CSE, ME
Codeyoung	Inside Sales Executive	02	B-Tech EE, ECE	EE, ECE
Cognizant Technologies	Programmer	31	BTech EE, ECE,	EE, ECE, CSE,

	Analyst Trainee		CSE, ME, FET, Civil, MCA	ME, FET, Civil
Dalmia Cement	GET	02	BTech ME	ME
Esteem Project Pvt. Ltd.	Mechanical Engineer	01	MTech ME	ME
Federal Bank	Associate in Non-Officer	03	BTech ME, ECE, FET	ME, ECE
Hexaware	GET	04	BTech ECE, CSE	ECE, CSE
Hitachi	GET	01	BTech CSE	CSE
Indigi Consulting	Management Trainee	03	BTech EE, MCA, MTech IT	EE, CSE
Inurture	Faculty IT	01	MTech IT	CSE
ITC Foods	Manufacturing Executive	01	BTech FET	FET
ITC Infotech	Associate IT, Consultant	17	BTech ECE, CSE, ME	ECE, CSE, ME
L&T ECC	GET	12	BTech CSE, ECE, EE, ME, Civil	CSE, ECE, EE, ME, Civil
Medblue	Internship	01	MDes	Design
Netinrich	Software Engineer	02	BTech CSE	CSE
Pmanifold	Analyst	02	MTech Energy	Energy
RDC Concrete India Pvt. Ltd.	-	01	BTech Civil	Civil
Saint Gobain	-	01	BTech ME	ME
SnyOption India Pvt. Ltd.	-	01	BTech ECE	ECE
Spectrum Eduventure	Junior Faculty	04	BTech ME, EE, CSE	ME, EE, CSE
T.I.M.E.	Aptitude Faculty	03	BTech ME, Civil, CSE	ME, Civil, CSE
TCS	Assistant System Engineer- Trainee	08	BTech ME, CSE, ECE, MCA, MDes	ME, CSE, ECE, Design
TechVariable	Junior Programmer Analyst	05	MCA	CSE
VFSTR (Deemed to be University)	Assistant Professor	06	MTech IT, ELDT, PhD	CSE, ECE
Zaloni Technologies	Associate Software Engineer	02	MCA	CSE
Zsee Smart Solution	-	05	BTech ME, MTech ME, Energy, MCA	ME, CSE, Energy

PERSONNEL OF THE CELL

Professor-in-Charge

Sarat Saharia, PhD

Professor, Department of Computer Science & Engineering
Email: sarat@tezu.ernet.in

Deputy Director

Pijush C Das, PhD

Email: pijush@tezu.ernet.in

MTS

Nayan J Kalita

Email: nayank@tezu.ernet.in

TRAINING & PLACEMENT CELL (NON-ENGINEERING)

Training & Placement Cell (Non-Engineering), Tezpur University operates round the year to not only provide students with job opportunities but also equip them with various skills through corporate talks, workshops, competitions, and career guidance programs. It serves as the bridge between students and organizations for potential placements, aiming to attract organizations from diverse fields to offer opportunities for students across all programmes. This year, the Placement Cell has enhanced the scenario of placements and internships. A total of 46 companies, including prominent names such as Colgate Palmolive, Aakash Byju's, Asian Paints, Azim Premji Foundation, Chegg India, DHL Global, VKVAPT, SBI Life Insurance, Reliance Retail, Tata Consumer Products, Reliance Consumer Products, RGAVP, Teach for India, HDFC Bank, Codeyoung, Federal Bank, IDBI Bank, ICICI Bank, Earth Kids Foundation, Gandhi Fellowship, JK Foods, Umang Dairies and more, conducted placement processes on campus. There has been a notable increase in both paid and unpaid internship opportunities, with companies like Varun Beverages, Marico, IDBI Bank, Integrity Moneytree Private Limited, Readerclub, Adani Airports Holding, GIAL, Numaligarh Refinery Limited, Amul, IIBM, State Bank of India, Emami Ltd, Indian Institute of Bank Management, Airtel, Berger Paints India, Century Ply, IOCL, Oil India, and many others participated. Currently, more than 100 students have been selected for final placements across various organizations.

WORKSHOP/SYMPOSIUM/SEMINAR/INVITED TALK ETC. ORGANIZED

<i>Title of Event/Talk</i>	<i>Date/Period</i>
Webinar by Glenmark Life Science Leadership Team	06 April 2022
Webinar on Developing Employability Skills-Career Option in Armed/Defense Forces	20 April 2022
Webinar on Interviewing Skill resourced by Dhananjay Mazumdar, Cluster Manager HR, Marico Ltd.	30 April 2022
Employability Skill Training Program (Mahindra Pride Classroom) Trainer, Sunil Lourembam	03-07 September 2022
Alumni Talk on Corporate Communication Skill, Resource Person: Smita Dey Tarafder, Co-founder, Swakia Technologies and alumna – Department of Business Administration (MBA 2004-06)	10 October 2022
Alumni Talk on the Importance of Internship, resourced by Smita Dey Tarafder, Co-founder, Swakia Technologies and alumna – Department of Business Administration (MBA 2004-06)	11 October 2022
Employability Skill Training Program (Mahindra Pride Classroom) Trainer, Sunil Lourembam	10-16 October 2022
Employability Skill Training Program (Mahindra Pride Classroom) Trainer, Vidyut Parna Bora	10-16 October 2022
Employability Skill Training Program (Mahindra Pride Classroom) Trainer, Kasturi Konwar	10- 16 October 2022
Employability Skill Training Program (Mahindra Pride Classroom) Trainer, Biswapriya Syam	11-17 October 2022
Alumni Talk on Creating a Powerful First Impression- Resume	22 October 2022
DHL Global Forwarding Ltd. (Campus placement and Talk on Corporate	26-27 October

Culture, corporate Ethics & Corporate Expectations about Freshers)	2022
Information Seminar on Post-Graduate and Doctoral Studies in the United States for UG and PG Student Resourced by Mr. Sudarshan Saha, former Education USA Advising coordinator, United State-Indian education foundation, Kolkata	24 November 2022
Career Counselling session on Career opportunities in the social sector resourced by Mr. Bijoy Sankar Das, Azim Premji University.	28 November 2022
Information Seminar on Unlock Your True Potential- Study in the UK by HR Professionals	20 February 2023
Seminar on The Career Kickstart -Guide to Building a Winning Resume by Vantage Circle, resourced by Mrigakshi Sarmah (Senior HR Manager)	23 February 2023
Orientation Programme, Career Opportunities at Bhabha Atomic Research Centre (BARC)	02 March 2023

DISTINGUISHED VISITORS

- Sudarshan Saha, Advising Coordinator, Education USA
- Noor U Rahman, Branch HR Manager, East Colgate-Palmolive India Ltd.
- Sunil P Naik, Director, HR, DHL Logistics Pvt. Ltd
- Bijoy Sankar Das, Leader, Azim Premji University
- Mrigakshi Sarmah, Senior HR Manager, Vantage Circle
- Pawan Kumar, Scientific Officer, Bhabha Atomic Research Centre (BARC)
- Lakshminarasimhan V, Academic Coordinator, Secretary, HRDD, Bhabha Atomic Research Centre

NOTABLE PLACEMENTS

<i>Name of the Organization/Company</i>	<i>Designation Offered</i>	<i>No. of Students Placed</i>	<i>Academic Programme</i>	<i>Department/Centre</i>
Thrillophilia	Sales & Business development associate	04	MTTM	Business Administration
Edelweiss Wealth Management	Wealth Manager	02	MBA	Business Administration
Gandhi Fellowship	Fellow	07	MA	Sociology, Mass Communication & Journalism, Cultural Studies
IDBI Bank	Assistant Manager (Grade A)	10	MBA	Business Administration
Network18	News Trainee	01	MA	Mass Communication & Journalism

NEDFi	Junior Consultant/ Executive (Credit)	02	MA/MCOM	Mass Communication & Journalism, Commerce
Aurigene Pharmaceutical Service	Technical Trainees	02	MSc	Molecular Biology & Biotechnology
Ramoji Filmcity	Management Trainee	04	MTTM	Business Administration
North East Educational Trust	Fundraising and Communication Lead	01	MA	Sociology
Cuemath	Associate-Sales	01	MTTM	Business Administration
Vantage Circle	Copywriter Specialist/ Marketing Executive	02	MA/MBA	Mass Communication & Journalism, Business Administration
HDFC Bank	Personal Banker-Sales	07	MBA	Business Administration
Colgate Palmolive (India) Ltd.	Customer Development Intern	02	MBA	Business Administration
SBI Life Insurance	Sales	10	MBA	Business Administration
Reliance Retail	Management Trainee	01	MBA	Business Administration
Tata Consumer Products	Institutional Sales Trainee	01	MBA	Business Administration
Federal Bank	Junior Management (Grade 1)	02	MBA	Business Administration
ICICI Bank	Assistant Manager	09	MBA	Business Administration
IDBI Bank	Assistant Manager (Grade A)	05	MBA	Business Administration
Asian Paints	Sales Officer Trainee	01	MBA	Business Administration
Code young	Inside Sales Specialist/ Inside Sales Executive	04	MA	English, Mass Communication & Journalism
Azim Premji Foundation	Associate	06	MA/MSc/Int MSc	Molecular Biology & Biotechnology, English, Physics, Social Work
Society for Education & Development	Junior Faculty- Biology	01	MSc	Molecular Biology & Biotechnology

Chegg India	Subject Matter Experts	01	MSc	Physics
VKVAPT	Teacher	02	BED	Education
DHL Global	Management Trainee	2	MBA	Business Administration
Reliance Consumer Products	Area Sales Executive	1	MBA	Business Administration
Teach for India	Fellow	1	BEEd	Education
Earth Kids Foundation	Education Warriors	3	MA	Sociology, English, Social Work
Academy of Management Studies	Communication Executive	1	Int MA	English
Agro Tech Foods Ltd.	Graduate Trainee – Sales	2	MBA	Business Administration
ETV Networks	Trainee	1	MA	Mass Communication & Journalism
Pickyourtrail	Management Trainee	2	MTTM	Business Administration
PRADAN	Development Apprenticeship	7	MSc	Environmental Science
Travel Destination	Travel Consultant	1	MTTM	Business Administration
Travel Triangle	Travel Consultant	3	MTTM	Business Administration
UltraTech Cement Limited	Trainee	1	MBA	Business Administration

PERSONNEL OF THE CELL

Professor-in-Charge

Chandan Goswami, PhD

Professor, Department of Business Administration

Email: chand@tezu.ernet.in

Officer (T&P)

Deena Davy

Email: deena@tezu.ernet.in

Office Assistant

Sidhant Saikia

Email: tnp@tezu.ernet.in

THE STATUTORY BODIES

- The Board of Management
 - The Planning Board
 - The Academic Council
 - The Finance Committee
 - The Building Committee

THE BOARD OF MANAGEMENT

Vice Chancellor	Chairman
Pro Vice Chancellor	Member
Dr. T David Singh, Associate Professor Department of Chemistry Department of Basic Science and Humanities, NIT Manipur, Imphal	Member
Prof. Pradip Lingfa Department of Mechanical Engineering NERIST, Itanagar, Arunachal Pradesh	Member
Prof. Sudeshna Bhattacharjya Department of Sanskrit Gauhati University, Guwahati	Member
Dr. Milan R Jamatiya, Associate Professor Department of Hindi Tripura University, Agartala	Member
Dr. Joyanti Chutia Former Director, IASST, Guwahati	Member
Prof. Papori Baruah Dean, School of Management Sciences	Member (till 17.10.2022)
Prof. Debajit Hazarika Dean, School of Sciences	Member (w.e.f.18.10.2022)
Prof. Mrinmoy K Sarma Department of Business Administration	Member (till 16.05.2022)
Prof. Tarun K Maji Department of Chemical Sciences	Member (w.e.f. 17.05.2022)
Dr. Madhurima Goswami Department of Cultural Studies	Member (till 11.12.2022)
Dr. Tridib R Sarma Department of Business Administration	Member (w.e.f. 12.12.2022)
Shri Rathijit Chakraborty Department of Foreign Languages	Member
Finance Officer	Permanent Invitee
Controller of Examinations	Permanent Invitee
Alumni representatives	
Dr. Barnali Das Deka, Tezpur, Assam	Special Invitee (till 06.08.2022)

Sri Dharma Saikia, Guwahati, Assam
Prof. KM Baharul Islam, IIM Kashipur
Sri Sourav Dutta, Kolkata, West Bengal

Special Invitee (till 06.08.2022)
Special Invitee (w.e.f. 19.10.2022)
Special Invitee (w.e.f. 19.10.2022)

Student Representatives

Ms. Aarati Singh, Research Scholar
Ms. Smitakshi Goswami, PG Student
Mr. Hritwik Bora, Research Scholar
Ms. Sandhyatora Saikia, PG Student
Registrar

Special Invitee (till 07.06.2022)
Special Invitee (till 07.06.2022)
Special Invitee (w.e.f. 08.06.20)
Special Invitee (w.e.f. 08.06.2022)
Ex officio Secretary

THE PLANNING BOARD

Vice Chancellor	Ex officio Chairman
Pro Vice Chancellor	Ex officio Member
Dean, School of Humanities and Social Sciences	Ex officio Member
Dean, School of Sciences	Ex officio Member
Dean, School of Management Sciences	Ex officio Member
Dean, School of Engineering	Ex officio Member
Dean, Students' welfare	Ex officio Member
Dean, Research and Development	Ex officio Member
Dean, Planning & Development	Ex officio Member
Dean, Academic Affairs	Special Invitee

Six teachers nominated by the Academic Council

Prof. Dilip K Saikia Department of Computer Science & Engineering	Member
Prof. Nashreen S Islam Department of Chemical Sciences	Member
Prof. Chandana Goswami Department of Business Administration	Member (till 31.07.2022)
Prof. Jiten Ch Dutta Department of Electronics and Communication Engineering	Member (w.e.f. 17.08.2022)
Dr. Tridib R Sarma Department of Business Administration	Member (till 15.03.2023)
Dr. Anjan Bhuyan Department of Business Administration	Member (w.e.f. 16.03.2023)
Dr. Rupak Mukhopadhyay Department of Molecular Biology and Biotechnology	Member
Dr. SI Singh Department of Computer Science & Engineering	Member

One Representative of Ministry of Education

Joint Secretary (Central University)	Member
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Ministry of Education
Department of Higher Education, New Delhi

One Representative of UGC

Prof. SB Agarawal Department of Botany, Faculty of Science Banaras Hindu University Varanasi, Uttar Pradesh	Member
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One Representative of NEC

Director (HRD & E) NEC, Nongrim Hill, Shillong	Member
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One Representative of State Govt. of Assam

Commissioner and Secretary Department of Higher Education, Govt. of Assam Dispur, Guwahati	Member
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Two Nominees by the Board of Management

Prof. Sashindra K Kakoti Department of Mechanical Engineering IIT Guwahati, Guwahati	Member (till 09.05.2022)
Prof. Mohan Ch Kalita Department of Biotechnology Gauhati University Guwahati	Member (till 09.05.2022)
Prof. Saket Kushwaha Vice Chancellor Rajiv Gandhi University Arunachal Pradesh	Member (w.e.f. 10.05.2022)
Prof. Bhabesh Ch Goswami Former Vice Chancellor Cotton University, Guwahati	Member (w.e.f. 10.05.2022)
Controller of Examinations	Permanent Invitee
Finance Officer	Permanent Invitee
Librarian	Permanent Invitee
Registrar	Ex officio Secretary

THE ACADEMIC COUNCIL

Vice Chancellor	Ex officio Chairman
Pro Vice Chancellor	Ex officio Member
Dean, School of Management Sciences	Ex officio Member
Dean, School of Humanities and Social Sciences	Ex officio Member
Dean, School of Engineering	Ex officio Member
Dean, School of Sciences	Ex officio Member
Dean, Students' Welfare	Ex officio Member
Dean, Research and Development	Special Invitee
Dean, Academic Affairs	Special Invitee
Two Professors nominated by the Vice Chancellor	
Prof. Charu L Mahanta Department of Food Engineering & Technology	Member
Prof. Bolin K Konwar Department of Molecular Biology and Biotechnology	Member
All Heads of Departments/Centres	
Head, Department of English	Ex officio Member
Head, Department of Foreign Languages	Ex officio Member
Head, Department of Linguistics and Language Technology	Ex officio Member
Head, Department of Cultural Studies	Ex officio Member
Head, Department of Sociology	Ex officio Member
Head, Department of Mass Communication and Journalism	Ex officio Member
Head, Department of Education	Ex officio Member
Head, Department of Social Work	Ex officio Member
Head, Department of Hindi	Ex officio Member
Head, Department of Law	Ex officio Member
Head, Department of Assamese	Ex officio Member
Head, Department of Business Administration	Ex officio Member
Head, Department of Commerce	Ex officio Member
Head, Department of Mathematical Sciences	Ex officio Member
Head, Department of Physics	Ex officio Member
Head, Department of Chemical Sciences	Ex officio Member
Head, Department of Molecular Biology and Biotechnology	Ex officio Member
Head, Department of Environmental Science	Ex officio Member
Head, Department of Computer Science and Engineering	Ex officio Member
Head, Department of Electronics & Communication Engineering	Ex officio Member
Head, Department of Food Engineering & Technology	Ex officio Member
Head, Department of Energy	Ex officio Member
Head, Department of Mechanical Engineering	Ex officio Member

Head, Department of Civil Engineering	Ex officio Member
Head, Department of Electrical Engineering	Ex officio Member
Head, Department of Design	Ex officio Member
Head, Department of Applied Sciences	Ex officio Member
Head, Computer Centre	Ex officio Member
Head, Centre for Disaster Management	Ex officio Member
Head, Women Studies Centre	Ex officio Member
Head, Centre for Distance and Online Education	Ex officio Member
Head, Centre for Inclusive Development	Ex officio Member

Two Associate Professors Nominated by the Vice Chancellor

Dr. Dambarudhar Mohanta Department of Physics	Member (till 20.07.2022)
Dr. Anjan Bhuyan Department of Business Administration	Member (w.e.f. 21.07.2022)
Dr. Bhim Pd. Sarmah Department of Mathematical Sciences	Member

Two Assistant Professors Nominated by the Vice Chancellor

Dr. Riku Chutia Department of Electronics and Communication Engineering	Member
Dr. Reetamoni Narzary Department of English	Member

Three Nominees of the Board of Management

Prof. Gautam Barua Director, IIIT Guwahati Guwahati, Assam	Member
Prof. Ajanta B. Rajkonwar Vice Chancellor Assam Women's University Jorhat, Assam	Member
Prof. NC Talukdar Former Director, IASST, Guwahati, Assam Vice Chancellor, Assam down town University Guwahati, Assam	Member

One Representative of Ministry of Education	Vacant
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One Representative of UGC

Prof. Madhoolika Agrawal Fellow, National Academy of Sciences CAS Department of Botany Banaras Hindu University Varanasi, Uttar Pradesh	Member
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One Representative of NEC

Director (HRD & E)
North Eastern Council (NEC)
Shillong

Member

One Representative of State Govt. of Assam

Commissioner & Secretary / Principal Secretary In-charge
Department of Higher Education
Govt. of Assam, Guwahati

Ex officio member

Controller of Examinations

Ex officio member

Librarian

Ex officio member

Registrar

Ex officio secretary

THE FINANCE COMMITTEE

Vice Chancellor	Chairman
Pro Vice Chancellor	Member
Joint Secretary and Financial Advisor, MoE or his/her nominee from Finance Bureau of MoE Not below the rank of Deputy Secretary	Member
Joint Secretary (CU&L) of MoE or his/her nominee not below the rank of Joint Secretary to the Govt. of India	Member
Joint Secretary (CU), UGC or any other Joint Secretary level officer nominated by the Chairman, UGC	Member
Mr. S Vasum, IAAS Deputy Comptroller and Auditor General of India (Retd.) Dimapur, Nagaland	Member
Prof. Ramesh K. Pandey Vice Chancellor Shri Lal Bahadur Shastri National Sanskrit University New Delhi	Member
Prof. Mrinmoy K Sarma Department of Business Administration, Tezpur University	Member (till 16.05.2022)
Prof. Papori Baruah Department of Business Administration, Tezpur University	Member (w.e.f. 17.05.2022)
Prof. Debajit Hazarika Department of Mathematical Sciences, Tezpur University	Member (w.e.f. 02.03.2023)
Finance Officer	Ex officio secretary

THE BUILDING COMMITTEE

Vice Chancellor	Ex officio chairman
Pro Vice Chancellor	Member
Prof. Smriti K Sinha Dean, School of Engineering	Member (till 21.08.2022)
Prof. Dilip K Saikia Department of Computer Science & Engineering	Member (w.e.f. 22.08.2022)
Dean Planning & Development	Member
Prof. Utpal Sarma Department of Computer Science & Engineering	Member
Prof. Raza R Hoque Department of Environmental Science	Member
Finance Officer, Tezpur University	Ex officio member
Head, Department of Civil Engineering Tezpur University	Ex officio member
Chief Engineer, PWD (Bld), Assam or his/her nominee who is not below the rank of Supdt. Engineer	Ex officio member
Er. Alok Ranjan Borah Superintendent Engineer (Retd)	Member
Superintendent Engineer (Electric) PWD (Elect), Guwahati Electric Division Guwahati, Assam	Ex officio member
Superintendent Engineer (PHE) Tezpur Circle, Assam	Ex officio member
Executive Engineer Tezpur University	Ex officio member
Shri Amal Barman Deputy Director, Office of the Chief Engineer (Bldg) Guwahati, Assam	Member
Mr. D Saikia Sr. Architect, PWD, Assam	Member
Assistant Horticulturist, Tezpur University	Ex officio member
Registrar, Tezpur University Secretary	Ex officio member

Schools of Studies and Centres

School of Engineering

School of Humanities and Social Sciences

School of Management Sciences

School of Sciences

Centre for Distance and Online Education

Centre for Multidisciplinary Research

School of Engineering

- Dean School of Engineering
- Department of Applied Sciences
 - Dept of Civil Engineering
- Dept of Computer Science and Engineering
 - Department of Design
- Dept of Electronics and Communication Engineering
 - Department of Electrical Engineering
 - Dept of Energy
- Dept of Food Engineering and Technology
 - Dept of Mechanical Engineering

DEAN, SCHOOL OF ENGINEERING

About the School

The School of Engineering (SoE) of Tezpur University was established in 2006 with the introduction of BTech programmes in three disciplines. There are now nine departments and recently UGC has sanctioned a new Department of Vocational Studies & Skill Development under the School. However, starting of the academic programmes and recruitment of specialized faculty member(s) in the Department is under process.

The departments under the School are:

- Applied Sciences
- Civil Engineering (CE)
- Computer Science and Engineering (CSE)
- Design
- Electrical Engineering (EE)
- Electronics and Communication Engineering (ECE)
- Energy
- Food Engineering and Technology (FET)
- Mechanical Engineering (ME)
- Vocational Studies and Skill Development

Six constituent departments (CE, CSE, ECE, EE, FET, and ME) of the school offer BTech programmes, while the departments of CSE, ECE, ME, FET, Energy, and CE offer Master of Technology programmes. Further, the Department of CSE also offers MCA programme and the Department of Design offers MDes programme. Except the Departments of EE and Design, all other departments offer PhD programmes as well. The School strives to produce skilled professionals at the UG, PG, and Doctoral levels. The departments are actively pursuing externally funded research projects, and both faculty members and students are engaged in developing innovative technologies. The School has been proactive in strengthening the teaching and learning experiences of the students to enhance their knowledge and employability.

Academic Programmes offered by various departments under the School

Department	Academic Programmes Offered
Applied Sciences	PhD
Civil Engineering	BTech
	MTech
	PhD
Computer Science and Engineering	BTech
	MTech (CSE)
	MTech (IT)

	MCA
	PhD
Design	MDes
Electronics and Communication Engineering	BTech
	MTech in Electronics Design & Technology
	MTech in Bioelectronics
	PhD
Electrical Engineering	BTech
	PhD
Energy	MTech
	PhD
Food Engineering and Technology	BTech
	MTech
	PhD
Mechanical Engineering	BTech
	MTech
	PhD

Important activities

- Total 08 numbers of students have enrolled for AICTE Doctoral Fellowship (ADF) of the academic year 2022-23.
- One PhD Scholar admitted under the QIP Scheme for the academic year 2022-23.
- Total 270 numbers of students benefited by career counselling and guidance for competitive examinations offered by the Institution during the year 2022-23.
- Total 149 numbers of students benefited by development and skills enhancement initiatives by the institution during the year 2022-23.
- Total 217 students from the different streams of the School of Engineering have been recruited by the different companies during the year 2022-23.
- The Department of Vocational Studies and Skill Development has co-organized a 3-day skill training programme on "Skill Development and Employment Opportunities" during 28-30 April 2022. Participants were drawn from various colleges of North-East India.
- The Department of Vocational Studies and Skill Development has co-organized a 6-month "Entrepreneurship Development Programme" for candidates sponsored by Arunachal Pradesh State Council for Science & Technology, Government of Arunachal Pradesh during September 2022 to February 2023.

Personnel of the Dean's Office

Dean of the School

Partha P Sahu, PhD

Professor, Department of Electronics and Communication Engineering

Email: deansoe@tezu.ernet.in

Senior Technical Assistant

Jibon C Das, Diploma

Email: djibon@tezu.ernet.in

Technician

Sanku Bordoloi, BA

Email: sankubo@tezu.ernet.in

Assistant

Zakir Hussain, BA

Email: zakir07@tezu.ernet.in

MTS

Durlav Mahanta

Email: duma@tezu.ernet.in

DEPARTMENT OF APPLIED SCIENCES

THE DEPARTMENT

The Department of Applied Sciences was established in 2019. It aims to provide high-quality teaching of basic science subjects to engineering students. The teachers provide individual attention to the students with the goal to develop a strong foundation for their respective future careers by nurturing their analytical abilities and critical thinking. The Department provides well equipped laboratory facilities to the students as a part of their curriculum. At the same time, the Department aspires to establish its name in research with world-class and high-impact outputs in the frontiers of applied sciences in interdisciplinary areas. Particularly, the Department possesses some highly motivated young faculty members with research experience from various premier institutes of India and abroad. Their research interests encompass diverse areas of applied as well as fundamental sciences, spanning fields like astrophysics, condensed matter physics, materials chemistry, pure and applied mathematics. The faculty members are focusing on establishing their own research groups to pursue research on their respective thrust areas.

ACADEMIC PROGRAMMES AND STUDENT INTAKE

Programme	Intake
PhD	Variable (10 in 2022-23)

THRUST AREAS

- Algebraic graph theory, operation research, harmonic analysis.
- Metal organic frameworks, porous organic polymers, polymer synthesis.
- High-energy astrophysics, low-dimensional material physics.

MAJOR FACILITIES/EQUIPMENT AVAILABLE

- Immersion cooler.
- Frost free refrigerator.
- Mathematica, MATLAB Software.

MAJOR RESEARCH AND DEVELOPMENT FINDINGS

Faculty/ Researcher	Salient Research Findings
R Haloi	Weighted norm inequalities for the one sided vector valued Hardy-Littlewood maximal function are established and for modified integral Hardy operators
BK Debnath	We have mathematically shown the impact of preservation technology investment to maximize the profit of the organization. We also have analyzed the impact of research and development costs in the economic production rate inventory model, in which the items are passed through an imperfect screening process in an imperfect production system

B Sarkar	We investigated the effects of thermal conduction on the magnetized advection-dominated accretion flow onto a rotating black hole (BH). We obtained the steady global transonic accretion solutions around the rotating BH containing a standing shock between the inner and outer critical points
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RESEARCH PROJECTS (BOTH ONGOING AND NEW)

Project Title	Funding Agency	Amount (in INR)	Duration	Investigator(s)
Developing Polymers of Intrinsic Microporosity (PIMs) as Solid Matrix for Potential Application in Separations of Hydrocarbons	SERB-DST	26.5 lakhs	2020 – 2022	S Seth
Molecular Level Engineering of Polymers of Intrinsic Microporosity to Modulate the Properties	UGC	10 lakhs	2020 – 2022	S Seth
Investigation of the accretion flow properties of black hole binaries with AstroSat	Department of Space, Government of India	4.77 lakhs	2020 – 2022	B Sarkar
Spectrum of magnetized dissipative accretion flow around a rotating black hole with thermal conduction and hydrodynamical winds	UGC	10 lakhs	2021 – 2022	B Sarkar
Simulation of Various Optical Spectra of Novel 2D Materials Using Phenomenological Oscillator Models	SERB MATRICS	6.6 lakhs	2023 – 2026	PK Gogoi

PUBLICATIONS BY FACULTY AND STAFF MEMBERS

JOURNAL PUBLICATIONS

Chutia D, Haloi R. Weighted integral inequalities for modified integral Hardy operators. *Bulletin of Korean Mathematical Society*, 59(3): 757-780, 2022.

Haloi R, Chutia D. On the existence of mild solutions for a class of nonlocal quasi-linear differential equations with iterated deviating arguments. *The Journal of Analysis*, 31: 57–76, 2023.

Barman T, Chutia D, Haloi R. Almost Periodic Solution to a Non-Instantaneous Impulsive Differential Equation with Deviating Arguments. *Electronic Journal of Mathematical Analysis and Applications*, 10(2): 289-304, 2022.

Mahata S, Debnath BK. A profit maximization single item inventory problem considering deterioration during carrying for price dependent demand and preservation technology investment. *RAIRO-Operations Research*, 56(3): 1841-1856, 2022.

Nath A, Sarkar B, Roy J, Misra R. AstroSat observation of rapid Type-I thermonuclear burst from the low mass X-ray binary GX 3+1. *Journal of Astrophysics and Astronomy*, 43 (93): 1-12, 2022. DOI: 10.1007/s12036-022-09878-9.

Medhi A, Dhar A, Sarmah K, Dutta P, Haloi DJ. Copolymers of Poly(butyl acrylate): Synthesis, Characterization and Compositional Analysis. *Asian Journal of Chemistry*, 34(4): 912-916, 2022.

Dhar A, Haloi DJ. Polyethylene glycol-based RAFT agent cum ATRP macroinitiator initiated block copolymerization of methyl methacrylate. *Indian Journal of Chemical Technology*, 29(5): 533-539, 2022.

Kalita J, Paul S. On the spectra of non-commuting graphs of certain class of groups. *Asian-European Journal of Mathematics*, 16(05):1-12, 2023. DOI: 10.1142/S1793557123500936.

Paul S. Conjugate Laplacian eigenvalues of co-neighbour graphs. *Algebra and Discrete Mathematics*, 33(2): 108-117, 2022.

Mahata S, Debnath BK. The impact of R&D expenditures and screening in an economic production rate (EPR) inventory model for a flawed production system with imperfect screening under an interval-valued environment. *Journal of Computational Science*, 69, 2023. DOI: 10.1016/j.jocs.2023.102027.

Debnath BK, Majumder P, Bera UK. EOQ model in uncertain environment by using generalized intuitionistic fuzzy Laplace transformation. *International Journal of Logistics Systems and Management*, 2023. DOI: 10.1504/IJLSM.2022.10054078.

Seth S, Pathak C. 4,4'-Azobis(1,2,4-triazole): A Versatile Molecular Scaffold to Develop Tailor-Made Energetic Materials. *Crystal Growth & Design*, 2023. DOI: 10.1021/acs.cgd.3c00133.

Pathak C, Gogoi A, Devi A, Seth S. Polymers of Intrinsic Microporosity based on Dibenzodioxin Linkage: Design, Synthesis, Properties and Applications. *Chemistry - A European Journal*, 2023. DOI:10.1002/chem.202301512.

Dhar A, Barman J, Bhattacharjee M, Talukdar H, Haloi DJ. Synthesis and characterization of starch-g-poly (methyl methacrylate-co-styrene) copolymer prepared via emulsion polymerization. *Iranian Journal of Chemistry and Chemical Engineering*, 2023. DOI: 10.30492/ijcce.2022.553430.5340.

Dhar A, Barman J, Talukdar H, Haloi DJ. Poly (methyl methacrylate) modified Starch: their preparations, properties and applications. *Polímeros*, 33(1):1-13, 2023, DOI: 10.1590/0104-1428.20220068.

Bhattacharjee M, Goswami S, Borah P, Saikia M, Barman J, Pramanik NB, Haloi DJ. Preparation, Characterization and Antimicrobial Activity of Chitosan/Kaolin Clay Biocomposite Films. *Macromolecular Chemistry and Physics*, 2023. DOI: 10.1002/macp.202300008.

CONFERENCE/WORKSHOP/SYMPOSIUM/SEMINAR ATTENDED

Name of Faculty/Staff Member	Purpose of Attending	Title of Event	Date/Period	Organizer and Venue (Online/Offline)
R Haloi	Tutor	Instructional School for Teachers on Partial Differential Equations	21 November -3 December 2022	National Centre of Mathematics and Department of Applied Sciences, Tezpur University
S Paul	Paper Presentation	National Conference on Advances in Mathematical Sciences (NCAMS-2022)	22-23 December 2022	Department of Mathematics, Gauhati University, Assam (online)
	Attendee	National Webinar on "Some Emerging areas in Pure Mathematics"	16-17 September 2022	Department of Mathematics, St. Anthony's College, Shillong (online)
	Attendee	International Webinar on "Empowering knowledge on ethical publishing: Mastering the art of identifying predatory, fake and cloned journals"	8 June 2022	Research Academy On Campus, Elsevier at APAC Customer Success Hub (online)
	Attendee	Instructional School for Teachers on Partial Differential Equations	21 November - 3 December 2022	National Centre of Mathematics and Department of Applied Sciences, Tezpur University
S Seth	Poster Presentation	Conference on Advances in Catalysis and Environment 2022 & CO ₂ India Network 1st Annual Meet	31 October - 4 November 2022	TIFR, Mumbai
B Sarkar	Contributory talk	National Conference On Physical Sciences (NCPS) - 2022	29-30 April 2022	Jointly organized by Department of Physics, DHSK College, Dibrugarh, Assam & Department Of Physics, Manipur University, Manipur (Online)

	Attendee	Five Days Faculty Development Program on "Recent Advances in Materials and Devices"	26-30 September 2022	School of Applied Sciences, Department of Physics in association with CSIR-IMMT, Bhubaneswar India (Online)
	Attendee	Online Weeklong Faculty Development Program (FDP) on Academic Writing and Publication	01-07 November 2022	Teaching Learning Centre (TLC), Tezpur University in association with Sibsagar Girls' College, Sivasagar, Assam & Duliajan College, Dibrugarh, Assam (Online)
	Paper Presentation	XIII Biennial National Conference of Physics Academy of North East (PANE-2022)	8-10 November 2022	Department of Physics, Manipur University, Imphal, Manipur, India (Online)
	Oral talk	Challenges and Innovations in Computational Astrophysics IV	21-23 November 2022	IAU Commission B1: Computational Astrophysics (Online)
	Paper Presentation	Second International Conference on Applied Sciences	24-25 November 2022	Department of Basic Science and Humanities, SCMS School of Engineering and Technology, Karukutty, Kerala (Online)
	Oral Presentation	Research and Industrial Conclave 2023	20-22 January 2023	Indian Institute of Technology Indore (Online)
	Oral Presentation	Exploring the Cosmos 2023: A National Seminar on Relativistic Universe (NSRU-2023)	15 February 2023	High Energy and Cosmic Ray Research Centre, University of North Bengal, West Bengal, India (Online)

	Paper Presentation	Conference on New Approaches of Basic Sciences towards the Development of Engineering and Technology-2023 (NABSET-2023)	24–25 February 2023	School of Technology (SoT), Assam Don Bosco University (ADBU) (Online)
	Oral Presentation	One-Day National Symposium	10 March 2023	Department of Physics, Tezpur University In collaboration with Students' Science Council, Tezpur University
PK Gogoi	Organizing Co - Convener	2nd India-Japan Nobel Laureate Seminar	17 May 2022	Indian JSPS Alumni Association (IJAA) organized this event in association with Tezpur University sponsored by the Japan Society of Promotion of Science (JSPS, Japan), and in association with the Embassy of India, Tokyo, Embassy of Japan, New Delhi, JST, Japan, and DST, India (Online)

TALKS BY THE FACULTY ABROAD AND IN INDIA

Name of Faculty Member	Title of the Talk	Title of the Event	Date	Organizer and Venue
S Paul	<i>On A_α-spectrum of graphs</i>	FDP on "Spectral Graph Theory"	13-17 March 2023	Division of Mathematics, School of Advanced Sciences, VIT Chennai (Online)
S Seth	<i>Nuclear Magnetic Resonance (NMR): An Essential Analytical Tool</i>	Workshop on "Analytical Approaches for Characterization of Food and Biomaterials"	24 February- 3 March, 2023	DST, India, and Tezpur University. Department of Food Engineering and Technology, TU

B Sarkar	<i>An Overview Of X-ray Astronomy And Discovering And Understanding X-ray Transients</i>	4th IUCAA Sponsored Workshop On Astronomical Data Analysis (WADA 2022)	12-14 May, 2022	Department of Physics, Jagannath Barooah College (Autonomous), Jorhat, Assam in collaboration with IUCAA Centre for Astronomy Research and Development (ICARD), Tezpur University, Assam.
	<i>On the detection of thermonuclear X-ray burst from low mass X-ray binary GX 3+1 with AstroSat</i>	Seven years of AstroSat conference	28-29 September 2022	ISRO HQ, Bangalore (Online)
PK Gogoi	<i>Advanced Analytical Techniques for Novel Electronic Materials Research – Electron Microscopy and Spectroscopic Ellipsometry</i>	Hands-on Training Program on Computation, Fabrication, and Characterization of Devices and Systems Under Synergistic Training Program Utilizing the Science & Technology Infrastructure (STUTI), An initiative of Department of Science and Technology (DST), Govt. of India	13-19 June 2022	Department of Electronics & Communication Engineering, Tezpur University, Assam, India
	<i>Advanced Transmission Electron Microscopy – Basics and Research Perspectives</i>	Training Program on Sophisticated Analytical Instruments Under STUTI- Synergistic Training Program Utilizing the Scientific and Technological Infrastructure	31 October – 7 November 2022	Department of Chemical Sciences and Sophisticated Analytical Instrumentation Centre (SAIC), Tezpur University, Assam, India
D Haloi	<i>Gel permeation Chromatography and Atomic force Microscopy</i>	Workshop on “Analytical Approaches for Characterization of Food and Biomaterials”	24 February- 3 March 2023	DST, India, and Tezpur University, Department of Food Engineering and Technology, Tezpur University

SEMINAR/WORKSHOP/SYMPOSIA/ LECTURES ORGANIZED

Title	Date
Instructional School for Teacher on Partial Differential Equations [In association with National Centre for Mathematics (Joint venture of IIT Bombay and TIFR)]	21 November - 03 December 2022

AWARDS/HONOURS/NOTABLE ACHIEVEMENTS

Name of Awardee	Designation of Awardee	Achievement	Event/Awarded by
B Sarkar	Assistant Professor	Received Life Membership of the Indian Physics Association	Indian Physics Association Room No. 2-119-S, "B" Block, Modular Lab., Bhabha Atomic Research Center Mumbai, India
		Received Junior Membership of the International Astronomical Union	International Astronomical Union, Paris, France
		Received extension as a Visiting Associate at Inter-University Centre for Astronomy and Astrophysics (IUCAA), Pune	IUCAA, Post Bag 4, Ganeshkhind, Pune, Maharashtra
		Received Life Membership of The Indian Science Congress Association	Indian Science Congress Association, 14, Dr. Biresh Guha Street Kolkata, India
		1 st runner up of the "Data and Computational Techniques" competition organized under Research and Industrial Conclave 2023	Indian Institute of Technology Indore

FACULTY MEMBERS

Professor

Rajib Haloi, PhD (IIT Kanpur)

Head of the Department

Specialization/Areas of interest: Differential Equations, Harmonic Analysis.

Email: rhaloi@tezu.ernet.in

Associate Professor

Dhrubajyoti Haloi, PhD (IIT Kharagpur)

Specialization/Areas of interest: Polymer Synthesis & Characterization, Chemical Modification of Polymer, Polymer Composite.

Email: djhaloi@tezu.ernet.in

Assistant Professor

Bijoy K Debnath, PhD (NIT Agartala)

Specialization/Areas of interest: Operations Research

Email: bijoy91@tezu.ernet.in

Somnath Paul, PhD (Tezpur University)

Specialization/Areas of interest: Spectral Graph Theory

Email: som@tezu.ernet.in

Saona Seth, PhD (IIT Kanpur)

Specialization/Areas of interest: Functional organic and metal-organic polymers, energetic materials, Materials for energy and environmental applications

Email: saonas@tezu.ernet.in

Pranjal K Gogoi, PhD (National University of Singapore)

Specialization/Areas of interest: Low-dimensional Material Physics, Optical Spectroscopy, Electron Energy Loss Spectroscopy, Scanning Transmission Electron Microscopy

Email: pkgogoi@tezu.ernet.in

Biplob Sarkar, PhD (IIT Guwahati)

Specialization/Areas of interest: Theoretical modeling of astrophysical flows, study of X-ray binaries, X-ray data analysis and interpretation

Email: biplobs@tezu.ernet.in

Guest Faculty

Kuldeep Sarma, PhD (Tezpur University)

Specialization/Areas of interest: Algebraic Graph Theory

Email: kuldeep.sarma65@gmail.com

Jitendra Singh, PhD (IIT Roorkee)

Specialization/Areas of interest: Approximation theory

Email: jsingh@ma.iitr.ac.in

Jutirekha Dutta, PhD (Tezpur University)

Specialization/Areas of interest: Algebra and Graph Theory

Email: jutirekha@tezu.ac.in

Rasna Devi, PhD (Tezpur University)

Specialization/Areas of interest: Catalysis, Inorganic synthesis and application

Email: rasna@tezu.ac.in

STAFF MEMBERS

Technical Assistant

Janardan Boruah, MSc

Email: jboruah@tezu.ernet.in

Udeshna Sharma, MSc

Email: udeshna@tezu.ernet.in

Assistant

Himangshu Saikia

Email: phb18001@tezu.ac.in

MTS

Biren Bora

Email: biren73@tezu.ernet.in

DEPARTMENT OF CIVIL ENGINEERING

THE DEPARTMENT

The Department of Civil Engineering under the School of Engineering of Tezpur University was established in 2009 to offer the BTech degree in Civil Engineering. The PhD programme was initiated in 2011 and the MTech programme was started in 2018. The Department aims to provide quality education, research, and professional experience that train its graduates in leadership enhancing their professional career, to pursue excellence in research, and to inculcate the spirit to face the competitive nature of national and international professional pursuits.

ACADEMIC PROGRAMMES AND STUDENT INTAKE

Academic Programme	Intake
BTech in Civil Engineering	68
MTech in Civil Engineering	11
PhD in Civil Engineering	Variable (02 in 2022-23)

THRUST AREAS

- Safe drinking water, sanitation
- Roads, soil stabilization
- Landslide mitigation, river bank protection

MAJOR FACILITIES/EQUIPMENT AVAILABLE

- Universal Tensile Machine
- Brookfield Viscometer
- Triaxial Test setup
- CBR test setup
- Marshal Test setup
- Compressive testing machine
- Atomic absorption spectrometer
- Ultrasonic pulse velocity tester
- Direct shear test
- Los Angeles abrasion testing machine

MAJOR RESEARCH AND DEVELOPMENT FINDINGS

Faculty/Researcher	Salient Research Findings
UK Das	<ul style="list-style-type: none">• Improvement of soil bearing capacity and settlement by use of geocell made from waste material as soil reinforcement
A Chakraborty	<ul style="list-style-type: none">• Seismic Slope Stability Analysis• Estimation of Shear Parameters of Soil
H Medhi	<ul style="list-style-type: none">• Monthly and seasonal variation in rainfall• River morphology characteristics• Regional Flood Frequency Analysis

RESEARCH PROJECTS (BOTH ONGOING AND NEW)

Project Title	Funding Agency	Amount (in INR)	Duration	Investigator(s)
Bio Electricity Generation Using Pilot Scale Model Septic Tank Installed Under Swachh Bharat Mission	DST-SERB	33.5 lakhs	2023-2026	KU Ahamad (PI) BK Narzary (Co-PI)
Development of plastimous concrete from waste plastic for road construction in Northeast India	AICTE	18.5 lakhs	2022-2025	BK Narzary (PI) KU Ahamad (Co-PI)
Response of Geocell Reinforced Soil Foundation under Static and Cyclic Loading	AICTE	20.75 lakhs	2019-2023	UK Das

PUBLICATIONS BY FACULTY AND STAFF MEMBERS

JOURNAL PUBLICATIONS

Tripathi D, Ahamad KU, Ríos-Pérez D, Tiwari DK, Téllez AVC. Estimation of Elemental Pollution in Freshwater Sediment of Lerma River Using EDS and FRX Techniques (Assessment of Lerma River Bed Sediments Using EDS and FRX Techniques). *Microscopy and Microanalysis*, 28 (S1), 1578-1582: 2022.

Kaushik S, Sonebi M, Amato G, Das UK, Perrot P. Optimization of Mix Proportion of 3D Printable Mortar Based on Rheological Properties and Material Strength Using Factorial Design of Experiment. *Materials*, 16 (4): 2023. DOI: 10.3390/ma16041748.

Chakraborty A, Goswami A. Mathematical Model for Estimation of Shear Parameters of Alluvial Soils of Kamrup Metro District (Assam, India) from Index Properties. *Australian Journal of Civil Engineering*, 2023. DOI: 10.1080/14488353.2022.2146274.

Doley C, Das UK, Shukla SK. Development of a Multiple Regression Equation for Prediction of Bearing Capacity of Geocell-reinforced Sand Beds Based on Experimental Study. *Arabian Journal of Geosciences*, 15(1408), 2022.

Soni P, Medhi H, Sagar A, Garg P, Singh A, Karna U. Runoff Estimation Using Digital Image Processing for Residential Areas. *Journal of Water Supply: Research and Technology-Aqua*, 71 (8): 938-948, 2022.

Boruah PP, Chakraborty A. Deterministic and Probabilistic Approach of Seismic Slope Stability Analysis – A State-of-The-Art Review. *Geotechnical Engineering Journal*. 53(3):31-38, 2022.

BOOK CHAPTERS

Chakraborty A. A State-of-the-Art Report on Solid Waste Management of Guwahati City, Assam, India. In: *Urban Environment and Smart Cities in Asian Countries*, pp. 157-175, Springer, 2023.

Medhi H, Soni P, Vidyarthi VK, Chourasiya S. Understanding the Relationship between Normalized Difference Vegetation Index and Meteorological Attribute Using Clustering Algorithm. In: *Precision Agriculture for Sustainability: Use of Smart Sensors, Actuators, and Decision Support Systems* (Eds. Khatri N, Vyas AK, Celestine I, Chatterjee P.), pp. 20-30. Apple Academic Press, 2022.

Chourasiya S, Talukdar B, Vidyarthi VK, Vajpayee A, Eslamian S, Medhi H. Modeling Reference Evapotranspiration with Limited Climatic Data for Indian Regions Using Artificial Neural Networks. In *Water Scarcity: Global Perspective, Issues and Challenges* (Eds. Eslamian S, Barua P, Eslamian F.), pp. 1-10. Nova Science Publishers, 2022.

CONFERENCE PROCEEDINGS

Kashyap K, Agarwal N, Medhi H. River bank line monitoring using satellite data. In proceedings of International Conference on Sustainable Technologies for River Erosion Alleviation and Management (STREAM-2022), page 52, Brahmaputra Board and IIT Guwahati, Assam, India. December 14–16, 2022.

CONFERENCE/WORKSHOP/SYMPOSIUM/SEMINAR ATTENDED

Name of Faculty/Staff Member	Purpose of Attending	Title of Event	Date/Period	Organizer and Venue
H Medhi	Attendee	FDP: Digital Pedagogy	11-15 March 2023	SS Jain Management Institute, Jaipur (Online)
A Chakraborty	Paper presenter	Sustainable Construction Technologies and Advancements in Civil Engineering, ScTACE 2022	15-17 December 2022	Department of Civil Engineering, Shri Vishnu Engineering College for Women (Online)
A Chakraborty	Attendee	Two-Day Workshop on Outcome Based Education with NBA compliant PO/PSOs for UG/PG programmes in Engineering	19-20 September 2022	School of Engineering, Tezpur University

SEMINAR/WORKSHOP/SYMPOSIUM/ LECTURES ORGANIZED

Title	Date
Two-day skill development programme on “Mix Designs in Civil Engineering”	01-02 November 2022

AWARDS/HONOURS/NOTABLE ACHIEVEMENTS

Name of Awardee	Designation of Awardee	Achievement	Event/Awarded by
S Sabina Yashmin and A Chakraborty	Student and Assistant Professor	Best paper award	Sustainable Construction Technologies and Advancements in Civil Engineering, ScTACE 2022. Awarded by Department of Civil Engineering, Shri Vishnu Engineering College For Women

A Chakraborty	Assistant Professor	In Recognition and Dedication in Geotechnical Innovation with Bharat Vikas Award	Institute of Self Reliance, Bhubaneswar, Odisha, India
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NUMBER OF STUDENTS QUALIFIED IN NET-JRF/SLET/GATE ETC.

Name of Qualifying Examination	Number of Qualified Students	Academic Programme
GATE	06	BTech

NOTABLE PLACEMENT OF STUDENTS

Name of Student	Academic Programme	Placement Designation	Company/ Organization	Type of Selection
Shraddha Sinha	BTech	-	KEC International Ltd	On-Campus
Sneha Talukdar	BTech	-	KEC International Ltd	On-Campus
Shreoshri Kashyap	BTech	-	Graduate Engineer Trainee (Larsen & Toubro)	On-Campus
Kumkum Bhuyan	BTech	-	KEC International Ltd	On-Campus
Dheeraj Malviya	BTech	-	Wipro (Project Engineer), Saint-Gobain (Management trainee)	On-Campus
Atul Mehta	BTech	-	Cognizant (Programmer analyst)	On-Campus
Vepuri Shalom Christie	BTech	-	Saint-Gobain (Management trainee)	On-Campus
Animesh Anand	BTech	-	Project Engineer (Wipro), KEC International	On-Campus
Mayur Trishna Saikia	MTech	Technical Officer	Jal Jivan Mission	Off- Campus
Ona Saikia	MTech	Technical Officer	Jal Jivan Mission	Off- Campus
Kalpajit Barman	MTech	-	JE, Panchayat & rural development	Off- Campus
Partha Protim Baruah	MTech	Technical Officer	Jal Jivan Mission	Off- Campus

ENROLLMENT OF STUDENTS IN OTHER INSTITUTES FOR HIGHER STUDIES

Name of Student	Academic Programme (in TU)	Name of other Institute	Enrolled Academic Programme
Sanobar Arafat	BTech	NIT Silchar	MTech
Shraddha Sinha	BTech	NIT Silchar	MTech
Simanta Pegu	BTech	IIM Bodh Gaya	MBA

FACULTY MEMBERS

Professor

Utpal K Das, PhD (Gauhati University)

Specialization/Areas of interest: Geotechnical Engineering

Email: ukrdas@tezu.ernet.in

Kamal U Ahamad, PhD (IIT Guwahati)

Head of the Department

Specialization/Areas of interest: Environmental Engineering

Email: kahamad@tezu.ernet.in

Assistant Professor

Ankurjyoti Saikia, PhD (Tezpur University)

Specialization/Areas of interest: Geotechnical Engineering

Email: asaikia@tezu.ernet.in

Binanda K Narzary, PhD (Tezpur University)

Specialization/Areas of interest: Transportation Engineering

Email: binanda@tezu.ernet.in

Debaraj B Sonowal, MTech (IIT Roorkee)

Specialization/Areas of interest: Structural Engineering

Email: bailung@tezu.ernet.in

Shailen Deka, PhD (IIT Guwahati)

Specialization/Areas of interest: Geotechnical Engineering

Email: deka.s@tezu.ernet.in

Jayanta D Bharali, MTech (IIT Guwahati)

Specialization/Areas of interest: Transportation Engineering

Email: jdb@tezu.ernet.in

Rituraj Buragohain, MTech (IIT Guwahati)

Specialization/Areas of interest: Water Resources Engineering

Email: rbgn@tezu.ernet.in

Karabi Bharadwaj, MTech (NIT Silchar)

Specialization/Areas of interest: Structural Engineering

Email: karabi@tezu.ernet.in

Arunav Chakraborty, PhD (Gauhati University)

Specialization/Areas of interest: Geotechnical Engineering

Email: aru243@tezu.ernet.in

Hemanta Medhi, PhD (IIT Kanpur)

Specialization/Areas of interest: Hydraulics and water resources engineering

Email: hmedhi@tezu.ernet.in

Guest Faculty

Moumita Goswami, MTech (Tezpur University)

Specialization/Areas of interest: Geotechnical Engineering

Email: moumi23@tezu.ernet.in

Abhinov Bharadwaj, PhD (ISM Dhanbad)
Specialization/Areas of interest: Structural Engineering
Email: abhinov@tezu.ernet.in

Jacklin Nilieng, PhD (IIT Kanpur)
Specialization/Areas of interest: Environmental Engineering
Email: jacklin@tezu.ernet.in

STAFF MEMBERS

Technical Officer

Chirajyoti Doley, MTech
Email: chirajd@tezu.ernet.in

Technical Assistant

Iseng Thawmung, Diploma in Civil Engineering
Email: iseng@tezu.ernet.in

Puspajyoti Kalita, Diploma in Civil Engineering
Email: pjkl@tezu.ernet.in

Jahnu Baruah, Diploma in Civil Engineering
Email: jahnu@tezu.ernet.in

Assistant

Parama N Chauhan
Email: chauhan @tezu.ernet.in

MTS

Dipak Deka
Email: dipak2@tezu.ernet.in

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

THE DEPARTMENT

The vision of the Department is to be a dedicated Centre of learning and research in computer science and engineering. It is committed to create competent professionals capable of taking leading roles in industry, academia, and application areas of the field. A High-Performance Computing Centre was established in the Department in June 2015 to provide high end computing facilities to the scientific researchers from the North-East region. The Department has been recently recognized as a Centre of Excellence in Machine Learning and Big Data Analytics by MHRD, Government of India under FAST. The Department is also recognized by UGC under the Special Assistance Programme (SAP DRS Phase II). During 2005-2009 and 2018-2023 the Department received support from the Department of Science and Technology (DST), Govt. of India under its FIST- Programme. The Department has also been recognized as an ISEA member, MeitY, Govt. of India and BRICS-NU Member. The BTech programme of the Department of Computer Science & Engineering is accredited by the National Board of Accreditation (NBA).

ACADEMIC PROGRAMMES AND STUDENT INTAKE

Academic Programme	Intake
MTech (IT)	25
MTech (CSE)	28
MCA	56
BTech	68
PhD	Variable (05 in 2022-2023)

THRUST AREAS

- Computer Networks and Network Security
- Artificial Intelligence and Machine learning
- Image Processing, Computer Vision & Pattern Recognition
- Computational Biology
- Natural Language and Speech Processing
- Algorithms and Optimization Techniques

MAJOR FACILITIES/EQUIPMENT AVAILABLE

- High Performance Computing Center (Supercomputer “PARAMTEZ” & “Param Shavak”)
- Cluster Computing Facility with Storage
- Interactive Smart classroom
- Embedded System Trainer Lab (8085 & Arm) Processor Based (2 Nos)
- Benchmark Lan Trainer/I-Security
- IBM X3550 M3 Server
- AR/VR (Augmented Reality and Virtual Reality) Equipment
- Graphics Workstation - with NVIDIA GeForce RTX 3080

- Apple iMAC - with Apple M1 chip with 8-core CPU 8-core GPU and 16-core Neural Engine

RESEARCH PROJECTS (BOTH ONGOING AND NEW)

Project Title	Funding Agency	Amount (in INR)	Duration	Investigator(s)
Development of Secured and Reliable Spectrum Allocation Schemes for Next-generation Elastic Optical Networks	MeitY, Govt. of India	86.31 lakhs	2021 - 2024	N Sarma SK Deka (Co-PI)
Developments of semantic-aware structure preserving image filtering techniques	SERB	38.87 lakhs	2021 - 2024	S Patra
Speech Datasets and Models for Tibeto-Burman Languages	NLTM, MeitY	24.36 lakhs	2020-2023	S Nath
Ensuring QoS in Internet of Medical Things (IoMT) using Software-Defined Networking	Tezpur University & MEITY	36.39 lakhs	2020 - 2023	N Medhi DK Saikia (Co-PI) SK Deka (Co-PI)
DST-FIST	DST	44 lakhs	2018-2023	N Sarma S Saharia (Co-PI) SK Deka (Co-PI) SS Satapathy (Co-PI) U Sharma (Co-PI)
Information Security Education and Awareness	MeitY, Govt of India	65 lakhs	2015-2023	DK Bhattacharyya
Radiomics with Machine Learning Methods towards Prediction of Gall Bladder Cancer	Indian Council of Medical Research	18.07 lakhs	2020-2022	R Sarmah D Boro (Co-PI)

PUBLICATIONS BY FACULTY AND STAFF MEMBERS

JOURNAL PUBLICATIONS

Alexy B, Sarat S, Hazarika SM. Non-parametric scene parsing: Label transfer methods and datasets. *Computer Vision and Image Understanding*, 219: 2022. DOI: 10.1016/j.cviu.2022.103418.

Aziz R, Sen P, Beura PK, Das S, Tula D, Dash M, Namsa ND, Deka RC, Feil EJ, Satapathy SS, Ray SK. Incorporation of transition to transversion ratio and nonsense mutations, improves the estimation of the number of synonymous and non-synonymous sites in codons. *DNA Research*, 29(4): 2022. DOI: 10.1093/dnares/dsac023.

Barua B, Dutta M, Bhattacharyya DK. An effective ensemble method for missing data imputation. *International Journal of Information and Computer Security*, 20 (3/4):295-314, 2023.

Baruah B, Dutta MP, Bhattacharyya DK. Identification of ESCC Potential Biomarkers using Biclustering Algorithms. *Gene Reports*, 27: 2022. DOI: 10.1016/j.genrep.2022.101563.

Beura PK, Sen P, Aziz R, Satapathy SS, Ray SK. Transcribed intergenic regions exhibit a lower frequency of nucleotide polymorphism than the untranscribed intergenic regions in the genomes of *Escherichia coli* and *Salmonella enterica*. *Journal of Genetics*, 102(1): 2023. DOI: 10.1007/s12041-023-01418-w.

Chowdhury HA, Bhattacharyya DK, Kalita JK. UIPBC: An effective clustering for scRNA-seq data analysis without user input. *Knowledge-Based Systems*, 248: 2022. DOI: 10.1016/j.knosys.2022.108767.

Devi M, Sarma N, Deka SK. A single-channel single-winner auction model for homogeneous channel allocation in CRNs. *Physical Communication*, 55:2022. . DOI: 10.1016/j.phycom.2022.101890.

Devi N, Borah B. A novel mutual information-based feature selection approach for efficient transfer learning in aerial scene classification. *International Journal of Remote Sensing*, 43 (15-16): 5961-5975, 2022.

Hijam D, Saharia S. A multilevel recognition of Meitei Mayek handwritten characters using fusion of features strategy. *The Visual Computer*, 2023. DOI: 10.1007/s00371-023-02776-3.

Kharkongor C, Nath B. Set Representation for Rule Generation Algorithms. *Computer Science*, 23(2): 2022. DOI: 10.7494/csci.2022.23.2.4071.

Kunal P, Patra S. Semantic-aware structure-preserving median morpho-filtering. *The Visual Computer*, 2023. DOI: 10.1007/s00371-023-02796-z.

Kurmi A, Sen P, Dash M, Patra AK, Ray SK, Satapathy SS. Prediction of essential genes using single nucleotide compositional features in genomes of bacteria: a machine learning-based analysis. *International Journal of Bioinformatics Research and Applications*, 19(1): 2023. DOI: 10.1504/IJBRA.2023.131276.

Mandal K, Sarmah R. SGAClust: Semi-supervised Graph Attraction Clustering of gene expression data. *Network Modeling Analysis in Health Informatics and Bioinformatics*, 11(1): 2022. DOI: 10.1007/s13721-022-00365-3.

Mandal K, Sarmah R, Bhattacharyya DK. POPTric: Pathway-based Order Preserving Triclustering for gene sample time data analysis. *Expert Systems with Applications*, 192: 2022. DOI: 10.1016/j.eswa.2021.116336.

Neog N, Dutta PE, Medhi N. Health condition prediction and covid risk detection using healthcare 4.0 techniques. *Smart Health*, 26: 2022. DOI: 10.1016/j.smhl.2022.100322.

Patowary P, Bhattacharyya DK, Barah P. SNMRS: An advanced measure for Co-expression network analysis. *Computers in Biology and Medicine*, 143: 2022. DOI: 10.1016/j.combiomed.2022.105222.

Prasad RK, Chakraborty S, Sarmah R. Impact of distance measures on partition-based clustering method—an empirical investigation. *International Journal of Information Technology*, 15(2): 627–642, 2023.

Rahman N, Borah B. An unsupervised method for word sense disambiguation. *Journal of King Saud University-Computer and Information Sciences*, 34(9): 6643-6651, 2022 .

Ramdinmawii E, Nath S. A Preliminary Analysis on the Correlates of Stress and Tones in Mizo. *ACM Transactions on Asian and Low-Resource Language Information Processing*, 22(2): 2022. DOI: 10.1145/3546950.

Rao KR, Kolpe A, Pradhan T, Zarpelao BB. An Efficient Solution to User Authorization Query Problem in RBAC Systems Using Hierarchical Clustering. *Journal of Cyber Security and Mobility*, 11(4): 531–548, 2022.

Rather MA, Dolley A, Hazarika N, Ritse V, Sarma K, Jamir L, Satapathy SS, Ray SK, Deka RC, Biswal AK, Doley R, Mandal M, Namsa ND. Glycome Profiling and Bioprospecting Potential of the Himalayan Buddhist Handmade Paper of Tawang Region of Arunachal Pradesh, *Frontiers in Plant Science*, 13: 2023. DOI: 10.3389/fpls.2022.831589.

Robindro K, Clinton UB, Hoque N, Bhattacharyya DK. JoMIC: A joint MI-based filter feature selection method. *Journal of Computational Mathematics and Data Science*, 6: 2023. DOI: 10.1016/j.jcmds.2023.100075.

Saikia M, Bhattacharyya DK, Kalita JK. Identification of Potential Biomarkers Using Integrative Approach: A Case Study of ESCC. *SN Computer Science*, 4(2): 2022. DOI: 10.1007/s42979-022-01492-4.

Saikia M, Bhattacharyya DK, Kalita JK. CBDCEM: An effective centrality based differential co-expression method for critical gene finding. *Gene Reports*, 29: 2022. DOI: 10.1016/j.genrep.2022.101688.

Sen P, Kurmi A, Ray SK, Satapathy SS. Machine learning approach identifies prominent codons from different degenerate groups influencing gene expression in bacteria. *Genes to Cells*, 27(10): 2022. DOI: 10.1111/gtc.12977.

Sharma M, Sarma N. Utility Aware Cooperative Spectrum Sharing in Overlay Cognitive Radio Networks. *International Journal of Wireless Information Networks*, 29(4): 503–520, 2022.

Shekhar S, Hoque N, Bhattacharyya DK. PKNN-MIFS: A Parallel KNN Classifier over an Optimal Subset of Features. *Intelligent Systems with Applications*, 14: 2022. DOI: 10.1016/j.iswa.2022.200073.

Talukdar J, Singh TP. Early prediction of cardiovascular disease using Artificial Neural Network. *Paladyn Journal of Behavioral Robotics*, 14(1): 2023. DOI: 10.1515/pjbr-2022-0107.

Talukdar J, Ahmed H, Kalita M, Boro P, Gogoi A. A review on detection of metamorphic and polymorphic malware. *Global Scientific Journals*. 10(8): 190-207, 2022.

BOOK CHAPTERS

Chowdhury P, Barman SD, Basumatary C, Misra SD, Nath S, Sharma U. An Acoustic/Prosodic Feature-Based Audio Dataset for Assamese Speech Summarization. In: Proceedings of International Conference on Frontiers in Computing and Systems, volume 404 of Part of the book series: Lecture Notes in Networks and Systems. (Eds. Basu S, Kole DK, Maji AK, Plewczynski D, Bhattacharjee D.), Springer, Singapore, 2022, ISBN: 978-981-19-0104-1,

Devi M, Sarma MK, Talukdar J. Speech Recognition Via Machine Learning in Recording Studio. In: Proceedings of the NIELIT's International Conference on Communication, Electronics and Digital Technology. NICE-DT, volume 676 of Lecture Notes in Networks and Systems. (Eds. Singh SN, Mahanta S, Singh YJ.), Springer, Singapore, 2023, ISBN: 978-981-99-1698-6.

Hijam D, Saharia S. Transfer Learning of Pre-trained CNN Models for Meitei Mayek Handwritten Character Recognition. In: Proceedings of the International Conference on Intelligent Computing, Communication, and Information Security, of Algorithms for Intelligent Systems (Eds. Devedzic V, Agarwal B, Gupta MK.), Springer, Singapore. 2022, ISBN: 978-981-99-1372-5,

Hoque N, Bhattacharyya DK. Internet-of-Thing-enabled energy systems: architectures, issues, and challenges. In: Nanoelectronics: Physics, Materials and Devices (Eds. Sarkar A, Sarkar CK, Benfdila A.), pages 487-506, Elsevier, 2023, ISBN: 978-0-323-91832-9.

Kathing M, Brahma RK, Saharia S. Comparative Study on Different Classifiers for Gait-Based Human Identification. In: Advanced Machine Intelligence and Signal Processing, volume 858 of Lecture Notes in Electrical Engineering. (Eds. Gupta D, Sambyo K, Prasad M, Agarwal S.), Springer, Singapore, 2022, ISBN: 978-981-19-0839-2.

Prasad RK, Chakraborty S, Sarmah R. Lockdown Phases and Changing Clusters of Indian States with Respect to Number of Cases of COVID-19. In: Smart Intelligent Computing and Applications, volume 283 of Smart Innovation, Systems and Technologies. (Eds. Satapathy SC, Bhateja V, Favorskaya MN, Adilakshmi T.), Springer, Singapore, 2022, ISBN: 978-981-16-9704-3.

Sharma M, Sarma N. One-to-One Matching for Cooperative Resource Sharing and Communication in CRNs. In: Proceedings of the International Conference on Computing Science, Communication and Security, Communications in Computer and Information Science, (Eds. Chaubey N, Thampi SM, Jhanjhi NZ.), 1604. Springer, Cham, 2022, ISBN: 978-3-031-10550-0.

CONFERENCE PROCEEDINGS

Barbhuiya DH, Dey A, Ghosh R, Das K, Ray K, Medhi N. Resource aware fog based remote health monitoring system. In proceedings of the IEEE Conference on Computer Communications Workshops (INFOCOM WKSHPS), pages 1-6, IEEE, New York, NY, USA. May 2-5, 2022.

Bardalai P, Neog H, Dutta PE, Medhi N, Deka SK. Throughput prediction in smart healthcare network using machine learning approaches. In proceedings of the *IEEE 19th India Council International Conference* (INDICON), pages 1-6, IEEE, Kochi, India. November 24-26, 2022.

Bargayary B, Medhi N. A Blockchain-Assisted Authentication for SDN-IoT Network Using Smart Contract. In proceedings of the *4th International Conference on Computing and Communication Systems* (I3CS), pages 1-6, IEEE. Shillong, India. March 16-18, 2023.

Das D, Boro D. Electromagnetic Signal Analysis: A vulnerability to edge computing driven IoT devices. In proceedings of the *4th IEEE International Conference on Computing and Communication Systems (I3CS)*, pages 16-18, IEEE, Shillong, India. March 16-18, 2023.

Das N, Pradhan K, Patra S. Classification of Polarimetric SAR Image using JS-Divergence Profile. In proceedings of the *IEEE Calcutta Conference (CALCON)*, pages 20-24, IEEE, Kolkata, India. December 10-11, 2022.

Das N, Ramdinmawii E, Kumar A, Nath S. Vocal Singing and Music Separation of Mizo Folk Songs. In proceedings of the *4th IEEE-sponsored International Conference on Computing and Communication Systems (I3CS)*, pages 1-6, Shillong, India. March 16-18, 2023.

Das R, Kalita S. Classification of Alzheimer's Disease stages through volumetric analysis of MRI data. In proceedings of the *IEEE Calcutta Conference (CALCON 2022)*, pages 165-169, IEEE, Kolkata, India. December 10-11, 2022.

Devi M, Deka M, Talukdar J. Speech Recognition via Machine Learning in Recording Studio. In proceedings of the *NIELIT's International Conference on Communication, Electronics and Digital Technologies*. New Delhi, India. February 10-11, 2023.

Gogoi A, Borah B. Students' Grading System by Fuzzy Approach. In proceedings of the *2nd International Conference on Computer Science, Engineering and Applications (ICCSEA)*, pages 1-6, Gunupur, India. September 8, 2022.

Gupta A, Sharma U. Machine Learning based Sentiment Analysis of Hindi Data with TF-IDF and Count Vectorization. In proceedings of the *7th International Conference on Computing, Communication and Security (ICCCS)*, pages 1-5, Seoul, Korea, Republic of Korea. November 3-5, 2022.

Kalita KP, Boro D. An Efficient Consensus Algorithm for Blockchain-Based Federated Learning. In proceedings of the *International Conference on Intelligent Systems, Advanced Computing and Communication (ISACC)*, pages 1-7, Silchar, India, IEEE. February 3-4, 2023.

Kathing M, Brahma RK, Saharia S. Effective method to reduce Covariate issues in gait-based human identification. In proceedings of the *2nd International Conference on Intelligent Technologies (CONIT)*, pages 1-5, IEEE, Hubli, India. June 24-26, 2022.

Kurmi A, Das D, Sen P, Ray SK, Satapathy SS. Gene Essentiality Mediated Base Substitution in Escherichia coli genome: Machine Learning Analysis. In proceedings of the *International Interdisciplinary Conference on Mathematics, Engineering and Science (MESIICON)*, pages 1-4, Durgapur, India. IEEE. November 11-12, 2022.

Paul C, Ray K, Medhi N. iRASA: Fog Scheduling With Congregation of MVO and PSO. In proceedings of the *4th International Conference on Computing and Communication Systems (I3CS)*, pages 1-6, IEEE. Shillong, India. March 16-18, 2023.

Pradhan K, Patra S. Structure Preserving Semantic Texture Filtering. In proceedings of the *IEEE Calcutta Conference (CALCON)*, pages 283-287, IEEE, Kolkata, India. December 10-11, 2022.

Sarkar T, Kalita S. ParPER: A Partitioned Prioritized Experience Replay in Multi-Agent Reinforcement Learning. In proceedings of the *5th International Conference on Smart Systems*

and Inventive Technology (ICSSIT 2023), pages 932-938, IEEE. Tirunelveli, India. January 23-25, 2023.

Sarkar T, Kalita S. A Delayed Median Q-value approach to the Muti-Agent Parallel Critic Network Architecture for Cooperative-Competitive Reinforcement Learning. In proceedings of the 6th International Conference on Emerging Technologies in Computer Engineering: Industrial IoT and Cyber Physical Systems (ICETCE-2023), Jaipur, India. February 3-4, 2023.

Sarmah P, Gogoi A, Kalita S. Encoder Decoder Based Deep Learning Architecture For Video Scene Parsing. In proceedings of the 2nd Second International Conference on Computer Science, Engineering and Applications (ICCSEA), pages 1-6, IEEE. Gunupur, India. September 8, 2022.

Sarmah T, Bhattacharyya DK. Extraction of Functionally Related Genes for Schizophrenia using Network Analysis in bulk RNA-Seq Data. In proceedings of the 4th International Conference on Computing and Communication Systems (I3CS), pages 1-5, Shillong, India. March 16-18, 2023.

CONFERENCE/WORKSHOP/SYMPOSIUM/SEMINAR ATTENDED

Name of the faculty member	Title of the paper	Organized by	Date/Period, year	Place/ institute/ venue
A Karmakar	Two Day Workshop on Data Science and its Applications	Dept. of Computer Sc. & Engineering, Tezpur University	02-03 March 2023	Dept. of Computer Sc. & Engineering, Tezpur University
A Karmakar	Recent Trends in Information Technology, Networking, Communication and Healthcare	Dept. of Computer Sc. & Engineering, Tezpur University	11-12 March 2023	Dept. of Computer Sc. & Engineering, Tezpur University
D Boro	Two Day Workshop on Data Science and its Applications	Dept. of Computer Sc. & Engineering, Tezpur University	02-03 March 2023	Dept. of Computer Sc. & Engineering, Tezpur University
D Boro	Recent Trends in Information Technology, Networking, Communication and Healthcare	Dept. of Computer Sc. & Engineering, Tezpur University	11-12 March 2023	Dept. of Computer Sc. & Engineering, Tezpur University
J Talukdar	Recent Trends in Information Technology, Networking, Communication and Healthcare	Dept. of Computer Sc. & Engineering, Tezpur University	11-12 March 2023	Dept. of Computer Sc. & Engineering, Tezpur University

J Talukdar	Two Day Workshop on Data Science and its Applications	Dept. of Computer Sc. & Engineering, Tezpur University	02-03 March 2023	Dept. of Computer Sc. & Engineering, Tezpur University
LB Singh	Recent Trends in Information Technology, Networking, Communication and Healthcare	Dept. of Computer Sc. & Engineering, Tezpur University	11-12 March 2023	Dept. of Computer Sc. & Engineering, Tezpur University
LB Singh	Two Day Workshop on Data Science and its Applications	Dept. of Computer Sc. & Engineering, Tezpur University	02-03 March 2023	Dept. of Computer Sc. & Engineering, Tezpur University
N Medhi	Recent Trends in Information Technology, Networking, Communication and Healthcare	Dept. of Computer Sc. & Engineering, Tezpur University	11-12 March 2023	Dept. of Computer Sc. & Engineering, Tezpur University
N Medhi	Two Day Workshop on Data Science and its Applications	Dept. of Computer Sc. & Engineering, Tezpur University	02-03 March 2023	Dept. of Computer Sc. & Engineering, Tezpur University
RC Baishya	Two Day Workshop on Data Science and its Applications	Dept. of Computer Sc. & Engineering, Tezpur University	02-03 March 2023	Dept. of Computer Sc. & Engineering, Tezpur University
R Sarmah	Recent Trends in Information Technology, Networking, Communication and Healthcare	Dept. of Computer Sc. & Engineering, Tezpur University	11-12 March 2023	Dept. of Computer Sc. & Engineering, Tezpur University
S Kalita	Two Day Workshop on Data Science and its Applications	Dept. of Computer Sc. & Engineering, Tezpur University	02-03 March 2023	Dept. of Computer Sc. & Engineering, Tezpur University
S Nath	Two Day Workshop on Data Science and its Applications	Dept. of Computer Sc. & Engineering, Tezpur University	02-03 March 2023	Dept. of Computer Sc. & Engineering, Tezpur University
S Patra	Recent Trends in Information Technology, Networking, Communication and	Dept. of Computer Sc. & Engineering, Tezpur University	11-12 March 2023	Dept. of Computer Sc. & Engineering, Tezpur University

	Healthcare			
S Patra	Two Day Workshop on Data Science and its Applications	Dept. of Computer Sc. & Engineering, Tezpur University	02-03 March 2023	Dept. of Computer Sc. & Engineering, Tezpur University
T Padhan	Recent Trends in Information Technology, Networking, Communication and Healthcare	Dept. of Computer Sc. & Engineering, Tezpur University	11-12 March 2023	Dept. of Computer Sc. & Engineering, Tezpur University
T Pradhan	Faculty Induction Programme	TLC, Tezpur University under PMMMNMTT Scheme, GoI	01 February-02 March 2023	TLC, Tezpur University
T Pradhan	Two Day Workshop on Data Science and its Applications	Dept. of Computer Sc. & Engineering, Tezpur University	02-03 March 2023	Dept. of Computer Sc. & Engineering, Tezpur University
Upasana Sharma	Recent Trends in Information Technology, Networking, Communication and Healthcare	Dept. of Computer Sc. & Engineering, Tezpur University	11-12 March 2023	Dept. of Computer Sc. & Engineering, Tezpur University
Upasana Sharma	Two Day Workshop on Data Science and its Applications	Dept. of Computer Sc. & Engineering, Tezpur University	02-03 March 2023	Dept. of Computer Sc. & Engineering, Tezpur University

TALKS BY THE FACULTY ABROAD AND IN INDIA

Name of the faculty member	Title of the Event	Date	Organizer and Venue
A Karmakar	Delivered lectures on <i>Design and Analysis of Algorithms</i>	10 March 2023	Dhemaji Engineering College
DK Bhattacharyya	Delivered a talk on <i>IoT Security Issues</i>	September 2022	Rajiv Gandhi University, Arunachal Pradesh
J Talukdar	Delivered a talk on <i>Impact of Machine Learning on E-commerce</i>	06 March 2023	Dept. of IT, Gauhati Commerce College
R Sarmah	Delivered a talk on <i>Machine Learning in Healthcare</i>	23 November 2022	Dept. of Computer Sc. & Engg, Jorhat Engineering College
R Sarmah	Delivered a talk in the International Women's Day Programme	03 March 2023	5 Tactical Air Centre, HQ 4 Corps (Mission Chariali)

R Sarmah	Delivered a talk on <i>DigitAll: Innovation and Technology for Gender Equality</i>	10 March 2023	IQAC, Darrang College
S Kalita	Delivered a talk on <i>Introduction to AI and its uses in Fish Farming</i>	22 February 2023	College of Fisheries, Assam Agricultural University, Raha
U Sharma	Delivered lecture in International E-Conference on Recent Advances in Humanities, Commerce, Management, Engineering, Science and Technology	28 September 2022	College of Arts, Bhigwan, Maharashtra, Dattakala Group of Institutions, Maharashtra, and Rangapara College
U Sharma	Delivered a talk on Departmental Presentations for NAAC Assessment, Rangapara College	03 December 2022	Rangapara College
U Sharma	Delivered lecture in Faculty Induction Program	23 February 2023	Teaching Learning Centre (TLC), Tezpur University

SEMINAR/WORKSHOP/SYMPOSIA/LECTURES ORGANIZED

Title	Date
MeitY Sponsored 2-day workshop on Recent Trends in Information Technology, Networking, Communication and Healthcare	11-12 March 2023
2-Day Workshop on Data Science and its Applications	02-03 March 2023

DISTINGUISHED VISITORS

- Jugal K Kalita, Professor, University of Colorado, Colorado Springs, USA.
- Dr. Ashok K Varma, Tata Memorial Center, Advance Centre for Treatment, Research and Education in Cancer (ACTREC), Mumbai.

AWARDS/HONOURS/NOTABLE ACHIEVEMENTS

Research Scholars/Students

- Prathana Saikia, PhD student has received full financial support to visit Queen's University Belfast, UK as a visiting doctoral student for 03 months under Collaborative Grant of British Council from 03 December 2022 to 28 February 2023.
- Linuskrishna Rajbongshi, PhD student has received full financial support to visit Queen's University Belfast, UK as a visiting doctoral student for 3 months under Collaborative Grant of British Council from 03 December 2022 to 28 February 2023.

NUMBER OF STUDENTS QUALIFIED NET-JRF/GATE/SLET

Qualifying Examination	Number of Qualified Students
NET- JRF/LS	05
GATE	12

NOTABLE PLACEMENTS

Name of Student	Organization Name	Designation
Subhasish Goswami	Blockswap	Protocol Engineer
Kaushik Kumar Bora	Amazon India	Software Development Engineer
Adittya Dey	Velocity	Software Development Engineer
Krishna Prabhakar	BlackRock	Analyst
Ankit Kumar Mishra	BlackRock	Analyst
Rabijit Singh	Velocity	Software Development Engineer
Nayanjeet Saikia	Velocity	Software Development Engineer
Nishant Bora	IQVIA	Associate Software Developer
Upam Sarmah	IQVIA	Associate Software Developer
Milan Mandal	IQVIA	Associate Software Developer

FACULTY MEMBERS***Professor***

Dilip K Saikia, PhD (IIT Kharagpur)

Specialization/Areas of interest: Mobile Computing, Computer Networks

Email: dks@tezu.ernet.in

Dhruba K Bhattacharyya, PhD (Tezpur University)

Specialization/Areas of interest: Machine Learning, Network Security and Bioinformatics

Email: dkb@tezu.ernet.in

Smriti K Sinha, PhD (Tezpur University)

Specialization/Areas of interest: Workflow Automation, Semi-structured Databases

Email: smriti@tezu.ernet.in

Utpal Sharma, PhD (Tezpur University)

Specialization/Areas of interest: Natural Language Processing

Email: utpal@tezu.ernet.in

Nityananda Sarma, PhD (IIT Guwahati)

Specialization/Areas of interest: Mobile Networks, Networks Security

Email: nitya@tezu.ernet.in

Bhogeswar Borah, PhD (Tezpur University)

Head of the Department (till 17 September 2022)

Specialization/Areas of interest: Data Mining, Image Processing

Email: bgb@tezu.ernet.in

Sarat Saharia, PhD (Tezpur University)

Head of the Department (since 18 September 2022)

Specialization/Areas of interest: Image processing, Pattern Recognition
Email: sarat@tezu.ernet.in

Bhabesh Nath, PhD (Tezpur University)
Specialization/Areas of interest: Data Mining, Artificial Neural Network
Email: bnath@tezu.ernet.in

Associate Professor

Siddhartha S Satapathy, PhD (Tezpur University)
Specialization/Areas of interest: Networking, Bioinformatics
Email: ssankar@tezu.ernet.in

Sajib K Deka, PhD (Tezpur University)
Specialization/Areas of interest: Computer Networks, Cognitive Radio Networks
Email: skdeka@tezu.ernet.in

Debojit Boro, PhD (Tezpur University)
Specialization/Areas of interest: Mobile Computing
Email: deb0001@tezu.ernet.in

Rosy Sarmah, PhD (Tezpur University)
Specialization/Areas of interest: Data Mining
Email: rosy8@tezu.ernet.in

Assistant Professor

S Ibotombi Singh, PhD (Tezpur University)
Specialization/Areas of interest: Data Mining
Email: sis@tezu.ernet.in

L Basantakumar Singh, MTech (Tezpur University)
Specialization/Areas of interest: Pattern Recognition
Email: lbsingh@tezu.ernet.in

Arindam Karmakar, PhD (ISI Kolkata)
Specialization/Areas of interest: Computational geometry
Email: arindam@tezu.ernet.in

Sanghamitra Nath, PhD (Tezpur University)
Specialization/Areas of interest: Natural Language Processing, Data Mining
Email: snath@tezu.ernet.in

Swarnajyoti Patra, PhD (Jadavpur University)
Specialization/Areas of interest: Pattern Recognition, Evolutionary Computing, Neural Networks
Email: swpatra@tezu.ernet.in

Shobhanjana Kalita, PhD (Tezpur University)
Specialization/Areas of interest: Knowledge Representation & Reasoning
Email: kalitas@tezu.ernet.in

Nabajyoti Medhi, PhD (NIT Meghalaya)
Specialization/Areas of interest: Knowledge Representation & Reasoning
Email: nmedhi@tezu.ernet.in

Jyotisma Talukdar, PhD (Gauhati University)

Specialization/Areas of interest: Data Mining, Machine Learning
Email: jyoti4@tezu.ernet.in

Tribikram Pradhan, PhD (IIT BHU)
Specialization/Areas of interest: Recommender System, Information Retrieval, Data Mining
Email: tpradhan@tezu.ernet.in

Guest Faculty

Ramcharan Baishya, PhD (Tezpur University)
Specialization/Areas of interest: Network Security, Data Mining,
Email: rbaishya@tezu.ac.in

Md. Faiz Iqbal Faiz, PhD (NERIST Itanagar)
Specialization/Areas of interest: Data Mining, Image processing
Email: faiziqbalfaz066@gmail.com

Habila Basumatary, PhD (NERIST Itanagar)
Specialization/Areas of interest: Network Security
Email: habilabasumatary6@email.com

Adjunct Faculty

Jugal K Kalita, PhD (University of Pennsylvania, USA)
Specialization: Artificial Intelligence, Bioinformatics, Information Retrieval, Computer Security
Email: jkalita@uccs.edu

Bhabani P Sinha, PhD (University of Calcutta)
Specialization: Microprogramming, Computer Arithmetic, Fault Diagnosis, Graph Algorithms, Parallel Architectures and Algorithms, Wireless Networks & Mobile Computing
Email: bhabani@isical.ac.in

STAFF MEMBERS

System Analyst

Pranabjyoti Dutta, PhD (Tezpur University)
Email: pjd@tezu.ernet.in

Rajib Goswami, PhD (Tezpur University)
Email: rgos@tezu.ernet.in

Debasish Das, PhD (Tezpur University)
Email: ddas@tezu.ernet.in

Technical Officer

Gautam K Das, BE (JEC)
Technical Officer
Email: gautamd@tezu.ernet.in

Technical Assistant

Ajay K Sharma, MTech (Tezpur University)
Email: ajay@tezu.ernet.in

Laboratory Assistant

Arun Chetri, MCA (IGNOU)

Email: arunch@tezu.ernet.in

Arup K Sarkar, JE (Silchar Polytechnic)
Email: arupks@tezu.ernet.in

UDC

Babita Das, MA (Dibrugarh University)
Email: bobi@tezu.ernet.in

MTS

Golap Baruah
Email: golapb@tezu.ernet.in

DEPARTMENT OF DESIGN

THE DEPARTMENT

The Department of Design of Tezpur University was established in 2019 under the School of Engineering. This Department aims to train a new bunch of manpower with focus on social innovation, healthcare, and education. During the academic programmes offered by this Department, students will have the freedom to explore different aspects of design in the fields of textile, tourism, culture, agriculture, forest, handicrafts etc. The training will focus on solving new emerging problems of society while working at the intersection of design, technology, and people.

The Department has started a Master of Design (MDes) programme in 2021. The curriculum covers specialized courses of Product Design (PD), Communication Design (CD), and Interaction Design (ID). The multidisciplinary approach of the program will train students for different industry domains such as consumer products, agriculture equipment, health-care products, IT-based industries, and design firms. Such an approach will also help students to explore various fields for their future research careers. Deeply rooted in the design fundamentals and design research, the curriculum trains the students in the basic design skills and new design research methodologies.

ACADEMIC PROGRAMMES AND STUDENT INTAKE

Academic Programme	Intake
Master of Design (MDes)	18

THRUST AREAS OF THE DEPARTMENT

- Product Design
- Interaction Design
- Visual Communication Design

MAJOR FACILITIES/EQUIPMENT AVAILABLE

- **Digital Prototyping Studio**
 - High-end workstations (Dell & HP) with the latest software package (Solidworks)
 - Wacom Cintiq Pro (24-inch 2 nos., 32-inch 1 no.) for product styling, illustrations, and visual design.
 - High quality A3 Scanners & A3 Printers.
- **Physical Prototyping Studio**
 - 3D printers for rapid prototyping.
 - Ultimaker 3 Desktop 3D Printer
 - DELTA WASP 2040
- **Communication Studio**
 - DSLR cameras and tripods.
 - Canon EOS 90D
 - Tripod (Manfrotto & Milibo)

PUBLICATIONS BY FACULTY AND STAFF MEMBERS

JOURNAL PUBLICATIONS

Verma SK, Puneekar RM. Gaining Insights into the Creative Process of Designing Nature Inspired Product Forms. *International Journal of Technology and Design Education*, 33(3): 1007-1035, 2023.

Jeyapradhap T, Srinivasan G, Raja B. Endpoint estimation using a measurement sensor for freeze-drying process control. *Thermal Science and Engineering Progress*, 41, 101848, 2023.

CONFERENCE PROCEEDINGS

Basak A, Verma SK. Understanding various factors affecting tea garden workers and their working conditions in a tea garden ecosystem: An exploratory study. Paper presented at the 20th International Conference on Humanizing Work and Work Environment, Punjabi University, November 24 – 26, 2022.

Shrivastava HM, Srinivasan G. Design Process Issues and Concerns Observed While Improving Taylors Slate for Visually Impaired Students. Paper presented at Co-evolution of design research and design practice - Implications of new methodological developments on future design processes, CPDM, Indian Institute of Science, Bangalore, January 12, 2023.

Basak A, Singh S, Ghosh A, Srinivasan G. Design of tea basket for small-scale tea plantation workers - An ergonomic approach. Paper presented at the 20th International Conference on Humanizing Work and Work Environment, Punjabi University, November 24 – 26, 2022.

Shrivastava HM, Srinivasan G. Design Issues and their associated health hazards from metal fumes during the welding process. Paper presented at the North-East Research Conclave organized by Science, Technology and Climate Change Department and Department of Education, Government of Assam at Department of Design, IIT Guwahati, May 20 - 22, 2022.

SEMINARS/CONFERENCES/WORKSHOPS/SYMPOSIA ATTENDED

Name of the faculty member	Title of the paper	Organized by	Date	Place/institute/venue
G Srinivasan	Interdisciplinary Refresher Course on Academic Writing and Research	Teaching Learning Centre, Tezpur University	16-30 May 2022	Teaching Learning Centre, Tezpur University (Online)

TALKS BY THE FACULTY MEMBERS ABROAD AND IN INDIA

Name of the faculty member	Title of the Event	Date	Place/institute/venue
G Srinivasan	Creative methods and tools for effective research dissemination	14 and 16 December 2022	IIITDM Kancheepuram
G Srinivasan	Creating a Quality Research Article: Software and Writing Perspective	18 and 22 July 2022	IIIT Kottayam

SEMINAR/WORKSHOP/SYMPOSIA/INVITED LECTURES ORGANISED

Title	Date
Online workshop on Need Finding & Problem Identification. Workshop coordinator: Dr Shiv Kumar Verma Industry Expert: Mr Arnav Bhagawati, Senior Designer at Samsung R&D Institute, Bangalore	22-23 April 2022

DISTINGUISHED VISITORS

- Prof V Ravishankar, Director, NID, Assam
- Prof D Udaya Kumar, IIT Guwahati
- Prof AK Das, IIT Guwahati

OTHER IMPORTANT ACTIVITIES OF THE DEPARTMENT

The design exhibition 'Gradient' was organized during 29-30 April 2022. The students of the Department presented their assignments and project work of some of the MDes courses.



Design Exhibition: Gradient

NUMBER OF STUDENTS QUALIFIED IN NET-JRF/GATE/SLET/CEED

Name of Qualifying Examination	Number of Qualified Students
CEED	01

NOTABLE PLACEMENTS

Name	Designation	Organization
Ankit Basak	PhD scholar	DoD, IIT Guwahati
Harsh Mohan Shrivastava	PhD scholar	DoD, IIT Delhi
Aurabinda Ghosh	UI/UX designer	Saissy.ai

FACULTY MEMBERS

Professor

Nayan M Kakoty, PhD (Tezpur University)

Head In Charge (till 09 September 2022)

Specialization/Areas of interest: Robotics, Biomedical Signal Processing

Email: nkakoty@tezu.ernet.in

Partha P Dutta, PhD (Tezpur University)

Head In Charge (since 10 September 2022)

Specialization/Areas of Interest: Renewable Energy, Thermal Engineering, Biomass Gasification, Solar Thermal Energy, Drying Technology, Automobile engineering

Email: ppdutta@tezu.ernet.in

Assistant Professor

Shiv K Verma, PhD (IIT Guwahati)

Specialization/Areas of Interest: Industrial Design, Product Design, Design Methodology

Email: shiv@tezu.ernet.in

Srinivasan G, PhD (IIITDM Kancheepuram)

Specialization/Areas of Interest: Product design and Ergonomics

Email: srini@tezu.ernet.in

Guest Faculty

Pranjal P Borah, MTech (ADBU Guwahati)

Specialization/Areas of Interest: Interaction Design

Email: ppborah@tezu.ernet.in

Kankana N Dev, PhD (IIT Guwahati)

Specialization/Areas of Interest: Visual Communication Design

Email: kankana.dev@tezu.ernet.in

Namrita Sharma, MFA (Delhi University)

Specialization/Areas of Interest: Visual Communication Design

Email: namrita@tezu.ernet.in

Hari B Saikia, MDes (CIT Kokrajhar)

Specialization / Areas of Interest: Interaction Design

Email: hari@tezu.ernet.in

STAFF MEMBERS

Laboratory Assistant

Himanshu Nath

Email: himansu@tezu.ernet.in

Technician

Hirak J Haloi

Email: hirakjy@tezu.ernet.in

MTS

Gitartha Bhatta

Email: gitarth@tezu.ernet.in

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

THE DEPARTMENT

The Department of Electronics and Communication Engineering, established in the year 1997 is one of the oldest departments of the University. Starting with an MTech Programme in Electronics Design and Technology in 1997, the Department has subsequently introduced another MTech programme in Bioelectronics under UGC's 'Teaching and Research in Interdisciplinary and Emerging Areas' scheme. The Department expanded its academic activities to undergraduate programmes, first with a BTech programme in Electronics and Communication Engineering in 2006 followed by another BTech programme in Electrical Engineering in 2014 (currently under the Department of Electrical Engineering since October 2016). The Department also carried out implementation of a three-year diploma programme in Advanced Diploma in Healthcare Informatics and Management under UGC's Career Oriented Scheme (2012-2017). In addition, the Department offers PhD programme in different areas including Signal and Image Processing, Vehicular Electronics, Bioelectronics, Biosensors, Microwave Engineering, Neuro-bio engineering, Health Care Engineering, Communication Engineering, Robotics and Microelectronics. The Department is supported by DST-FIST, DeitY – MIT, UGC-SAP (DRS-I), AICTE, RPS, AICTE NEQIP, Visvesvaraya PhD Scheme under Meity, GoI. The faculty members of the Department have several international research collaborations including Queen's University Belfast (QUB), UK; University Technology Malaysia, Malaysia; Airlangga University, Indonesia, University of Maryland, USA and University of Rio de Janeiro, Brazil.

ACADEMIC PROGRAMMES AND STUDENT INTAKE

Academic Programme	Intake
MTech in Electronics Design and Technology	35
MTech in Bioelectronics	19
BTech in Electronics and Communication Engineering	68
PhD in Electronics and Communication Engineering	Variable (23 in 2022-23)

THRUST AREAS

- Microwave, Communication Engineering, Semiconductor Devices
- Biosensors, Bioelectronics, Neuro-engineering, Health Care Engineering, Intelligent Instrumentation, Image and Signal Processing
- Vehicular Electronics, Power Electronics, Robotics

MAJOR FACILITIES/EQUIPMENT AVAILABLE

Experimental

- Optical Lithography unit (Suss Microtech)
- Thin film deposition unit
- Mili-Q water system
- Probe Station
- Reactive Ion etching unit (Hind Hivac)
- Plasma Enhanced CVD (Hind Hivac)
- Vacuum coating unit (E-Beam and thermal)
- Physical vapor deposition unit

- Spin coater (Suss Microtech)
- Spectrum analyzer
- Optical Microscope
- Thin film thickness measurement unit (F20 Sinsil International)
- Multichannel Bio-signal acquisition unit
- Quantum Efficiency and IV measurement set up (Under procurement process)
- FPGA board
- Potentiostat-Galvanostat
- Probe Sonicator
- Centrifuge machine

Computational

- Cadence UG/PG bundle
- Synopsys TCAD
- Mentor Graphics
- Xilinx

MAJOR RESEARCH AND DEVELOPMENT FINDINGS

Faculty/ Researcher	Salient Research Findings
P Kakoty	<ul style="list-style-type: none"> • Developed a Pt. Decorated Composite of ZnO Nanorod and SnO₂ for gas sensing applications for detection of 'Linalool', a natural aroma compound • Developed a composite material for UV photodetection
R Goswami	<ul style="list-style-type: none"> • Designed and Developed a one-dimensional simulation tool, FlatB, for calculating flatband voltage in MOS structures using spatial distribution of fixed oxide charges • Developed first hand design principles of fin dimensionality of dual core source/drain GAA FinFETs using calibrated TCAD framework • Carried out investigation of incomplete dopant ionization and mobility effects on nanoscale TFETs and FinFETs using calibrated TCAD framework • Developed inherent characteristic studies of traps and random telegraph noise in commercial MOSFETs and TFETs
S Sharma	<ul style="list-style-type: none"> • Behavioral Model and Analysis of Mechanical and Electromechanical Dampers in Light Vehicles

RESEARCH PROJECTS (BOTH ONGOING AND NEW)

Project Title	Funding Agency	Amount (in INR)	Duration	Investigator(s)
Exploring Knowledge on Medieval Assam: Multidisciplinary IKS Centre at Tezpur University	IKS, MoE	30.84 lakhs	2022-2024	R Goswami
Fractal Web-based flexible Interconnects	DST-SERB	26.82 lakhs	2022-2025	RK Baruah
Sensor array on flexible substrate for monitoring BTEX VOCs and hydrocarbons particularly present in oil and natural gas industrial environment	DST-SERB	23.82 lakhs	2022-2025	B Mondal

Development of a Mobile Application and Agroclimatic Atlas for Climate Smart Agriculture in Assam	ISRO	25 lakhs	2022-2025	B Deka
Design and development of a low cost computerized garment cutting machine	ASTEC	5 lakhs	2021-2023	R Chutia
Development of a Real Time Crop Advisory System Exploiting Nanotechnology based Nitrogen Sensor with Internet of Farming (IoF) Framework	DBT	46.15 lakhs	2020-2022	R Goswami
Early detection of pests on Tea plantation through multispectral imaging from unmanned arial vehicle	MeitY	195.12 lakhs	2020-2023	S Bhattacharyya
A behavioral model of Ion Sensitive Field Effect Transistor (ISFET) with spatial dependence on reference electrode and development of a hardware system for model validation	ASTEC	4.7 lakhs	2019-2023	S Sharma
Design and implementation of low cost hybrid aquaponic system	AICTE	21.86 lakhs	2019-2023	S Roy
Development of A Cost-Effective EMG Controlled Prosthetic Hand for Multiple Patterns	I-Hub Foundation for COBOTICS, IIT Delhi	43.44 lakhs	2021-2024	NM Kakoty
Study for label free optical detection of snake venom protein using Surface Plasmon Resonance technique	DST-SERB	47.52 lakhs	2018-2022	B Mondal
Facility for simulation and characterization of advanced electronic devices and circuits	DST-FIST	173 lakhs	2019-2024	B Mondal
IEEE Smart Village Project: Sustainable Rural Community Development in Jhawani Village of Assam	IEEE	US\$ 59,470	2023-2025	B Deka

PUBLICATIONS BY FACULTY AND STAFF MEMBERS

JOURNAL PUBLICATIONS

Borah BB, Baruah SMB, Kakati D, Roy S. CVD prediction on micro-controller: ECG morphology learning approach. *Innovations in Systems and Software Engineering (NASA Journal)*, 17(3): 1-11, 2022.

- Borah BB, Hazarika U, Baruah SMB, Roy S, Jamir A. A BCI framework for smart home automation using EEG signal. *Intelligent Decision Technologies*, 17(2): 485-503, 2023.
- Gupta AK, Das S, Sahu PP, Mishra P. Design and development of IDE sensor for naringin quantification in pomelo juice: An indicator of citrus maturity. *Food Chemistry*, 377, 2022.
- Muchahary D, Lakum SR, Narzary R, Sahu PP, Bhattarai S, Tayal S. Heterojunction between crystalline silicon and nanocomposite coupled ZnO·SnO₂ and optimization of its photovoltaic performance. *Current Applied Physics*, 38:15-21, 2022.
- Chetia R, Sahu PP. Quantum Edge Extraction of Chest CT Image for the Detection and Differentiation of Infected Region of COVID-19 Patient. *Arabian Journal for Science and Engineering*, 48(8): 1–12, 2022.
- Das S, Sahu PP. A novel electrochemical interdigitated electrodes sensor for limonin quantification and reduction in citrus limetta juice. *Food Chemistry*, 381, 2022.
- Saikia O, Dutta JC, Thakur HR. Carbon nanotube based biologically modified field effect transistors (CNT-BioFETs): A research review. *Materials Today: Proceedings*, 2023.
- Hazarika K, Thakur HR, Dutta JC. Fabrication and characterization of different polymer doped CNT nanocomposites for creatinine detection. *Materials Today: Proceedings*, 2023.
- Das K, Sharma S. Coulombic efficiency estimation technique for eco-routing in electric vehicles. AIMS Energy. *American Institute of Mathematical Sciences*, 10(3):356-74, 2022.
- Baruah SMB, Roy S. Modelling neuron fiber interaction and coupling in non-myelinated bundled fiber. *Biomedical Physics and Engineering Express*, 8(3), 2022.
- Deka B, Mullah HU, Barman T, Dutta S. Joint Sparse Representation-based Single Image Super-resolution for Remote Sensing Applications. *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing*, 16: 2352-2365, 2023.
- Barman T, Deka B. Edge Preserving Single Remote Sensing Image Super-resolution using Sparse Representations. *SN Computer Science*, 4, 312, 2023.
- Sharma R, Zhang J, Kumar R, Deka B, Fusco V, Yurduseven O. 3-D Super-Resolution of Coded Aperture Millimeter-Wave Images Using Complex-Valued Convolutional Neural Network. *IEEE Sensors Journal*, 22(21): 20921-20936, 2022.
- Deka B, Kumar S, Datta S. Dictionary Learning-Based Multichannel ECG Reconstruction Using Compressive Sensing. *IEEE Sensors Journal*, 22(16): 16359-16369, 2022.
- Deka B, Deka D. An improved multiscale distribution entropy for analyzing complexity of real-world signals. *Chaos, Solitons & amp; Fractals*, 158:112101, 2022.
- Datta S, Dandapat S, Deka B. A deep framework for enhancement of diagnostic information in CSMRI reconstruction. *Biomedical Signal Processing and Control*, 71:103117, 2022.
- Baruah HG, Nath VK, Hazarika D. Remote Sensing Image Retrieval Based on 3D-Local Ternary Pattern (LTP) Features and Non-subsampled Shearlet Transform (NSST) Domain Statistical Features. *Computer Modeling in Engineering & Sciences*, 131(1), 137-164, 2022.
- Zhuo GY, Banik S, Kao FJ, Ahmed GA, Kakoty NM, Mazumdar N, Gogoi A. An insight into optical beam induced current microscopy: Concepts and applications. *Microscopy Research and Technique*, 85(11):3495-513, 2022.

Gohain L, Sarma K, Kalita AJ, Kakoty NM, Hazarika SM. EMG controlled adaptive multi-grasp prosthetic hand with an android interface. *International Journal of Intelligent Robotics and Applications*, 6(4):791-803, 2022.

Boruah A, Kakoty NM, Ali T, Malarvili MB. Shape oriented object recognition on grasp using features from enclosure based exploratory procedure. *International Journal of Intelligent Robotics and Applications*, 7(1):48-64, 2023.

Kakoty NM, Gohain L, Saikia JB, Kalita AJ, Borah S. Real-time EMG based prosthetic hand controller realizing neuromuscular constraint. *International Journal of Intelligent Robotics and Applications*, 6(3):530-42, 2022.

Routh S, Deb D, Baruah RK, Goswami R. Impact of High-temperature and Interface Traps on Performance of a Junctionless Tunnel FET. *Silicon*, 15(6):2703-14, 2023.

Baruah RK, Mahajan BK, Routh S. A Scalable Enhancement-Mode Junctionless SiC FET with Embedded P+ Pockets in the Oxide Layer for High-Temperature Applications. *Journal of Electronic Materials*, 52(2):1507-1, 2023.

Deb D, Goswami R, Baruah RK, Kandpal K, Saha R. Parametric investigation and trap sensitivity of n-p-n double gate TFETs. *Computers and Electrical Engineering*, 100:107930, 2022.

Deb D, Goswami R, Baruah RK, Saha R, Kandpal K. Role of gate electrode in influencing interface trap sensitivity in SOI tunnel FETs. *Journal of Micromechanics and Microengineering*, 32(4):044006, 2022.

Saha R, Goswami R, Panda DK. Analysis on electrical parameters including temperature and interface trap charges in gate overlap Ge source step shape double gate TFET. *Microelectronics Journal*, 130:105629, 2022.

Saha R, Panda DK, Goswami R. Dependence of RF/analog and linearity parameters on ferroelectric layer thickness in ferroelectric tunnel junction dual material double gate (FTJ)-DMDG TFET. *Ferroelectrics*, 602(1):204-14, 2023.

Hazarika P, Ray M, Hazarika A, Deb D, Das PS, Choudhury H, Goswami R. Flatband voltage in MOS structures for spatial fixed oxide charge distributions. *Journal of Materials Science: Materials in Electronics*, 34(15):1242, 2023.

Chakraborty A, Das S, Mondal B. Integrating Neural Network for Pest Detection in Controlled Environment Vertical Farm. *Indian Journal of Science and Technology*, 15(17):829-38, 2022.

Mondal B, Gogoi PK. Nanoscale heterostructured materials based on metal oxides for a chemiresistive gas sensor. *ACS Applied Electronic Materials*, 4(1):59-86, 2022.

Kakoty P, Das K. Performance Enhancement of Linalool Sensor with Pt Decorated Composite of ZnO Nanorod and SnO. *IEEE Sensors Journal*, 22(21):20223-9, 2022.

Toan HLM, Goswami R. Impact of gate dielectric on overall electrical performance of Quadruple gate FinFET. *Applied Physics A*, 128(2):103, 2022.

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Mangla A, Saha R, Goswami R. Impact on performance of dual stack hetero-gated dielectric modulated TFET biosensor due to Si_{1-x}Ge_x pocket variation. *Microelectronics Journal*, 129:105603, 2022.

Chander S, Sinha SK, Chaudhary R, Goswami R. Effect of noise components on L-shaped and T-shaped heterojunction tunnel field effect transistors. *Semiconductor Science and Technology*, 37(7):075011, 2022.

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Das T, Gohain L, Kakoty NM, Malarvili MB, Widiyanti P, Kumar G. Hierarchical approach for fusion of electroencephalography and electromyography for predicting finger movements and kinematics using deep learning. *Neurocomputing*, 527:184-95, 2023.

Zhuo GY, Banik S, Kao FJ, Ahmed GA, Kakoty NM, Mazumder N, Gogoi A. An insight into optical beam induced current microscopy: Concepts and applications. *Microscopy Research and Technique*, 85(11):3495-513, 2022.

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BOOKS

Sahu PP. Fundamentals of Optical Networks Components, CRC press, 2022, ISBN: 9780367265458.

Misra P, Sahu PP. Biosensors in Food Safety and Quality, CRC press, 2022, ISBN: 9780367201647.

Goswami R, Saha R. Contemporary Trends in Semiconductor Devices: Theory, Experiment and Applications, Springer Singapore, 2022, ISBN: 978-981-16-9124-9.

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BOOK CHAPTERS

Bujar Baruah SM, Hazarika U, Roy S. Edge detection and segmentation type responses in primary visual cortex. In: Proceedings of International Conference on Frontiers in Computing and Systems: COMSYS 2021-2022. (Eds. Basu S, Kole DK, Maji AK, Plewczynski D, Bhattacharjee D) Springer Nature Singapore, 2023, <https://doi.org/10.1007/978-981-19-0105-8>.

Baruah SM, Laskar AZ, Roy S. Scene Segmentation and Boundary Estimation in Primary Visual Cortex. In: Proceedings of the International Conference on Paradigms of Computing, Communication and Data Sciences: PCCDS 2022-2023. (Eds. Yadav RP, Nanda SJ, Rana PS, Lim MH), Springer Nature Singapore, 2023, <https://doi.org/10.1007/978-981-19-8742-7>.

Borah BB, Baruah SM, Kakati D, Roy S. Automating remote point-of-care ECG diagnostics via decentralized report routing algorithm. In: Computational Intelligence in Healthcare. (Eds. Altrjman C, Gupta M, Kumar R, Ahmed S), CRC Press, 2023, <https://doi.org/10.1201/9781003305347>.

Sharma S, Hazarika C, Neroula S. Significance of Optimal Positioning of the Reference Electrode for an ISFET. In: Contemporary Trends in Semiconductor Devices: Theory, Experiment and Applications. (Eds. Goswami R, Saha R), Springer Nature Singapore, 2022, <https://doi.org/10.1007/978-981-16-9124-9>.

Das K, Sharma S. Eco-routing navigation systems in electric vehicles: A comprehensive survey. In: Autonomous and Connected Heavy Vehicle Technology. (Eds. Krishnamurthi R, Kumar A, Gill SS), Academic Press, 2022, <https://doi.org/10.1016/C2020-0-03957-5>.

Baruah RK, Das SK, Sarmah N. Advanced materials for smart devices. In: Nanoelectronics: Physics, Materials and Devices. (Eds. Sarkar A, Sarkar CK, Deyasi A, De D, Benfdila A) Springer Nature Singapore, 2022, <https://doi.org/10.1016/C2020-0-03814-4>.

Senapati M, Singhal S, Gupta AK, Sonowal D, Mishra P, Sahu PP. Bio/chemical sensors and microsensors involved in meat industry. In: Biosensors in food safety and quality. (Eds. Mishra P, Sahu PP) CRC Press, 2022, <https://doi.org/10.1201/9780429259890>.

Ganguly A, Goswami R. Low dimensional materials in nanoelectronics. In: Nanoelectronics: Physics, Materials and Devices. (Eds. Sarkar A, Sarkar CK, Deyasi A, De D, Benfdila A) Springer Nature Singapore, 2022, <https://doi.org/10.1016/C2020-0-03814-4>.

Adil M, Baruah SM, Roy S. A novel two-electrode ecg acquisition from palm. In: Advanced Computational Paradigms and Hybrid Intelligent Computing: Proceedings of ICACCP 2021. Advances in Intelligent Systems and Computing. (Eds. Gandhi TK, Konar D, Sen B, Sharma K) Springer Singapore, 2022, <https://doi.org/10.1007/978-981-16-4369-9>.

Baruah SM, Hazarika U, Das B, Roy S. Primates Visual Cortex Inspired Novel Edge Detection Method. In: Advanced Computational Paradigms and Hybrid Intelligent Computing: Proceedings of ICACCP 2021. Advances in Intelligent Systems and Computing. (Eds. Gandhi TK, Konar D, Sen B, Sharma K) Springer Singapore, 2022, https://doi.org/10.1007/978-981-16-4369-9_35.

CONFERENCE PROCEEDINGS

Suhas D, Bhattacharyya S. Compact Dual-Band CRLH Metamaterial Planar Antenna in Laptops for WLAN/WiMAX Frequencies. In 2022 IEEE Microwaves, Antennas, and Propagation Conference (MAPCON), 1037-1042, Bangalore, India. December 12-16, 2022.

Chakraborty S, Sharma S. Behavioral Model and Analysis of Mechanical and Electromechanical Dampers in Light Vehicles. In 2022 IEEE Calcutta Conference (CALCON), 84-88, Kolkata, India. December 10-11, 2022.

Sharma R, Hussung R, Keil A, Friederich F, Fromenteze T, Khalily M, Deka B, Fusco, V. Performance Analysis of Classification Algorithms for Millimeter-Wave Imaging. In European Conference on Antennas and Propagation, Madrid, Spain, March 27- April 1, 2022.

Khatoniar S, Routh S, Malakar D, Baruah RK. Modelling of Surface Potential and Threshold Voltage for Short Channel Junctionless Cylindrical Gate-All-Around MOSFET. In IEEE International Conference of Electron Devices Society Kolkata Chapter (EDKCON), 495-499, Kolkata, India. November 26-27, 2022.

Bhattacharjee A, Baruah RK. Electrical Performance of Fractal Web as Flexible Interconnects. In IEEE Latin American Electron Devices Conference (LAEDC), 1-4, Cancun, Mexico, July 04-06, 2022.

Routh S, Deb D, Baruah RK, Goswami R. Junctionless tunnel FET for high-temperature applications from an analog design perspective. In IEEE International Conference on Nanoelectronics, Nanophotonics, Nanomaterials, Nanobioscience & Nanotechnology (5NANO), 1-4, Kottayam, India, April 28-29, 2022.

PUBLICATION OF PATENTS

Inventor(s)	Patent Title	Application /Patent Number	Published /Granted	Country
A Sharma, S Chakraborty, S Sharma	Detection of egg albumin	Application No. 202331012154	Applied	India
NM Kakoty, L Gohain	An EMG based Prosthetic Hand Controller for Real Time Grasping realizing Neuromuscular Constraint	Application No. 201931049269	Published	India (Funded by TIFAC, DST, Govt. of India)
R Hussain, D Sonowal	Bionic Arm	Application no. 375272-001 on 08-12-2022	Applied	India
PP Sahu	A portable Optical fiber instrument for instant petrol purity detection	Patent No. 201831009528	Granted	India
R Goswami	Double Drawer Match Box	Application No. 202231076570	Published	India
PP Sahu	A Reduced Size Linearly Tapered 3dB (Half Power Splitter) Multimode Interference (MMI) Coupler	522/KOL/2008	Applied	India
PP Sahu	A system and apparatus for measuring and monitoring transfer oil breakdown voltage using optical fiber sensor	Application No. 201931020800	Applied	India
PP Sahu G Sarma, B Borkakaty	Paper capacitive sensor based Novel corona virus detection kit	Application No: 202231009453	Applied	India
NM Kakoty, L Gohain.	An EMG Based Multi Grasp Prosthetic Hand with an Android Interface	Application No. 202131022730	Published	India

SEMINARS/CONFERENCES/WORKSHOPS/SYMPOSIA ATTENDED

Name of the faculty member	Title of the Event	Organized by	Date	Place/institute/venue
P Kakoty	Interdisciplinary Refresher course on Curriculum and Pedagogy (online)	TLC, Tezpur university	7-20 June 2023	Tezpur university
R Goswami	Session Chair in 5th International	IEEE KGECE Student Branch	7-8 April 2023	Kalyani Government

	Conference “2023 Devices for Integrated Circuit (DevIC)”	Chapter		Engineering College, Kalyani
	Session Chair in 2022 IEEE Electron Device Kolkata Conference (2022 IEEE EDKCON)	IEEE EDS Kolkata Chapter	26-27 November 2022	Vedic village, Rajarhat – Kolkata – 700135
	Session Chair in International Conference on MNDCS-2023	NIT Silchar	29-31 January 2023	NIT Silchar
D Hazarika	Workshop on Trilingual Glossary of Engineering in Assamese	CSTT, MoE	4-8 April 2022	Tezpur University
	Workshop on Trilingual Glossary of Engineering in Assamese	CSTT, MoE	2-6 June 2022	Tezpur University
	Workshop on Trilingual Glossary of Engineering in Assamese	CSTT, MoE	28 June - 2 July 2022	Tezpur University

TALKS BY THE FACULTY MEMBERS ABROAD AND IN INDIA

Name of the faculty member	Title of the Event	Date	Place/institute/ venue
R Goswami	‘A Tale of today’s semiconductor devices’ in the Emerging Research Trends in Electronics & Telecommunication	24 March 2023	Assam Engineering College, Guwahati
	‘The Breakfast with Semiconductor Devices’ in the 75th Anniversary of the Transistor, 2022 IEEE Electron Device Kolkata Conference (2022 IEEE EDKCON)	27 November 2022	IEEE EDS Kolkata Chapter
	‘Trap Sensitivity of TFETs and Prospects of Biomemristor’s in the 5-Day Recent Research Trends in VLSI Design (RRTVD-22)	21 November 2022	Academic Staff College and School of Electronics and Communication Engineering, Vellore Institute of Technology, Vellore

SEMINAR/WORKSHOP/SYMPOSIA/INVITED LECTURES ORGANISED

Title	Date
Two Days Workshop on Embedded Machine Learning on System-on-Chip (SoC) in Association with IIT Guwahati, IIT Mandi, and CoreEL Technologies, Bangalore	20-21 December 2022
Digital VLSI System Design Using Cadence Tool and FPGA	17-21 March 2023
Hands-on Training on Advanced Digital Design with Verilog	13-14 May 2023

DISTINGUISHED VISITORS

- Dr Ramana Vinjamuri, Assistant Professor, University of Maryland
- Dr Anup Dandapat, Associate Professor, NIT Meghalaya
- Dr Sonali Chauhan, Associate Professor, IIT Guwahati

AWARDS & HONOURS/ NOTABLE ACHIEVEMENTS

Faculty

NM Kakoty won 2nd position in the Dare to Dream Innovation Contest 3.0 under the theme Cognitive Technologies for Sensing and Adaptation organized by Defense Research and Development Organization, Govt. of India.

Research Scholars/Students

- Sourish Das and Rituparna Borah won 2nd prize in the event TechMilaap 2022 held at GIMT, Guwahati
- Bidyut Bikash Borah, Satyabrat Malla Bujar Baruah and Debaraj Kakati and Faculty Prof S Roy are nominated for Best Chapter along with 11 top selected chapters around the globe published by Taylor & Francis, CRC Press
- Satyabrat Malla Bujar Baruah, Adil Zafar won the Best Paper in 3rd International Conference on Paradigms of Communication, Computing and Data Sciences (PCCDS 2022), 05- 07 July 2022

OTHER IMPORTANT ACTIVITIES OF THE DEPARTMENT

- NM Kakoty has transferred the technology, Intelligent Electrical Charging Time Controller (iElectron)
- Hands-on training program was conducted on Cadence and Advanced tools
- Dr. Bipin Dhekial Phukan award was presented to three best BTech student projects
- A robotic hand developed in the department by NM Kakoty was handed over to two amputees for day-to-day use
- Roboanalyzer based online competition (ROC-2022) was organized during 12 June-10 July 2022

NUMBER OF STUDENTS QUALIFIED IN NET-JRF/GATE/SLET

Name of Qualifying Examination	Number of Qualified Students	Academic Programme
CAT 2022	01	BTech
GATE 2023	04	BTech

NOTABLE PLACEMENTS

Name	Designation	Organization
Ahmed Murtaza	Programmer Analyst Trainee	Cognizant Technologies
Ajanta Das	Graduate Engineer Trainee	Alstom
Akshay Kumar	Associate IT Consultant	ITC Infotech
Amar Kumar Sah	Programmer Analyst Trainee	Cognizant Technologies
AMARTYA MADHAB	Associate IT Consultant	ITC Infotech
Anindya	Internship	IQVIA
Ayan Chakraborty	Associate Software Developer	IQVIA
Baishali Ghosh	Analyst	Capgemini
Bhabagiri Malakar	Project Engineer	Wipro
Elura Sonowal	Associate	Federal Bank
Gajanand Kasat	Associate Software Developer	IQVIA
Hemanta Das	GET	IGGL
Kamal Das	Project Engineer	Wipro
Keerthan Reddy Konnela	Graduate Engineer Trainee	L & T Limited
Krishanu Dev Sarma	Analyst	Capgemini
Kunal Das	Associate IT Consultant	ITC Infotech
Monik Talagatla	Associate Software Developer	IQVIA
Monjit Chetry	Project Engineer	Wipro
Mriganka Kumar Kalita	Project Engineer	Wipro
Nikhil Kumar	Project Engineer	Wipro
Nishanta Saikia	Project Engineer	Wipro
Nitumoni Kalita	Programmer Analyst Trainee	Cognizant Technologies
Pavan Sai Chitteti	Project Engineer	Wipro
Pratiksha Boruah	Graduate Engineer Trainee	Alstom
Sanjana Singha	Graduate Engineer Trainee	Alstom
Saurav Suman	Programmer Analyst Trainee	Cognizant Technologies
Sourav Nath	Project Engineer	Wipro
Harsh Vardhan	Graduate engineer trainee	Tata Advanced Systems Ltd
Sufee Sahin	system engineer	Infosys limited
Monjit Chetry	MBA student	IIM Amritsar
Akshay Kumar	M.Tech student	IIT Guwahati

FACULTY MEMBERS

Professor

Partha P Sahu, PhD (Jadavpur University)

Specialization/Areas of interest: Optical Network, Clinical Instrumentation, Micro-fabrication, Quantum Technology

Email: pps@tezu.ernet.in

Jiten C Dutta, PhD (Jadavpur University)

Specialization/Areas of interest: Biosensors and Bioelectronics, Neuro bioengineering

Email: jitend@tezu.ernet.in

Satyajib Bhattacharyya, PhD (University of Delhi)

Specialization/Areas of interest: Microwave Antennas, Absorbers and Absorbing Materials

Email: sb@tezu.ernet.in

Santanu Sharma, PhD (Tezpur University)

Head of the Department

Specialization/Areas of interest: Semiconductor Devices, Bioelectronic Devices, Vehicular Electronics, Power Electronics

Email: sss@tezu.ernet.in

Soumik Roy, PhD (Tezpur University)

Specialization/Areas of interest: Neuroengineering, Health Care Engineering, Hydroponics, Digital System Design, Intelligent Instrumentation

Email: xoumik@tezu.ernet.in

Bhabesh Deka, PhD (IIT Guwahati)

Specialization/Areas of interest: Digital Image Processing, Biomedical Signal Processing, Machine and Computer Vision; Machine Learning and Deep Learning for Biomedical Signal/Image Processing and Analysis; Deep Learning for Precision Agriculture; Microwave and Millimeter-wave Biosensors for Smart Healthcare; Embedded Machine Learning on FPGA for system-on-chip (SoC) Applications

Email: bdeka@tezu.ernet.in

Vijay K Nath, PhD (IIT Guwahati)

Specialization/Areas of interest: Image Processing, Machine Learning, Computer Vision, Pattern recognition, Deep Learning

Email: vknath@tezu.ernet.in

Nayan M Kakoty, PhD (Tezpur University)

Specialization/Areas of interest: Robotics, Biomedical Signal Processing

Email: nkakoty@tezu.ernet.in

Associate Professor

Deepika Hazarika, PhD (Tezpur University)

Specialization/Areas of interest: Medical Image Processing using Deep Learning, Machine Learning, Computer Vision, Image Processing

Email: deepika@tezu.ernet.in

Ratul K Baruah, PhD (IIT Guwahati)

Specialization/Areas of interest: Nanoelectronics, Biosensors, Flexible Electronics

Email: ratulkr@tezu.ernet.in

Assistant Professor

Riku Chutia, PhD (Tezpur University)

Specialization/Areas of interest: e-nose, Instrumentation and Signal Processing, Embedded system

Email: riku@tezu.ernet.in

Biplob Mondal, PhD (Jadavpur University)

Specialization/Areas of interest: Optical Biosensing, Nanoscale engineering for sensing, Smart materials and systems, MEMS/NEMS

Email: biplobm@tezu.ernet.in

Durlav Sonowal, PhD (Tezpur University)

Specialization/Areas of interest: Sensors, Signal Processing

Email: dsn@tezu.ernet.in

Ananya Bonjyotsna, PhD (Tezpur University)

Specialization/Areas of interest: Audio processing

Email: ananyab@tezu.ernet.in

Priyanka Kakoty, PhD (Tezpur University)

Specialization/Areas of interest: Sensors and Nanotechnology

Email: priyankak@tezu.ernet.in

Rupam Goswami, PhD (NIT Silchar)

Specialization/Areas of interest: Micro/Nano-electronics and VLSI, Bio/Memristive Sensors, Charcoal Electronics

Email: rupam21@tezu.ernet.in

Guest Faculty

Hiranya R Thakur, PhD (Tezpur University)

Specialization/Areas of interest: Bioelectronics

Email: hiranya2@tezu.ernet.in

STAFF MEMBERS***Technical Officer***

Anukul Baishya, PhD (Jadavpur University)

Email: anukul@tezu.ernet.in

Technical Assistant

Kulendra Sharma (till August 2022)

Email: kulen@tezu.ernet.in

Jiten C Boro

Email: j_boro@tezu.ernet.in

Khagen Gogoi

Email: khageng@tezu.ernet.in

Technician

Satya P Saikia

Email: satyap@tezu.ernet.in

Laboratory Assistant

Rupak Sharma

Email: rupak@tezu.ernet.in

Navanit K Roy

Email: navanit@tezu.ernet.in

Machine Operator

Bipul Das

Email: bipulda@tezu.ernet.in

Assistant

Nabajyoti Deka

Email: naba@tezu.ernet.in

MTS

Dharani D Bania

Email: baniad2@tezu.ernet.in

DEPARTMENT OF ELECTRICAL ENGINEERING

THE DEPARTMENT

The Department of Electrical Engineering started in 2014 under the School of Engineering with a BTech program. The prime objective of the Department is to impart quality education, training, and research at the undergraduate level in the forefront areas of Electrical Engineering and its allied technologies. The Department currently offers BTech and PhD programmes in Electrical Engineering. The Department will be offering an MTech Programme in Power and Energy Systems from the year 2024.

The Department plans to expand its teaching and research infrastructure, enhance its industrial and research collaboration and implement modern techniques of imparting training to the students. The key areas of faculty expertise of the Department include Power System Engineering; Power Electronics; Nonlinear Analysis-Theory, Methods & Applications; Control Systems; Fractional Order Chaotic Systems; Converter and Inverter Topologies; Sensor Technologies; Smart Grid Technologies and Policy Design; Distributed Generation Based System Optimization; Renewable Energy Management; Bioelectronics and Neuro Engineering.

ACADEMIC PROGRAMMES AND STUDENT INTAKE

Academic Programme	Intake
BTech	Variable (38 in 2022-2023)
BTech - lateral Entry	Variable (06 in 2022-2023)
PhD	Variable (02 in 2022-2023)

THRUST AREAS

- Sensor, Measurement and Instrumentation.
- Power Electronics and Drives, Microgrid.
- Sensors and Sensing Technologies for Green Energy, Food and Health.

MAJOR FACILITIES AND EQUIPMENT AVAILABLE

- Low Resistance Measurement
- Kelvin Double Bridge Kit
- Impedance Analyzer
- NIELVIS III with FPGA
- Ultra Sonicator fixed frequency
- Trace Moisture Generation Unit
- Power System & Protection Lab
- Magnetic Levitation System for Control System Design.
- PCB Prototyping Machine.
- Typhoon-Hardware in loop (HIL) 402 Real Time Emulator
- Magnetic levitation system
- Hot Air Oven
- Muffle Furnace with Profile controller upto 1000 C

- Hot Plate with Magnetic Stirrer
- Power Electronics Lab
- Conductivity Meter
- Microgrid Control Setup

MAJOR RESEARCH AND DEVELOPMENT FINDINGS

Faculty/Researcher	Salient Research Findings
A Datta	Development of a modified unipolar modulation full-bridge topology that exhibits constant common-mode voltage to suppress the common-mode ground leakage current
A Ahmad	Design of a novel high voltage conversion converter suited for Electric Vehicle (EV) Application. In EV applications input voltage is given through the battery and this battery voltage has constraints. In order to enhance the battery voltage and meet the bus voltage requirement a converter is required which converts high conversion. The proposed converter gives a minimum 5.8 times gain which is not found in the conventional converter of that segment

RESEARCH PROJECTS (BOTH ONGOING AND NEW)

Project Title	Funding Agency	Amount (in INR)	Duration	Investigator(s)
High Voltage Gain Converters for Renewable Energy Resource Applications	UGC-FRPS	10 lakhs	2021-2023	A Ahmad
Development of an on-Board Hybrid charging system for Hilly-station Performance Light Electric Vehicle	Central Power Research Institute (CPRI)	31.46 lakhs	2022-2024	A Datta, A Ahmad

PUBLICATIONS BY FACULTY AND STAFF MEMBERS

JOURNAL PUBLICATIONS

Singh PP, Borah M, Datta A, Jafari S, Roy BK. Integer cum fractional ordered active-adaptive synchronization to control vasospasm in chaotic blood vessels to reduce risk of COVID-19 infections. *International Journal of Computer Mathematics*, 1-15, 2023.

Ortegón-Aguilar J, Castillo-Atoche A, Becerra-Nuñez G, Estrada-López JJ, Osorio-de-la-Rosa E, Carrasco-Alvarez R, Datta A, Vázquez-Castillo J. Multimodal Power Management Based on Decision Tree for Internet of Wearable Things Systems. *Applied Sciences*, 13(7): 4351, 2023.

Rai B, Matsa A, Datta A. Steer Guidance of Autonomous Agricultural Robot Based on Pure Pursuit Algorithm and LiDAR Based Vector Field Histogram. *Journal of Applied Science and Engineering*, 26(10): 1363-1372, 2023.

Rai B, Mahtsa A, Datta A. Obstacle Detection for Agricultural Robot Based on Vector Field Histogram. *Mathematical Statistician and Engineering Applications*, 71(4): 1304-11, 2022.

Koley I, Datta A, Panda GK. Load frequency control scheme for a microgrid system with the application of hTLO-DE algorithm. *Engineering Review*, 42(2): 133-146, 2022.

Ahmad A, Reza MM, Beig AR, Alsawalhi JY, Al Jaafari K. High voltage gain switched-z-source bidirectional dc-dc converter. *IEEE Access*, 10: 53560-53577, 2022.

Roy B, Adhikari S, Datta S, Lalngaihawma S, Samanta S. Real-Time Simulation of a Wind-Solar-Battery Based Microgrid System. *Journal of Electrical Engineering & Technology*. Springer, 18:2087–210, 2023.

Ali SA, Mahboob MR, Islam T. An Intelligent Food Salt Tester Using Cross-Conductive Sensor. *IEEE Open Journal of Instrumentation and Measurement*, 2023.

Hussain S, Ali SA, Islam T, Mahboob MR. Design and detection method of a four electrodes cross-conductive sensor for fluid conductivity measurement. *Applied Physics A*: 129(5):314, 2023.

CONFERENCE PROCEEDINGS

Koley I, Panda GK, Debbarma S, Atoche AC, Datta A. Plug-in Electric Vehicle Aided Load Frequency Control using Cascaded Controller in Microgrid System. In proceedings of the 2023 IEEE IAS Global Conference on Renewable Energy and Hydrogen Technologies, Male Maldives, 1-7, March 11-12, 2023.

Sarker R, Datta A, Sarwat A. Implementation of SHE-MCPWM Technique on a 5L-CHB Inverter for Electric Vehicle (EV) Application. In Proceedings of the IEEE International Conference on Power Electronics Drives and Energy System (PEDES), Jaipur, India, December 14-17, 2022.

Koley I, Datta A, Panda GK, Debbarma S. TLBO Optimised PID Controller for Coordinated Control in a Hybrid AC/DC Microgrid. In Proceedings of the 2022 4th International Conference on Energy, Power and Environment (ICEPE), IEEE, Shillong, 29 April - 01 May, 2022.

Deori P, Bhuyan R, Ahmad A. Improved Control Scheme for Grid Connected Solar PV System with Fuzzy MPPT. In proceedings of the 2022 IEEE International Conference on Power Electronics, Drives and Energy Systems (PEDES):1-6, December 14-17, 2022.

Saharia BJ. A comparison of DC-DC converters for power point tracking in Photovoltaic Applications. In proceedings of the 2022 IEEE 2nd International Symposium on Sustainable Energy, Signal Processing and Cyber Security (iSSSC). 1-6, Gunupur, Odisha, India, December 15-17, 2022.

Lalngaihawma S, Datta S, Singh R, Deb S, Mayanglambam S, Samanta S, Roga S. Performance Analysis of a Solar-Battery-Fuel cell based Micro-grid System. In proceedings of the IEEE 2nd International Conference on Sustainable Energy and Future Electric transportation (SEFET 2022), Hyderabad, India, August 04-06, 2022.

Anamika, Samanta S, Ghose T, Mishra S. Control of DC microgrid using Interconnection and Damping Assignment Passivity Based Control method. In proceedings of the IEEE 7th International Conference for Convergence in Technology (7th I2CT 2022), Pune, India, April 07-09, 2022.

SEMINARS/CONFERENCES/WORKSHOPS/SYMPOSIA ATTENDED

Name of the faculty member	Title of the Event	Organized by	Date	Place/institute/venue
A Datta	Presented a paper in the 2023 IEEE IAS Global Conference on Renewable Energy and Hydrogen Technologies (GlobConHT)	The Maldives National University	11-12 March 2023	The Maldives National University, Male, Maldives
A Datta	Presented a paper in the IEEE International Conference on Power Electronics Drives and Energy System (PEDES)	Malaviya National Institute of Technology, Jaipur	14-17 December 2022	Malaviya National Institute of Technology Jaipur (online)
A Datta	Presented a paper in the 4th International Conference on Energy, Power and Environment	NIT-Meghalaya	29 April - 01 May 2022	NIT-Meghalaya (online).
BJ Saharia	Presented a paper in the 2022 IEEE 2nd International Symposium on Sustainable Energy, Signal Processing and Cyber Security	GIET University, Gunupur, Odisha, India	15-17 December 2022	GIET University, Gunupur, Odisha, India (online)
A Ahmad	Chaired a session in the IEEE Silchar Subsection Conference	NIT Silchar	4-6 November 2022	NIT Silchar (online)
A Ahmad	Presented a paper in an International conference on Emerging Electronics & Automation (E2A)	NIT Silchar	16-18 December 2022	NIT Silchar (online)

TALKS BY THE FACULTY MEMBERS ABROAD AND IN INDIA

Name of the faculty member	Event	Date	Place/institute/venue
A Datta	One Day Seminar on 'Power Converters and Drives for Electrical Vehicles'	4 April 2022	The Institution of Engineers (India), Tripura State Centre
A Datta	One Day workshop on 'Recent trend on Electrical Vehicle	13 October	EE Department, Manipal University

	Technology'	2022	Jaipur
S Samanta	Paper and Thesis Drafting Using LaTeX Environment :How to draw a diagram in latex environment and hands-on to Latex	15 February 2022	Department of Electrical Engineering, CMRIT Bengaluru

SEMINAR/WORKSHOP/SYMPOSIA/INVITED LECTURES ORGANISED

Title	Date
Workshop on Real Life Aspects in Electrical Engineering	06-07 March 2023

DISTINGUISHED VISITORS

- Prabir Barooah, Professor, IIT Guwahati
- Binoy Krishna Roy, Professor, NIT Silchar
- Manash Jyoti Baishya, Manager, Power Grid Corporation of India Ltd., Biswanath Chariali

AWARDS & HONOURS/NOTABLE ACHIEVEMENTS

Research Scholars/Students

- Sayed Afzal Ali has won the Best Paper Award-2022 for Sensors and Measurements in IEEE International Conference organized by NIT, Patna
- Pooja Deori, a research scholar of the Department has won the Northeast India Student Travel Awards organized by IEEE 2022.

OTHER IMPORTANT ACTIVITIES OF THE DEPARTMENT

- Organized a one-day field trip visit to Power Grid Corporation of India Limited (PGCIL), HVDC converter station, Biswanath Chariali on 19 May 2022.

NUMBER OF STUDENTS QUALIFIED IN NET-JRF/GATE/SLET/CEED

Name of Qualifying Examination	Number of Qualified Students
GATE	01
CEED	01

NOTABLE PLACEMENTS

Name	Designation	Organization
Debangee Goswami	Graduate Engineer trainee	Alstom
Jaivir Singh Yadav	Graduate Engineer trainee	Larsen & Toubro
Abhishek Raj	Graduate Engineer trainee	Larsen & Toubro
Rituraj Bordoloi	Graduate Engineer trainee	Larsen & Toubro
Roshan kumar	Teacher	Spectrum Eduventure
Noorafsha Tahseen	Graduate Engineer trainee	Alstom

Dhritismita Bhagawati	Graduate Engineer trainee	Alstom
Mrinal Hazarika	Graduate Engineer trainee	Larsen & Toubro
Udit Agarwala	Graduate Engineer trainee	Indigi Consulting pvt Ltd
Arjun Roy	Graduate Engineer trainee	Allegion India
Prasoon Kumar	Electrical trainee Engineer	Tata Consumers
Sayan Das	Programmer Analyst Trainee	Cognizant
Subhajit roy	Senior Analyst	Capgemini
Ritupan bhuyan	Associate IT Consultant	Associate IT Consultant
Vivek Kumar	Analyst	Capgemini
Ankur Singh	Programmer Analyst Trainee	Cognizant
Satyam	Graduate Engineer Trainee	Larsen & Toubro
	Project Engineer	Wipro
Manish Choudhary	Associate IT Consultant	ITC infotech
	Analyst	Capgemini
	Project Engineer	Wipro
Ali Kamran Ansari	Associate IT Consultant	ITC infotech
	Project Engineer	Wipro
Anurodh Yadav	Programmer Analyst Trainee	Cognizant

FACULTY MEMBERS

Professor

Soumik Roy, PhD (Tezpur University)

HoD in-Charge (till 25 January 2023)

Specialization/Areas of interest: Electronics Design and Technology

Email: xoumik@tezu.ernet.in

Associate Professor

Asim Datta, PhD (IEST Shibpur)

Head of the Department (since 26 January 2023)

Specialization/Areas of interest: Renewable Energy Sources, Power system, Electric vehicles

Email: asim@tezu.ernet.in

Assistant Professor

Md Rahat Mahboob, PhD (Jamia Millia Islamia New Delhi)

Specialization/Areas of interest: Instrumentation and Control Sensors and Signal Conditioning
Wireless measurement Health Monitoring & IoT, Food Quality, Smart Agriculture, Green Technology

Email: rahat@tezu.ernet.in

Manashita Borah, PhD (NIT Silchar)

Specialization/Areas of interest: Smart Energy storage, Electric transportation, Control Systems
IoT, Green energy

Email: manabor@tezu.ernet.in

Barnam J Saharia, MTech (NIT Agartala)

Specialization/Areas of interest: Power Electronic converters for Renewable Energy Applications, Hybrid PV-Wind Energy System Modeling and Optimization Fuzzy and Neural Network applications in power point tracking of PV systems, Optimization in power electronic converters design, Artificial Intelligence in Renewable Energy applications
Email: bjsece@tezu.ernet.in

Anish Ahmad, PhD (IIT BHU)

Specialization/Areas of interest: Power Electronics and Drives, Modeling and Control of Power Electronics and Drives systems, Renewable Energy Integration, Microgrid/Smartgrid, Electric Vehicle/Hybrid Electric Vehicle
Email: aahmad@tezu.ernet.in

Soumya Samanta, PhD (NIT Silchar)

Specialization/Areas of interest: Power and Energy Systems Engineering, Renewable Energy Integration and Microgrid Control Power/Energy Management in Microgrid, Electric Vehicle and Drives.
Email: soumya@tezu.ernet.in

Guest Faculty

Rumi Rajbongshi, PhD (NIT Silchar)

Specialization/Areas of interest: Load frequency control, voltage control, power system operation and control, deregulated power system, solar photovoltaic, techno economic assessment of hybrid system for rural electrification
Email: rumi90@tezu.ernet.in

Swarnankur Ghosh, PhD (NIT Meghalaya)

Specialization/Areas of interest: High Voltage Engineering
Email: swarnankur@tezu.ernet.in

Kaveri Bhuyan, PhD (NERIST Itanagar)

Specialization/Areas of interest: Power System & High Voltage Engineering
Email: kaverib@tezu.ernet.in

Kamaljyoti Gogoi, MTech (NERIST Itanagar)

Specialization/Areas of interest: Power System, Power System Operation & Control, Grid analysis, Smart Grid
Email: kjgogoi@tezu.ernet.in

Shruti Sahu, MTech (NIT Meghalaya)

Specialization/Areas of interest: Microgrids, Shunt Active Filters & Power Quality Improvement
Email: sshruti@tezu.ernet.in

Prashant Prakash, MTech (MNNIT Allahabad)

Specialization/Areas of interest: Control and Instrumentation
Email: prashant@tezu.ernet.in

Gourab Bhuyan, ME (AEC, Guwahati)

Specialization/Areas of interest: Power System Engineering, Grid integration, Renewable energy
Email: gourab@tezu.ernet.in

STAFF MEMBERS

Laboratory Assistant

Biswajeet Nath

Email: biswa89@tezu.ernet.in

Technical Assistant

Madhujya Dowarah

Email: dowarah@tezu.ernet.in

Ankur Jyoti Gogoi

Email: gogoi@tezu.ernet.in

Bedanta Gogoi

Email: gogoi02@tezu.ernet.in

Assistant

Mrinal Basumatary

Email: mrin123@tezu.ernet.in

MTS

Dipak Saikia

Email: dipsai@tezu.ernet.in

DEPARTMENT OF ENERGY

THE DEPARTMENT

The Department of Energy has been one of the vibrant academic departments of the University, marking its existence for the last 25 years with a mandate to produce qualified manpower in the field of energy. The other objectives of the Department are to carry out research and extension activities in the field of energy and to develop new and efficient energy technologies. The Department offers a two-year (four semesters) AICTE-approved MTech program in Energy Technology and PhD in energy-related areas. Apart from teaching and research, the Department also organizes training programs, workshops, and seminars in the relevant areas of energy. The Faculty of the Department has completed several international collaborative research projects and has ongoing international collaborative projects with several countries including the UK, Brazil, South Africa, Sweden, Greece, Italy, and Hungary. Currently, the Department has six externally funded research projects and two consultancy projects including a distinguished project under IMPRINT (Impacting Research, Innovation and Technology), Government of India.

ACADEMIC PROGRAMMES AND STUDENT INTAKE

Academic Programme	Intake
MTech in Energy Technology	35
PhD	Variable (05 in 2022-23)

THRUST AREAS

- **Renewable Energy Resources:** Characterization & Sustainable Applications
- **Energy Conservation:** Advance Management Addressing Sustainability
- **New Energy Systems:** Advance Materials, Energy Storage & New Sources

MAJOR FACILITIES/EQUIPMENT AVAILABLE

- Gas Chromatograph
- Oxidation Stability Apparatus
- Auto Bomb Calorimeter
- Gas Analyser
- UV VIS (Spectrophotometer)
- Computerized Diesel Engine Test Rig
- Micro Hydel Power Generating Equipment
- Dual Fuel Engine
- Biomass gasification systems
- Bio diesel pilot plant
- Grid Tied SPV training system.
- Fuel Cell stack for Unmanned Aerial Vehicle
- Galvanostat with integrated impedance analyser
- Wind Energy Training System
- Solar Water Heating System
- 1 kW Off-grid solar power plant
- GIS Laboratory with hardware and software

- Biogas plant of capacity 50 m³
- Computation Laboratory equipped with Software and 13 Computers
- AdaptNET E-Lab facility equipped with Server (2TB) and 18 Computers.

MAJOR RESEARCH AND DEVELOPMENT FINDINGS

Faculty/ Researcher	Salient Research Findings
P Borah and S Mahapatra	Agri-photovoltaic (APV) system design and performance studies have been carried out with a focus on tea gardens. The suitable installation parameter for the proposed APV plant in Sonabheel Tea Estate is a 20° tilt angle with 1.5 inter-rows spacing at 2 m ground clearance height. It is also found that the solar modules installed above the crops were 2.5–3.0 °C cooler than the solar modules installed on a roof
NJ Mahapurushia and S Mahapatra	Modified dispatch strategies are designed for PV/Pumped Hydro Storage System (PHS)/Battery Bank stand-alone Hybrid energy system (HES) and PV/PHS/Grid-tied HES as the in-built dispatch strategies in HOMER Pro did not allow much controllability over the system. It is found that the levelized cost of energy is lower in the case of grid-connected hybrid energy systems compared to stand-alone hybrid energy systems
R Kataki	Agro-industrial wastes can be valorized through hydrothermal conversion to high-value material such as Carbon Quantum Dot (CQD)s, hydrochar, and biofuel
R Kataki	Plants grown on heavy metal contaminated sites can address multiple objectives of bioremediation, and production of biofuel and biomaterials through thermo-chemical conversion of the biomass
R Kataki	Sustainable management of noxious weed species (<i>Tithonia diversifolia</i>) as a potential feedstock for thermo-chemical conversion to biofuels and biomaterials fulfills three-fold objectives of weed control, replacing conventional biomass for production of bioenergy and biobased materials, and waste to wealth generation
R Kataki	Agro-residue wastes based biorefinery product could be utilized for production of supercapacitor electrode material & replacing conventional cement without compromising the strength of concrete structure, which contributes directly towards bioeconomy by replacing fossil-based petroleum sources
R Kataki	Organic fraction of the MSW could fit a thermo-chemical based biorefinery operation as a potential feedstock for production of a range of products including biofuels, agro-chemicals & biofertilizer & thereby contributing to a circular economy
R Kataki	Development of a low-cost urine dehydrating system for complete recovery of all nutrients leading to resource conservation and recycling for a circular economy
N Sarmah	Development of improved model for estimation of photovoltaic performance cleaning cycle recommendations for photovoltaic power plants in Assam
Debakshi Kashyap and D Deka	Green synthesis of a biogenic heterogeneous composite as catalyst for biodiesel production
Khalifa Said Mohammed Hassen and D Deka	Sustainable biodiesel production from selected microalgae strains
Khalifa Said Mohammed	Biodiesel Production from <i>Chlorella homosphaera</i> by Two-Step Catalytic Conversion Using Waste Radish Leaves as a Source for Heterogeneous

Hassen and D Deka	Catalyst
Swagat Chutia, Nayan M Kakoty and D Deka	Robotic algae harvester: A novel method for efficient algae collection
Niran Daimary and D Deka	Potato peels as a sustainable source for biochar, bio-oil and a green heterogeneous catalyst for biodiesel production
Niran Daimary and D Deka	Musa acuminata peel: A bioresource for bio-oil and by-product utilization as a sustainable source of renewable green catalyst for biodiesel production
BK Kakati and Dwipkower Talukdar	A prototype wireless spatial air quality monitoring system has been developed for Unmanned Aerial Vehicle
BK Kakati and Biswajit Das	Development of an oxy-hydrogen generator for renewable energy storage
DC Baruah	<p>Thirteen different locally available crop residue biomasses (Ipomoea Leaves, Mikania, Cogon Grass, Reed, Napier, Rice Straw, Black Gram Straw, Green Gram Straw, Mustard Straw, Lentil Straw, Pea Straw, Corn Stalk and Garlic Stalk) were successfully tested as potential feedstock for biomethane production, while attempting to develop process-based technology for pre-treatment of multi crop residues into standard feedstock for anaerobic digestion (AD). Digestate slurry from established AD reactor has been identified as the most promising pretreatment material.</p> <p>Online monitoring of real-time AD reactor operational data using IoT system and data communication and web for remote access has been developed and applied for Indian Patent.</p> <p>ASTM A516-Grade 485 (Carbon steel grade coated with Glass Fiber Reinforced Polymer) is identified for 10000 litter AD reactor which was successfully simulated against failure testing.</p> <p>Microorganisms (gram-positive cocci, gram positive bacilli, gram negative cocci and gram-negative bacilli) have been isolated from environmental origin (naturally decomposed bamboo) with methane producing property. The consortium (in different ratio) has been developed using all the pure isolates which could be grown efficiently under anaerobic condition.</p> <p>An AD reactor is developed to monitor reaction/operational parameters instantaneously and control operational temperature for household application</p>

RESEARCH PROJECTS (BOTH ONGOING AND NEW)

Project Title	Funding Agency	Amount (in INR)	Duration	Investigator(s)
Applied Research and development for industrial realization of lignin recycling and conversion to value-added international market product	DST	48.38 lakhs	2021-2024	D Deka
Catalytic conversion of biomass derived 2,5-dimethyl furan to value added petro chemical p-xylene	AICTE	23 lakhs	2019- 2023	R Kataki

Water quality baseline survey and follow-up monitoring assessment of hydrological and biological status of streams in upper watersheds for Water Resource Conservation (COSFOM), Manipur	Govt. of Manipur	58.98 lakhs	2022-2027	R Kataki
Development of Spatial Air Quality Monitoring System using Polymer Electrolyte Fuel Cell Powered Unmanned Aerial Vehicle	AICTE	17.06 lakhs	2022-2025	BK Kakati

PUBLICATIONS BY FACULTY AND STAFF MEMBERS

JOURNAL PUBLICATIONS

Borah D, Eldiehy KSH, Hatiboruah D, Mandal M, Deka D. An Integrated Approach for Simultaneous Monitoring and Data Acquisition on the Culture of Green Microalga *Chlorella homosphaera* Using Different LED Illumination. *Bioenergy Research*, 2022. DOI: 10.1007/s12155-022-10452-y.

Bhuyan N, Dev Choudhury N, Dutta BK, Upadhyaya K, Saikia N, Kataki R. Assessment of kinetic parameters, mechanisms and thermodynamics of *Tithonia diversifolia* pyrolysis. *Biomass Conversion and Biorefinery*, 13: 2703–2718, 2023.

Brahma B, Shukla AK, Baruah DC. Design and performance analysis of solar air heater with phase change materials. *Journal of Energy Storage*, 61: 2023. DOI: 10.1016/j.est.2023.106809.

Brahma H, Sarmah N. Performance Analysis of Spectrum-Dependent Integrated Thermal-Electrical Model of a PV Module, *IEEE Journal of Photovoltaics*, 13(3) : 467 – 475, 2023.

Brahma H, Pant S, Micheli L, Smestad GP, Sarmah N. Effect of Environmental Factors on Photovoltaic Soiling, *Experimental and Statistical Analysis, Energies*, 16(1): 1-22, 2023.

Chutia S, Gohain L, Kakoty NM, Deka D. Robotic algae harvester: a novel method for efficient algae collection. *Aquacultural Engineering*, 98: 2022. DOI: 10.1016/j.aquaeng.2022.102266.

Das V, Dunford N, Deka D. Waste utilization and biodiesel production from *Desmodium maximum* grown in swine wastewater using waste eggshells as a catalyst. *Aquacultural Engineering*, 99: 2022. DOI: 10.1016/j.aquaeng.2022.102293.

Daimary N, Eldiehy KSH, Boruah P, Deka D, Bora U, Kakati BK. Potato peels as a sustainable source for biochar, bio-oil and a green heterogeneous catalyst for biodiesel production, *Journal of Environmental Chemical Engineering*, 10 (1): 2022. DOI: 10.1016/j.jece.2021.107108.

Dev Choudhury N, Saha N, Bhaumik S, Kataki R. Production and Evaluation of Physicochemical, Rheological and Tribological Properties of *Cucurbita pepo* L Seed oil, *Biomass Conversion and Biorefinery*, 13: 1101–1114, 2023.

Deka TJ, Osman AI, Baruah DC, Rooney DW. Assessment of bioenergy and syngas generation in India based on estimation of agricultural residues. *Energy Reports*, 9: 3771-3786, 2023.

Deka TJ, Osman AI, Baruah DC, Rooney DW. Methanol fuel production, utilization, and techno-economy: A review. *Environmental Chemistry Letters*, 20: 3525-3554, 2022.

Eldiehy KSH, Daimary N, Borah D, Mandal M, Deka D. Biodiesel Production from *Chlorella homosphaera* by Two-Step Catalytic Conversion Using Waste Radish Leaves as a Source for Heterogeneous Catalyst. *Applied Biochemistry and Biotechnology*, 195: 4347–4367, 2023.

Eldiehy KSH, Daimary N, Borah D, Sarmah D, Bora U, Mandal M, Deka D. Towards biodiesel sustainability: Waste sweet potato leaves as a green heterogeneous catalyst for biodiesel production using microalgal oil and waste cooking oil. *Industrial Crops & Products*, 187: 2022. DOI: 10.1016/j.indcrop.2022.115467.

Eldiehy KSH, Bardhan P, Borah D, Rather MA, Chutia H, Bhagya Raj GVS, Mandal M, Deka D. Optimization of nutrient composition for enhanced microalgal biomass and macromolecules using RSM: An integrated approach towards improving microalgal biodiesel feasibility. *Journal of Applied Phycology*, 34: 2869–2882, 2022.

Eldiehy KSH, Pritam B, Borah D, Gohain M, Rather MA, Deka D, Mandal M. A comprehensive review on microalgal biomass production and processing for biodiesel production. *Fuel*, 324: 2022. DOI: 10.1016/j.fuel.2022.124773.

Eldiehy KSH, Gohain M, Daimary N, Borah D, Mandal M, Deka D. Radish (*Raphanus sativus* L.) leaves: A novel source for a highly efficient heterogeneous base catalyst for biodiesel production using waste soybean cooking oil and *Scenedesmus obliquus* oil. *Renewable Energy*, 191: 888-901, 2022.

Kakati U, Sakhiya AK, Baghel P, Trada A, Mahapatra S, Upadhyay D, Kaushal P. Sustainable utilization of bamboo through air-steam gasification in downdraft gasifier: Experimental and simulation approach. *Energy*, 252: 2022. DOI: 10.1016/j.energy.2022.124055.

Lal L, Kakati BK. Synthesis of nitrogen and sulfur-nitrogen co-doped carbon-based oxygen reduction reaction catalyst from rice straw and reeling waste of muga silk (*Anthraxia assamensis*), *Materials Today: Proceedings*, 54 (3): 628-636, 2022.

Mondal SC, Sarma B, Narzari R, Gogoi L, Katak R, Garg A, Gogoi N. Role of pyrolysis temperature on application dose of rice straw biochar as soil amendment. *Environmental Sustainability*, 5: 119–128, 2022.

Rathore D, Sevda S, Prasad S, Venkatramanan V, Chandel AK, Katak R, Bhadra S, Channashettar V, Bora N, Singh A. Bioengineering to accelerate biodiesel production for a sustainable biorefinery. *Bioengineering*, 9 (11): 2022. DOI: 10.3390/bioengineering9110618.

Sarma R, Tamuly A, Kakati BK. Recent developments in electricity generation by Microbial Fuel Cell using different substrates, *Materials Today: Proceedings*, 49: 457-463, 2022.

Saikia S, Verma V, Kakati BK, Sivasakthivel T, Tarodiya R. Optimization of solar integrated electrolyser system for hydrogen production using Taguchi method. *Materials Today: Proceedings*, 49: 397–402, 2022.

Sarmah S, Lal L, Kakati BK, Deka D. Recent advancement in rechargeable battery technologies. *WIREs Energy Environ*: 2022. DOI: 10.1002/wene.461.

Verma V, Nath R, Tarodiya R. Heat transfer prediction for radiant floor heating/cooling systems using artificial neural network (ANN). *Heat Transfer*: 2023. DOI: 10.1002/htj.22820.

Verma V, Tarodiya R, Thangavel S, Nath R. Thermal performance of water-based brines as a heat carrier for ground heat exchanger under severely cold environments. *Heat Transfer*: 2022. DOI: 10.1002/htj.22642.

Williams NB, Quilliam RS, Campbell B, Raha D, Baruah DC, Clarke ML, Sarma R, Haque C, Borah T, Dickie J. Challenging perceptions of socio-cultural rejection of a taboo technology: Narratives of imagined transitions to domestic toilet-linked biogas in India. *Energy Research & Social Science*, 92: 2022. DOI: 10.1016/j.erss.2022.102802.

BOOK CHAPTERS

Bardhan P, Gupta K, Mandal M, Kataki R. Nanomaterials in Lignocellulosic Biodiesel Production by Oleaginous Microorganisms. In: *Biotic Resources: Circular Bioeconomy Perspective* (Eds. Bhaskar T, Varjani S, Krishna BB, Pandey A.), CRC Press, 2023, ISBN: 9781003335740.

Bardhan P, Deka A, Bhattacharya SS, Mandal M, Kataki R. Economical aspect in biomass to biofuel production. In: *Value-Chain of Biofuels: Fundamentals, Technology, and Standardization*. (Eds. Yusup S, Rashidi NA.), Elsevier, 2022, ISBN: 978-0-12-824388-6.

Baruah D, Hiloidhari M, Baruah DC. Biomass Supply Chain for Anaerobic Methane Generation: Issues and Concern. In *Biomethane through Resource Circularity*, pages 33-45, CRC Press, 2022.

Biswal T, Shadangi KP, Kataki R. Advanced Practices in Biodiesel Production. In: *Biodiesel Production: Feedstocks, Catalysts, and Technologies*. (Eds. Rokhum SL, Halder G, Assabumrungrat S, Ngaosuwan K.), Wiley, 2022, ISBN: 9781119771364.

Bordoloi N, Bora N, Deka A, Athparia M, Sohtun P, Kataki R. Panoramic View about Microalgae Biomass as Waste-to-Energy: A Biorefinery Concept. In: *Handbook of Waste Biorefinery*. (Eds. Jacob-Lopes E, Zepka LQ, Deprá MC.), pages 417-462, Springer Cham, 2022, ISBN: 978-3-031-06561-3.

Deka P, Gohain M, Bhuyan N, Gogoi N, Kataki R. Utilization of Biowastes in Green Chemistry. In: *Climate Change and Agriculture: Perspectives, Sustainability and Resilience*. (Eds. Benkeblia N.), pages 399-424, Wiley, 2023, ISBN: 978-1-119-78976-5.

Deka A, Kataki R, Simha P. Recycling source-separated human faces. In: *Novel Approachers Towards Wastewater Treatment and Resource Recovery Technologies*. (Eds. Mungray A, Sonawane S.), Elsevier, 2022, ISBN: 978-0-323-90627-2.

Gupta K, Bardhan P, Bhatt D, Rather MA, Kumar P, Bawitlung L, Mandal M, Kataki R. Evolution of Biological Pretreatment Methods for Agricultural Residues and Defatted Microalgae for Overcoming Biomass Recalcitrance in Biofuel Generation. In: *Enzymes in the Valorization of Waste*. (Eds. Verma P.), Boca Raton, CRC Press, 2023, ISBN: 9781003187714.

Baruah R, Das SK, Sarmah N. Advanced materials for smart devices. In: *Nanoelectronics: Physics, Materials, and Devices*, pages 457-486, Elsevier, 2023.

Baruah G, Karimirad M, Friel D, Mackinnon P, Abbasnia A, Sarmah N. Development of a CFD model for simulating a floating solar platform in irregular wave regimes. In: *Trends in Renewable Energies Offshore*. CRC Press, 2022.

Brahma H, Sarmah N. Spectrum-Based 3D Thermal Modeling of the PV Module: Simulation and Experimental Study. In: *Advances in Thermofluids and Renewable Energy*, pages 493-502, Springer, 2022.

Borthakur P, Lahon NK, Kakati BK, Verma V. Multiphysics Simulation of a Polymer Electrolyte Fuel Cell (PEFC) to Study its Polarization Characteristics under Different Oxygen Concentrations. In: *Lecture Notes in Mechanical Engineering*. 2023, ISBN: 978-981-19-2187-2 & 978-981-19-2188-9.

Kataki S, Wangpan T, Tangjang S, Baruah DC, Dwivedi SK, Kamboj DV, Kushwaha S, Chatterjee S. Abundance, variety, and scope of value-added utilization of agricultural crop residue: emphasizing potential of anaerobic digestion and digestate recycling. In: *Sustainable Agriculture and the Environment*, pages 247-272, Academic Press, 2023.

Kumar S, Mahato RP, Gupta K, Bardhan P, Mandal M, Kataki R. Understanding Biomass Recalcitrance: Conventional Physical, Chemical, and Biological Pretreatment Methods for Overcoming Biomass Recalcitrance. In: *Thermochemical and Catalytic Conversion Technologies for Future Biorefineries. Clean Energy Production Technologies*. (Eds. Verma P.), pages 53-78, Springer, Singapore, 2022, ISBN: 978-981-19-4311-9.

Kumar R, Jain S, Verma V, Tarodiya R, Kumar M. Performance Optimization of a Pine Oil-Fueled Agricultural Engine Using Grey-Taguchi Approach. In: *Renewable Energy Systems: Modelling, Optimization and Applications*, pages 191-216, Scrivener Publishing LLC, 2022, ISBN: 9781119803515.

Kumari S, Boopathi K, Sarmah N. Repowering of Wind Farm and Its Economic Feasibility: A Case Study. In: *Advances in Thermofluids and Renewable Energy*, pages 535-547, Springer, 2022.

Phukan MM, Sangma SR, Kalita D, Pankaj PP, Das PP, Bora P, Saha J, Kumar M, Hazarika N, Kataki R. Next-generation biosurfactant and their practical application in the food industry. In: *Applications of Next Generation Biosurfactants in the Food Sector*. (Eds. Inamuddin, Adetunji CO), pages 361-389, Academic Press, 2023, ISBN: 978-0-12-824283-4.

Sarma R, Kakati BK. Modern challenges and future perspective of Microbial Fuel Cells, In: *Microbial Fuel Cells for Environmental Remediation*. (Eds. Ahmad A, Ibrahim MNM, Yaqoob AA, Setapar SHM.), Springer, 2023, ISBN: 978-981-19-2680-8.

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Sarma B, Gogoi L, Gogoi N, Kataki R. Crop Plants under Metal Stress and Its Remediation. In: *Plant Stress: Challenges and Management in the New Decade*. (Eds. Roy S, Mathur P, Chakraborty AP, Saha SP.), Springer Nature, 2023, ISBN: 978-3-030-95365-2.

Saikia S, Verma V, Sivasakthivel T, Tarodiya R, Kumar R. Optimization of PV Coupled Electrolyzer for hydrogen Production using Perforated Tubes. In: *Renewable Energy Systems: Modelling, Optimization and Applications*, pages 295-326, Scrivener Publishing LLC, 2022, ISBN: 9781119803515.

CONFERENCE PROCEEDINGS

Bhowmik M, Mishra J, Mohan H, Mahapatra S. . Power generation control optimizing framework of distributed power system with renewables. In *proceedings of the IEEE 6th International Conference on Condition Assessment Techniques in Electrical Systems (CATCON)*, pages. 115-119, Durgapur, India. December 17-19, 2022.

Baruah G, Karimirad M, Abbasnia A, Mackinnon P, Sarmah N, Moghtadaei A. Numerical Simulation of Nonlinear Wave Interaction with Floating Solar Platforms with Double Tubular Floaters Using Viscous Flow Model, In proceedings of the International Conference on Ocean, Offshore and Arctic Engineering, Hamburg, Germany (ASME Conference). June 5-10, 2022.

Chakraborty B, Das V, Deka D. Microalgal Growth in Low-Cost Media for Biodiesel Production. In proceedings of the Sustainable Environment, North-East Research Conclave 2022 (NERC-2022), Springer, Singapore, May 20-22, 2022. DOI: 10.1007/978-981-19-8464-8_17. Print ISBN 978-981-19-8463-1

Rasul I, Chakraborty B, Deka D. Investigation of Microalgae Growth in a Mixture of Kraft Paper Industry Effluent and Biogas Slurry: Wastewater Treatment and Biodiesel Production. In proceedings of the Sustainable Environment, North-East Research Conclave 2022 (NERC-2022), Springer, Singapore, May 20-22, 2022. DOI: 10.1007/978-981-19-8464-8_2. Print ISBN 978-981-19-8463-1.

Saharia BJ, Sarmah N. A comparison of DC-DC converters for power point tracking in Photovoltaic Applications. In proceedings of the IEEE 2nd International Symposium on Sustainable Energy, Signal Processing and Cyber Security (iSSSC), pages 15-17, Gunupur, Odisha, India. December 15-17, 2022.

PUBLICATION OF PATENTS

Inventor(s)	Patent Title	Application/Patent Number	Published/Granted	Country
D. Deka and D. Borah	STAMP (Stacked Tray Modular Photobioreactor)	202231069759	Applied	India
N. Dutt, V.P. Singh, A. Kumar, Y. Gori, M.K. Awasthi, V. Verma	SMART TOILET MANAGEMENT SYSTEM	202211036216 A	Published	India

PEDAGOGY AND CONTENT DEVELOPMENT

Development of A Smart Platform for Promotion of Renewable Energy in Assam (PREA) under State Innovation & Transformation Aayog (SITA) Transformation and Development, Government of Assam, India

E-course development under AdaptNET program: Course Code: EN552, Course Name: Climate change mitigation and energy management for crop-based livelihood, Department of Energy.

CONFERENCE/WORKSHOP/SYMPOSIUM/SEMINAR ATTENDED

Name of Faculty/Staff Member	Purpose of Attending	Title of Event	Date/Period	Organizer and Venue
DC Baruah	Presentation of research work <i>Waste to Energy Conversion: A business model integrated sustainable</i>	North-East Research Conclave, 2022	20-22 May 2022	IIT Guwahati, India, Science, Technology and Climate Change Department & Dept. of Education, Govt. of Assam

	<i>approach</i>			
DC Baruah	Progress of the AdaptNET Project: Tezpur University Assam	Strengthening Research, Education, and Innovation for Climate Smart Crops in Southeast Asia (AdaptNET)	13-15 June 2022	Organizer: Erasmus+ Capacity Building in Higher Education, Athens ,Goa, India
D Deka	Co-Chair a session in the Theme <i>Energy</i>	Technology Vision -2047, INDIA—The Northeast India Consultative meeting	14 March 2023	IIT Guwahati. (Offline)
S Mahapatra	Participant	Energy Education Outreach Workshop	20-21 March 2023	Department of Energy Science & Engineering, IIT Bombay
R Kataki	Panelist	Panel Discussion on, Industry-Academia Energy Conclave	17 November 2022	Kaziranga University Jorhat, Assam
R Kataki	Presented a paper	1st National Conference on Chemical and Bio-Sciences	25-26 March 2023	Department of Chemical Engineering, Veer Surendra Sai University of Technology, Burla, Sambalpur, Odisha
R Kataki	Presented a paper (Online)	5th World Congress on Agroforestry 2022	17-20 July 2022	Quebec City, Canada
S Mahapatra	Resource Person	Workshop to Finalize the Activity Guidebook, NCSC	18-20 October 2022	Assam Science, Technology and Environment Council (Offline)
V Verma	Performance Evaluation of Double Slope Solar Still Using Hollow Circular Fins with Splitter Plate	Emerging Technologies in Mechanical Engineering	08-09 November 2022	Rakshpal Bahadur College of Engineering and Technology (RBCET), Bareilly, U.P-243001
V Verma	Ground Source Heat Pump	Short Term Course on “Solar Energy: A Pathway to Green Energy	03-04 June 2022	Rakshpal Bahadur College of Engineering and Technology (RBCET), Bareilly, U.P-243001

TALKS BY THE FACULTY ABROAD AND IN INDIA

Name of Faculty Member	Title of the Talk	Title of the Event	Date	Organizer and Venue
DC Baruah	<i>Promotion of Industrial scale biogas: Issues & challenges in Assam</i>	Biofuels themed Seminar / Exhibition in Guwahati as part of Azadi Ka Amrit Mahotsav Iconic events	18 April 2022	Alternate Energy & Sustainable Development, IOCL, Guwahati
DC Baruah	<i>Sustainable Rural Community Development in Jhawani village, Assam</i>	IEEE Power Africa 2022 Conference and IEEE Smart Village (ISV) meeting series	22-27 August 2022	Kigali, Rwanda
DC Baruah	<i>National Education Policy 2020: Issues & challenges</i>	One Day International Seminar on National Education Policy 2020: Issues and Challenges	11 November 2022	LGB Girls' College, Tezpur
DC Baruah	<i>Domestic waste management</i>	Waste Management	04 February 2023	Jhaljhala, Tezpur
DC Baruah	<i>Traditional knowledge for sustainable development</i>	Bodoland International Knowledge Festival	27 February-02 March 2023	Bodoland Territorial Council, Kokrajhar, Assam
DC Baruah	<i>Understanding quality in academic institutions</i>	Sensitization Workshop on quality higher education	07 February 2023	Nazir Ajmal Model College of Education, Hojai, Assam
DC Baruah	<i>Issues & challenges of implementing NEP 2020</i>	NEP 2020 Implementation in HEI of Middle Assam Zone	01 March 2023	Biswanath College, Biswanath
DC Baruah	<i>Issues & challenges of implementing NEP 2020</i>	NEP 2020 Implementation in HEI of Middle Assam Zone	04 March 2023	Darrang College, Tezpur
DC Baruah	<i>Issues & challenges of implementing NEP 2020</i>	NEP 2020 Implementation in HEI of Middle Assam Zone	10 March 2023	Nagaon GNDG Commerce College, Nagaon
DC Baruah	<i>Benefits of Biogas</i>	Invited Talk on Environment, Farm and Entrepreneurship	11 March 2023	Enajori, Tezpur
D Deka	<i>Bio-Inspired heterogeneous catalyst for sustainable biodiesel production.</i>	One day hybrid mode Seminar on Challenges and opportunities in Sustainable Biodiesel synthesis and its application towards greener	02 March 2023	Chemical Engineering Department of National Institute of Technology Durgapur, West Bengal. (Online Mode)

		future		
D Deka	<i>Some salient Points related to PhD Research</i>	Induction Programme for newly admitted PhD Student	20 March 2023	Bodoland University, Kokrajhar, Assam, India
R Kataki	<i>Waste Bioresources for Circular Bioeconomy</i>	Refresher Course in Environmental Science (Interdisciplinary)	28 December 2022- 08 January 2023	Department of Environmental Sciences, University of Jammu, Jammu
R Kataki	<i>Valorization of organic wastes</i>	National Conference North East Sustainable and Inclusive Development	16-18 November 2022	Assam Kaziranga University Jorhat, and Institute of Frontier Science and Application, Bangalore, Jorhat, Assam
R Kataki	<i>Waste Management</i>	National Conference on Environmental and Industrial Biotechnology	10-12 November 2022	Department of Biotechnology, Dr. Ambedkar Institute of Technology for Handicapped, Kanpur, UP
S Mahapatra	<i>Energy Conservation in Building</i>	National Seminar on Energy conservation for a sustainable future & mitigating climate change	07 February 2023	Haldia Energy Ltd, Haldia
S Mahapatra	<i>Solar Cell, Module and PV Systems</i>	One Week Capacity Building Program on Solar PV Power Plant (O & M, Design, DPR Preparation & Tariff Calculation)	20 September 2022	NPTI-NER, Guwahati
S Mahapatra	<i>Design of Grid connected Solar PV power Plant – Hands on PVSyst Software</i>	One Week Capacity Building Program on Solar PV Power Plant (O & M, Design, DPR Preparation & Tariff Calculation)	20 September 2022	NPTI-NER, Guwahati
S Mahapatra	<i>Sustainable Campus Initiatives in Higher Learning Institutes</i>	Faculty Induction Programme (FIP)	05 August 2022	Teaching Learning Center, Tezpur University

AWARDS/HONOURS/NOTABLE ACHIEVEMENTS

Name of Awardee	Designation of Awardee	Achievement	Event/Awarded by
DC Baruah	Professor	IEEE Senior Member	IEEE
R Kataki	Professor	Indian Roads Congress Medal for the best paper,	80th Annual Session of the Indian Roads Congress at Patna, and awarded during

		Towards sustainable asphalt binders: Evaluation of bio-asphalt binders and mixes with biochar	the 81st Annual Session of the Indian Roads Congress, October 8-11, 2022, Lucknow
BK Kakati	Assistant professor	Editorial board member of International Journal of Energy and Environmental Science	International Journal of Energy and Environmental Science

OTHER SIGNIFICANT ACTIVITIES OF THE DEPARTMENT

- DC Baruah delivered a talk at Sonitpur District Meeting of Red Cross Society Tezpur on 29 May 2022
- Awareness Campaign on Renewable Energy as a part of Azadi ka Amrit Mahotsav at Jhawani and Harigaon, Tezpur, 19 March 2023

NUMBER OF STUDENTS QUALIFIED IN NET-JRF/SLET/GATE

Name of Qualifying Examination	Number of Qualified Students	Academic Programme
NET JRF	1	PhD
GATE	1	MTech

NOTABLE PLACEMENT OF STUDENTS

Name of Student	Academic Programme	Placement Designation	Company/ Organization	Type of Selection (On-Campus/Off-Campus)
Pranjal Ozah	MTech	Graduate Trainee	PGCIL	Off Campus
Gautam Kumar		Junior Engineer	Indian Railways	Off Campus
Prasanna Saikia		Stove Co-ordinator	C-Quest Capital	On Campus
Rajashree Bordoloi				On Campus
Trideep Gogoi				On Campus
Bashemphang Tiewsoh		Project Manager	Pamoja Cleantech	Off Campus

ENROLLMENT OF STUDENTS IN OTHER INSTITUTES FOR HIGHER STUDIES

Name of Student	Academic Programme (in TU)	Name of Institute	Enrolled Academic Programme
Vivek Prasad	MTech	IIT Guwahati	PhD in Energy Science & Engineering
Jyotimoni Devi		NIT Meghalaya	PhD
Achintya Basak		Vellore Institute of Technology	PhD
Sohit Singh		IIT Roorkee	PhD

FACULTY MEMBERS

Professor

Debendra C Baruah, PhD (PAU, Punjab)

Head of the Department (till 15 August 2022)

Specialization/Areas of interest: Energy, emission, rural livelihood, waste to energy

Email: baruahd@tezu.ernet.in

Dhanapati Deka, PhD (Tezpur University)

Specialization/Areas of interest: Biofuel & Bioenergy Systems, Development of Renewable Catalyst

Email: dhanapati@tezu.ernet.in

Rupam Kataki, PhD (Tezpur University)

Specialization/Areas of interest: Biomass & Biofuel, Energy Environment Interaction

Email: rupam@tezu.ernet.in

Sadhan Mahapatra, PhD (IISc Bangalore)

Head of the Department (since 16 August 2022)

Specialization/Areas of interest: Biomass gasification, Climate responsive buildings, Energy Conservation & Decentralized Energy Options

Email: sadhan@tezu.ernet.in

Assistant Professor

Pradyumna K Choudhury, PhD (Tezpur University)

Specialization/Areas of interest: Solar Energy, Hybrid Energy System, Energy Conservation, Grid Integration, Electric Vehicle, Instrumentation & Control

Email: pkc@tezu.ernet.in

Biraj K Kakati, PhD (IIT Guwahati)

Specialization/Areas of interest: Hydrogen Energy, Energy Storage Devices, Graphene, Electrochemistry, UAV based pollution monitoring

Email: bkakati@tezu.ernet.in

Nabin Sarmah, PhD (Heriot-Watt, Edinburgh)

Specialization/Areas of interest: Solar Energy, Photovoltaic, Energy Systems

Email: nabin@tezu.ernet.in

Vikas Verma, PhD (IIT Roorkee)

Specialization/Areas of interest: Solar Thermal System, Nanofluid, Refrigeration and Air-Conditioning System, Radiant system, GSHP System

Email: vikas@tezu.ernet.in

STAFF MEMBERS

Technical Officer

Madhurjya Borah, BE (Electrical Engineering)

Email: madtech@tezu.ernet.in

Technical Assistant

Tapanjit Borah, Diploma (Mechanical Engineering)
Email: tapanji@tezu.ernet.in

Laboratory Assistant

Troilokya Lahon, BSc (Botany)
Email: tlahon@tezu.ernet.in

Lower Division Clerk

Polly Rajbonshi
Email: poli227@tezu.ernet.in

MTS

Dinesh Bhuyan
Email: dinesh@tezu.ernet.in

DEPARTMENT OF FOOD ENGINEERING AND TECHNOLOGY

THE DEPARTMENT

The Department of Food Engineering and Technology was established in the year 2006 with the aim of creating skilled human resources in the engineering aspect of food processing in order to cater to the needs of the rapidly growing food processing sector. Since its inception, the Department has been imparting MTech programme in food processing and technology. The BTech programme of the Department is accredited by the National Board of Accreditation (NBA) as a Tier-I programme. The Department also offers PhD in Food Engineering and Technology and students are also admitted through AICTE Doctoral Fellowship (ADF), NET/JRF, GATE etc.

The Department has well developed laboratories for teaching and research created from grants received from various agencies viz., HRD grant from the Ministry of Food Processing Industries (MoFPI), Govt. of India, grant under the FIST programme (Level I) from the Department of Science and Technology (DST), grant under the UGC- SAP (DRS-I) programme of the UGC, and grant under the NEQIP Scheme of the AICTE. The Department has established NABL accredited Food Quality Control Laboratory (FQCL) supported by the MoFPI to cater to the requirements of testing nutritional parameters of various food items manufactured by various food industries. The Department has been recognized as the State Level Technical Institute (SLTI) for Assam and Meghalaya under the PM-FME scheme (PM Formalization of Micro food processing Enterprises Scheme) of MoFPI, GoI, New Delhi.

Research activities at the Department are supported by sponsoring agencies like UGC, MoFPI, DST, DBT, DRDO, ICAR, AICTE, MSME, ASTEC, etc. Various projects carried out at the Department aims at developing effective and low cost technologies for the society. Some developed food products and processes have also been patented by the faculty members. Workshops, conferences and seminars are regularly organized in the Department for knowledge sharing among peers as well as for motivating local youths to start their own enterprises.

ACADEMIC PROGRAMMES AND STUDENT INTAKE

Academic Programme	Intake
BTech in in Food Engineering & Technology	56
MTech in Food Engineering & Technology	23
PhD in Food Engineering & Technology	Variable (08 in 2022-23)

THRUST AREAS

- Value addition of convenience foods
- Process engineering for desired food product characteristics

MAJOR FACILITIES /EQUIPMENT AVAILABLE

- One dedicated library with more than 200 books
- Computer laboratory with more than 30 computers with licensed software like MATLAB

- Hunter Color Spectrophotometer (Hunter Lab, USA)
- Texture Analyser (Stable Micro System, UK)
- Freeze Dryer (Lyolab, India)
- HPLC (Waters, USA)
- Modified atmospheric packaging unit (Vacstar, Sweden)
- DSC-TGA (Netzsch, Germany)
- Encapsulator (Buchi, Switzerland)
- Gas pycnometer (Porous Materials Inc., USA)
- Fermenter (Sartorius, Germany)
- Supercritical fluid extraction system (Waters, USA)
- Rheometer (Anton Paar, Austria)
- PCR (Eppendorf, USA)

RESEARCH PROJECTS (BOTH ONGOING AND NEW)

Project Title	Funding Agency	Amount (in INR)	Duration	Investigator(s)
Ultrasound assisted rapid immobilization of pectinase on solid support for juice clarification	AICTE	21.1 lakhs	2019-2022	N Sit
Non-thermal pulsed light processing of fresh cut fruits of NE India: A novel hurdle approach for predicting enhanced shelf life and nutritional quality	AICTE	25 lakhs	2019-2022	B Srivastava
Solar greenhouse drying system for the production of 'no cooking' rice from Assam and product quality modelling during storage	AICTE	25 lakhs	2019-2022	MK Hazarika
Phytochemical profiling and valorization of Pomelo fruit of Northeast India	MoFPI	41.48 lakhs	2021-2023	P Mishra
Non-thermal processing of Assam lemon juice using ozone processing	ASTEC	1.98 lakhs	2022-2023	NR Swami Hulle
Valorisation of Biobased Feedstock derived Biomaterials and Functionalized Nanostructures for High Performance Food Applications	Tezpur University	2 lakhs	2021-2022	T Ghosh
Fabrication of Non-Toxic Agro-Waste Derived Nanocellulosic Materials based Functionalized Biocomposites for High Performance Food Applications	SERB-DST	30.23 lakhs	2022-2024	T Ghosh

PUBLICATIONS BY FACULTY AND STAFF MEMBERS

JOURNAL PUBLICATIONS

Begum N, Hazarika MK. Deep learning based image processing solutions in food engineering: A review. *Agricultural Reviews*, 43(3): 267-277, 2022.

Bhagya Raj GV, Swami Hulle NR, Dash KK. Rheological characteristics of reconstituted freeze-dried dragon fruit pulp powder: Effect of concentration and temperature. *Journal of Food Processing and Preservation*, 46(7):167-172, 2022.

Bora J, Mahnot NK, Makroo HA, Mahanta CL. Impact of hydrothermal treatments on the functional, thermal, pasting, morphological and rheological properties of underutilized yam starches. *Journal of Food Measurement and Characterization*, 1-16, 2022.

Choudhary AK, Chakraborty S, Kumari S, Hazarika MK. Feed forward neural network and its reverse mapping aspects for the simulation of ginger drying kinetics. *Agricultural Engineering International: CIGR Journal*, 24(1), 2022.

Das MJ, Chakraborty S, Deka SC. Sensory evaluation of microwave-ultrasound treated bottle gourd juice using hybrid features of fuzzy logic and proportional odd modelling approach. *Journal of Food Science and Technology*, 59(12): 4624-4633, 2022.

Das T, Das P, Gupta AK, Mishra P. Fabrication of flaxseed extracted gel and gellan gums containing functional sol and its application on the storage stability of matured banana. *Journal of Food Processing and Preservation*, 46(2), 2022.

Deka P, Sit N. A review of the traditional cereal based foods and beverages of north-east India. *International Journal of Gastronomy and Food Science*, 100632, 2022.

Devi LS, Das AJ, Das AB. Characterization of high amylose starch-microcrystalline cellulose based floatable gel for enhanced gastrointestinal retention and drug delivery. *Carbohydrate Polymer Technologies and Applications*, 3, 100185, 2022.

Devi MB, Deka SC. Physicochemical properties and structure of starches of foxnut (*Euryale ferox* Salisb.) from India and its application. *Journal of Food Processing and Preservation*, 46(2), 2022.

Dhar P, Deka SC. Effect of ultrasound-assisted extraction of dietary fiber from the sweetest variety Queen pineapple waste of Tripura (India). *Journal of Food Process Engineering*, 2022. <https://doi.org/10.1111/jfpe.14220>.

Dhara S, Gupta AK, Mishra P. Aerogel: Functional Emerging Material for Potential Application in Food: A Review. *Food and Bioprocess Technology*, 15(11): 2396-2421, 2022.

Dutta D, Sit N. Application of natural extracts as active ingredient in biopolymer-based packaging systems. *Journal of Food Science and Technology*, 1-15, 2022.

Dutta D, Sit N. Comparison of Properties of Films Prepared from Potato Starch Modified by Annealing and Heat-Moisture Treatment. *Starch-Stärke*, 74(11-12), 2022.

Jha A K, Sit N. Extraction of bioactive compounds from plant materials using combination of various novel methods: A review. *Trends in Food Science & Technology*, 119, 579-591, 2022.

Khurshida S, Deka SC. Application of microwave and hydrothermal treatments for modification of cassava starch of Manipur region, India and development of cookies. *Journal of Food Science and Technology*, 1-11, 2022.

Kumari T, Das AB, Deka SC. Effect of extrusion and enzyme modification on functional and structural properties of pea peel (*Pisum sativum* L.) insoluble dietary fibre and its effect on yogurt rheology. *International Journal of Food Science & Technology*, 57(10): 6668-6677, 2022.

Kumari T, Das AB, Deka SC. Impact of extraction methods on functional properties and extraction kinetic of insoluble dietary fiber from green pea peels: A comparative analysis. *Journal of Food Processing and Preservation*, 46(4), 2022.

Marboh V, Gayary MA, Gautam G, Mahanta CL. Comparative Study of Heat-Moisture Treatment and Annealing on Morphology, Crystallinity, Pasting, and Thermal Properties of Sohphlang (*Flemingia vestita*) Starch. *Starch-Stärke*, 74(7-8), 2022.

Neog B, Das JK, Vijayakumar A, Badwaik LS. Development and characterization of edible films made with Indian jujube fruit puree and pectin. *Journal of Food Process Engineering*, 45(3), 2022.

Rather MA, Gupta K, Gupta AK, Mishra P, Qureshi A, Dutta TK, Mandal M. Phytochemical Analysis and Demonstration of Antioxidant, Antibacterial, and Antibiofilm Activities of Ethnomedicinal Plants of North East India. *Applied Biochemistry and Biotechnology*, 1-38, 2022.

Rizwana S, Hazarika MK. Near infrared-based process analytical technology module for estimating gelatinization optimal point. *Journal of Food Process Engineering*, 45(3), 2022.

Rohilla S, Mahanta CL. Foam mat dried tamarillo powder: Effect of foaming agents on drying kinetics, physicochemical and phytochemical properties. *Journal of Food Processing and Preservation*, e17164, 2022.

Roy J, Bhattacharya S, Sahu PP, Das AB. Physical, mechanical, and electrical properties of rice starch-based films plasticised by ionic liquid. *Indian Chemical Engineer*, 64(4): 390-401, 2022.

Samyori D, Calderwood D, Carey M, Das AB, Green BD, Deka SC. Dipeptidyl peptidase-4 (DPP-4) inhibitory activity and glucagon-like peptide (GLP-1) secretion in arsenically safe pigmented red rice (*Oryza sativa* L.) and its product. *Journal of Food Science and Technology*, 59(10): 4016-4024, 2022.

Singh A, Sit N. Meat Analogues: Types, Methods of Production and Their Effect on Attributes of Developed Meat Analogues. *Food and Bioprocess Technology*, 15(12): 2664-2682, 2022.

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Kalita B, Sit N. Biohydrogen from Fruit and Vegetable Industry Wastes. In: Organic Waste to Biohydrogen. Clean Energy Production Technologies (Eds. Kuddus M, Yunus G, Ramteke PW, Molina G), Springer Singapore, 2022, https://doi.org/10.1007/978-981-19-1995-4_3.

Medhi M, Gupta AK, Dhua S, Mishra P. Food Additives. In: Advances in Food Chemistry (Eds. Chauhan OP), Springer Singapore, 2022, https://doi.org/10.1007/978-981-19-4796-4_7.

Nongmaithem SD, Hulle NRS. Nanostructures for improving food structure and functionality. In: Food, Medical, and Environmental Applications of Nanomaterials. Micro and Nano Technologies, (Eds. Pal K, Sarkar A, Sarkar P, Bandara N, Jegatheesan V), Elsevier, 2022, <https://doi.org/10.1016/B978-0-12-822858-6.00009-1>.

TALKS BY THE FACULTY MEMBERS ABROAD AND IN INDIA

Name of the faculty member	Title of the Event	Date	Place /institute/venue
CL Mahanta	Sustainable Approaches in Food Engineering And Technology (SAFETy-2022)	19-20 October 2022	Sultan Qaboos University, Oman (Online)
SC Deka	Sustainable Approaches in Food Engineering And Technology (SAFETy-2022)	19-20 October 2022	Sultan Qaboos University, Oman (Online)
MK Hazarika	Sustainable Approaches in Food Engineering And Technology (SAFETy-	19-20 October 2022	Sultan Qaboos University, Oman

	2022)		(Online)
	Analytical Approaches for Characterization of Food and Biomaterials	24 February - 03 March 2023	Tezpur University, Assam
B Srivastava	Sustainable Approaches in Food Engineering And Technology (SAFETy-2022)	19-20 October 2022	Sultan Qaboos University, Oman (Online)
	Analytical Approaches for Characterization of Food and Biomaterials	24 February - 03 March 2023	Tezpur University, Assam
N Sit	Sustainable Approaches in Food Engineering And Technology (SAFETy-2022)	19-20 October 2022	Sultan Qaboos University, Oman (Online)
P Mishra	Sustainable Approaches in Food Engineering And Technology (SAFETy-2022)	19-20 October 2022	Sultan Qaboos University, Oman (Online)
	Analytical Approaches for Characterization of Food and Biomaterials	24 February - 03 March 2023	Tezpur University, Assam
	Delivered invited Lecture in Seminar on Technological Readiness Level (TRL) and its application in Food Processing and Agriculture Technologies	26 September 2023	IIT Dhanbad
LS Badwaik	Sustainable Approaches in Food Engineering And Technology (SAFETy-2022)	19-20 October 2022	Sultan Qaboos University, Oman (Online)
	Analytical Approaches for Characterization of Food and Biomaterials	24 February - 03 March 2023	Tezpur University, Assam
AB Das	Analytical Approaches for Characterization of Food and Biomaterials	24 February – 03 March 2023	Tezpur University, Assam
NR Swami Hulle	Opportunities, Innovations & Entrepreneurship in the Field of Food Processing	22-26 May 2023	Amity University, Uttar Pradesh
T Ghosh	ACS-PMSE Symposium, Asia Pacific Young Scientists Symposium in Polymer Science and Engineering	28-30 March 2023	Indianapolis, USA (Online)
	5 day workshop on Sensor Application	20-24 March 2023	NIT Mizoram
	Indo-Japan Bilateral Symposium 2023	3-4 March 2023	IIT Guwahati
	Training Programme on Biopolymers Edible Coatings to Farmers in Taiwan India 2022 Exchange Workshop and Symposium on Intensifying the Connection of Sustainable Technology	4-6 September 2023	IIT Guwahati

SEMINAR/WORKSHOP/SYMPOSIA/INVITED LECTURES ORGANISED

Title	Date
International Conference on Sustainable Approaches in Food Engineering and Technology” (SAFETy) with the Department of Soils, Water Agricultural Engineering, College of Agricultural Marine Sciences, Sultan Qaboos University, Oman.	19-20 October 2022
A hands-on Training Program on Analytical approaches for characterization of food and biomaterials Under the scheme of Synergistic Training Program Utilizing the Scientific and Technological Infrastructure (STUTI), An initiative by Department of Science and Technology, India Organized by Institute of Chemical Technology, Mumbai (PMU) Hosted by Department of Food Engineering and Technology, Tezpur University, Assam	24 February - 03 March 2023

DISTINGUISHED VISITORS

Keshavan Niranjana, Professor, Food Bioprocessing, University of Reading, UK.

AWARDS & HONOURS/ NOTABLE ACHIEVEMENTS

The Department has been awarded Certificate of Excellence under Eat Right Research Institute Award by the Food Safety & Standards Authority of India (FSSAI) in 2022.

Faculty

LS Badwaik and team awarded with ‘Eat Right Research Team Award’ under the category of ‘Eat Healthy’ for project title ‘Development of low-fat, high-protein baked snack using de-oiled soya flour’ and received ‘Certificate of Excellence’ for the year 2022 from Food Safety and Standards Authority of India (FSSAI), New Delhi.

LS Badwaik and team received ‘Shri Somalal Vyas SEA Innovation Award 2022’ for the project title ‘Development of low fat baked snacks by utilizing by-product of soybean oil industry (de-oiled soya cake)’ from The Solvent Extractors’ Association of India.

Research Scholars/Students

Lourembam M Devi, a Research Scholar of the Department has stood first in ‘JR Agro Poster Competition Award’ organized by the Solvent Extractors’ Association of India (SEA)

OTHER IMPORTANT ACTIVITIES OF THE DEPARTMENT

- Celebration of International Year of Millets, 2023
- Lecture Series - Talk 1: Creating awareness about millets (Types, importance, climate resilient and economic security) by Dr Debabandya Mohapatra, Principal Scientist, ICAR-Central Institute of Agricultural Engineering (CIAE)
- Celebration of World Food Day, 2022
- The Department in association with AFSTI Tezpur Chapter, presents Industrial -Academia Interaction Series (Talk 1: Mrs Vibha Gaur, Senior Flavourist & Mentor - Flavour R&D, Claremont Ingredients Ltd, THG, New Castle, United Kingdom)

- The Department in association with AFST (I) Mysuru and AFST (I) Tezpur Chapter organized a one-day outreach activity in offline mode on 17 October 2022 for Aparajita VO, Napaam, Assam.

NUMBER OF STUDENTS QUALIFIED IN NET-JRF/GATE/SLET

Name of Qualifying Examination	Number of Qualified Students
UGC-NET	05
ICAR-NET	03
GATE	05

NOTABLE PLACEMENTS

Name	Designation	Organization
Puja Sharma	Product manager	ITC
Priotosh Paul	Territory manager	Amul
Ujjal Kumar	Territory manager	Amul
Akash Agarwalla	Territory manager	Amul
Nillachandra Yendrembam	Territory manager	Amul
Mithuraj Borgohain	Territory manager	Amul
Christeena Borah	Software Developer	Flexday Solution
Ipshita Borah	Graduate Engineer	BIS
Sounoq Raj Phukon	Assistant Quality Control Officer	Annapurna Food & Beverages

FACULTY MEMBERS

Professor

Charu L Mahanta, PhD (CFTRI Mysore)

Specialization/Areas of interest: Rice science and technology, Product development and product quality

Email: charu@tezu.ernet.in

Sankar C Deka, PhD (HAU Hissar), FRSC, FRSB

Specialization/Areas of interest: Food biochemistry, Food quality, Fermented foods

Email: sankar@tezu.ernet

Manuj K Hazarika, PhD (IIT Kharagpur)

Specialization/Areas of interest: Dairy & food engineering, Transport processes, Process modeling

Email: mkhazarika@tezu.ernet.in

Brijesh Srivastava, PhD (IIT Kharagpur)

Specialization/Areas of interest: Emerging non-thermal processing, Process and food engineering, Food rheology

Email: brijesh@tezu.ernet.in

Nandan Sit, PhD (Tezpur University)

Head of the Department (till 11 August 2022)

Specialization/Areas of interest: Food engineering, Biochemical engineering, Oils and fats

Email: nandan@tezu.ernet.in

Poonam Mishra, PhD (Tezpur University)

Specialization/Areas of interest: Food Technology, Fruits and vegetables processing, Biosensors, Functional nanomaterials

Email: poonam@tezu.ernet.in

Laxmikant S Badwaik, PhD (Tezpur University)

Head of the Department (since 12 August 2022)

Specialization/Areas of interest: Food packaging, Food processing waste utilization, Extraction of bioactive compounds

Email: badwaik@tezu.ernet.in

Assistant Professor

Amit B Das, PhD (IIT Guwahati)

Specialization/Areas of interest: Food process modeling, Extrusion technology

Email: amittu@tezu.ernet.in

Nishant RS Hulle, PhD (IIT Kharagpur)

Specialization/Areas of interest: Non thermal processing, Food process engineering, Food product development

Email: nishant@tezu.ernet.in

Tabli Ghosh, PhD (IIT Guwahati)

Specialization/Areas of interest: Edible food packaging, Food processing, Biobased secondary packaging, Food nanotechnology, Active packaging

Email: tabli@tezu.ernet.in

Nikhil C, PhD (ICAR-IARI, New Delhi)

Specialization/Areas of interest: Food process engineering, Grain storage and structures, Fruits and vegetable processing and machineries

Email: nikhil@tezu.ernet.in

Soumya R Purohit, PhD (IIT Kharagpur)

Specialization/Areas of interest: Food bioprocessing, Rice chemistry and technology, Value addition of local crops

Email: srpurohit@tezu.ernet.in

STAFF MEMBERS

Technical Officer

Dipankar Kalita, PhD (Tezpur University)

Email: dkalita@tezu.ernet.in

Senior Technical Assistant

Arup Jyoti Das, PhD (Tezpur University)

Email: arupdas@tezu.ernet.in

Technician

Labadeep Kalita

Email: labadeep@tezu.ernet.in

Laboratory Assistant

Swdwmsri Mushahary

Email: swdwm26@tezu.ernet.in

Assistant

Krishna Borah

Email: krishnab@tezu.ernet.in

MTS

Anjan Keot

Email: akeot@tezu.ernet.in

DEPARTMENT OF MECHANICAL ENGINEERING

THE DEPARTMENT

The Department was started in 2006 under the School of Engineering to offer a BTech degree. Since 2013, the Department has been offering MTech programmes and PhD. The specialization in masters programmes include Machine Design and Thermal and Fluids Engineering. The Department has various laboratories with state-of-the-art facilities and one Central Workshop with different machineries. Both the BTech and MTech programmes are AICTE approved. Additionally, the BTech programme was accredited by the National Board of Accreditation (NBA).

The Department strives to emerge as a center of excellence producing quality engineers and conducting cutting-edge research. In pursuit of achieving the vision, the Department has been training scholars in handling mechanical engineering as well as interdisciplinary problems exploiting their domain knowledge and using latest technologies. The Department also carries out research addressing critical issues, arising from the dual problem of limited natural resources and environmental hazards, leading to the development of alternative resources, energy management and sustainable systems design.

ACADEMIC PROGRAMMES AND STUDENT INTAKE

Academic Programme	Intake
BTech in Mechanical Engineering	68
BTech in Mechanical Engineering (Lateral Entry)	Variable, 02 in 2022-2023
MTech in Mechanical Engineering (Machine Design, Thermal and Fluids Engineering)	23
PhD	Variable, 03 in 2022-2023

THRUST AREAS

- Thermal and mechanical system analysis using thermodynamic modeling, computational fluid dynamics and evolutionary based optimization techniques.
- Solar thermal power for cooling, storage and drying systems.
- Autofrettage methods, reinforced composites, micro alloying materials.

MAJOR FACILITIES AND EQUIPMENT AVAILABLE

- Universal vibration apparatus
- ANSYS-FLUENT academic teaching
- Pro-E software
- COMSOL Multiphysics
- MATLAB
- CATIA V5
- FlowNex
- Inverted metallurgical microscope with accessories and interface software.
- Static and Dynamic balancing
- Sound level meter with sound level calibrator

- Diesel Engine test set up VCR.
- Variable compression ratio multi-fuel engine test rig
- Computerized single cylinder petrol engine test rig
- VCR and VAR test rig
- Air conditioning test rig
- Cooling tower test rig
- Heat exchangers: Double pipe, shell, and tube
- Dropwise and filmwise condensation apparatus
- Precision Lathe
- CNC Lathe and Milling Machine
- Universal Milling Machine
- Pelton turbine
- Propeller turbine
- Universal testing machine (UTM)
- One dedicated library with more than 150 books

RESEARCH PROJECTS (BOTH ONGOING AND NEW)

Project Title	Funding Agency	Amount (In INR)	Duration	Investigator(s)
Multi-Crop Residue Processing Technology Package for Production of Fuel and Fertilizer	SERB_IMPRINT	₹143 Lakhs	2020 - 2023	S Kashyap (Co-PI)
Use of Thermal Autofrettage for Defense Application	ARMREB, DRDO	₹41.34 Lakhs	2021 - 2024	SM Kamal
Development of A Cost-Effective EMG Controlled Prosthetic Hand for Multiple Patterns	I-Hub Foundation for COBOTICS, Technology Innovation Hub of IIT Delhi	₹43.44 Lakhs	2021 - 2024	Z Kalita (Co-PI)
Design and development of an improved tricycle rickshaw	ASTEC	₹2.96 Lakhs	2021-2023	PP Dutta
Design Development and Performance Testing of a Solar Dryer for Drying of <i>Garcinia pedunculata</i> with Thermal Energy Storage	AICTE	₹17.00 lakhs	2019-2023	PP Dutta

PUBLICATIONS BY FACULTY AND STAFF MEMBERS

JOURNAL PUBLICATIONS

Nondy J, Gogoi TK. 4E analyses of an intercooled-recuperative gas turbine-based CCHP system: Parametric analysis and tri-objective optimization. *Thermal Science and Engineering Progress*, 39: 101719, 2023.

Nema VK, Singh A, Chaurasiya PK, Gogoi TK, Verma TN, Tiwari D. Combustion, performance, and emission behavior of a CI engine fueled with different biodiesels: A modelling, forecasting and experimental study. *Fuel*, 339: 126976, 2023.

Gogoi TK, Lahon D, Nondy J. Energy, exergy and exergoeconomic (3E) analyses of an organic Rankine cycle integrated combined cycle power plant. *Thermal Science and Engineering Progress*, 41: 101849, 2023.

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Borah PP, Kashyap S, Banerjee S, Kirtania S. Modeling the Buckling Characteristics of Pineapple Leaf Fibre Reinforced Laminated Epoxy Composite. *Mechanics of Advanced Composite Structures*, 10: 233-246, 2023.

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Dutta P, Dutta PP, Kalita P. Energy and exergy study of a novel multi-mode solar dryer without and with sensible heat storage for *Garcinia pedunculata*. *Energy Sources, Part A: Recovery, Utilization, and Environmental Effects*, 45(3): 9266-9282, 2023.

Kalita Z, Kashyap S, Borah R, Swargiary MC, Pao K. Design and Analysis of a Five Fingered Robotic Hand. *NanoWorld Journal*, 9(S1): S476-80, 2023.

Chetry A, Kamal SM, Mehta VK. A Numerical Model for Rotational Autofrettage of Disks Based on von Mises Yield Criterion and Its Application in Strengthening Flanged Disks Used for Joining High Pressure Pipelines. *International Journal of Applied Mechanics*, 15(03): 2350022, 2023.

Musharavati F, Khanmohammadi S, Nondy J, Gogoi TK. Proposal of a new low-temperature thermodynamic cycle: 3E analysis and optimization of a solar pond integrated with fuel cell and thermoelectric generator. *Journal of Cleaner Production*, 331: 129908, 2022.

Nondy J, Gogoi TK. Tri-objective optimization of two recuperative gas turbine-based CCHP systems and 4E analyses at optimal conditions. *Applied Energy*, 323: 119582, 2022.

Gogoi TK, Dutta UK. Performance of a combined power and cooling system under solar, solar storage and storage mode of operations. *Journal of Energy Systems*, 6: 18-32, 2022.

Haloi P, Gogoi TK. Performance assessment of a magnetohydrodynamic power generation system: Division of the exergy destruction rate into its sub-portions. *Journal of Energy Systems*, 6(2): 290-308, 2022.

Haloi P, Gogoi TK. Effects of Partially Ionized Combustion Products on the Performance of a Magneto-Hydrodynamics (MHD)-Gas Turbine (GT) Combined Power Plant, Part 1: Exergy Analysis. *Iranian Journal of Science and Technology - Transactions of Mechanical Engineering*, 46: 481-495, 2022.

Joardar SD, Neog A, Parvez S, Kirtania S, Kashyap S, Banerjee S. Micromechanics based finite element analysis of effective elastic properties of natural fiber reinforced composites. *Journal of Natural Fibers*, 19(17): 15790-15807, 2022.

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Gogoi S, Banerjee S, Bhowmick S. Modelling precipitation kinetics and investigating age-hardening behavior of 2219Al alloys microalloyed with Cd. *Journal of Thermal Analysis and Calorimetry*, 147: 12437-12453, 2022.

Verma S, Banerjee S, Das R. A fully analytical model of a box solar cooker with sensible thermal storage. *Solar Energy*, 233: 531-542, 2022.

Banerjee S, Robi PS, Srinivasan A, Gogoi S, Bhowmick S. Effect of trace additions of Sn on precipitation kinetics and microstructural phases of Al-Cu-Mg alloys. *Reaction Kinetics, Mechanisms and Catalysis*, 135(4): 1853-1874, 2022.

Perl M, Kamal SM, Mulera S. The Use of an Equivalent Temperature Field to Emulate an Induced Residual Stress Field in a Rotating Disk Due to Full or Partial Rotational Autofrettage. *Journal of Pressure Vessel Technology, Transactions of the ASME*, Volume 144(6): 061301, 2022.

Sharma A, Dutta PP. Energy, Exergy, Economic and Environmental (4E) Assessments of a Withering Trough Coupled with a Solar Air Heater having an Absorber Plate with Al can protrusion. *International Journal of Ambient Energy*, 58(3): 423-432, 2022.

Sharma A, Dutta PP. Performance Studies of Low Temperature Solar Drying of Fresh Tea Leaves (*Camellia assamica*). *Applied Solar Energy*, 58: 423-432, 2022.

Sharma A, Dutta PP. Evaluation of low temperature drying characteristics of fresh tea leaves (*Camellia assamica*) in an environmental chamber using mathematical models. *Research in Agricultural Engineering*, 69: 55-64, 2022.

Dutta PP, Borpatra Gohain R, Dutta PP. Performance assessment of an efficient biomass fired cook stove as a standby unit for community cooking. *Biomass Conversion and Biorefinery*, 13: 11609-11620, 2022.

Dutta PP, Nath PP, Kumar BJ, Handique B, Bardalai M, Dutta PP. Modelling and simulation of a rotary grain dryer. *Science and Technology Journal*, 10(1): 29-35, 2022.

Shukla AK, Dutta PP, Bardalai M, Dutta PP. Performance Assessment of a Single-Cylinder Diesel Engine with Diesel and Waste Cooking Oil Blends Preheated by Engine Exhaust Gas. *International Journal of Vehicle Structures and Systems*, 14: 150-157, 2022.

Kumar H, Chowdhury B. An application of design of experiments approach to statistically model and optimize performance parameters of a single cylinder four-stroke diesel engine. *ADBU-Journal of Engineering Technology*, 11(2): 0110203505, 2022.

CONFERENCE PROCEEDINGS

Rajput M, Kamal SM, Patil RU. Estimation of the residual stresses in thermal autofrettage of hollow disk using von Mises yield criterion. In proceedings of the 67th Congress of the Indian Society of Theoretical and Applied Mechanics (ISTAM), 8-18, IIT Mandi, Mandi, Himachal Pradesh, India. December 14–16, 2022.

Dutta P, Kalita P, Dutta PP. Numerical Performance Studies of a Single Cylinder Spark Ignition Engine. In proceedings of the Third International Conference on Recent Advancement of Mechanical Engineering (ICRAME-2022), NIT Silchar, Assam. February 04-06, 2022.

BOOKS

Dixit US, Muthu N, Kamal SM. *Strength of Materials*, AICTE, New Delhi, 2023, ISBN: 978-81-960576-6-4

Dash KK, Kalita P. *Solving Problems in Fluid Mechanics (GATE XE)*, Astral International Pvt. Ltd., 2022, ISBN: 978-9354613562.

Dash KK, Kalita P. *Solving Problems in Thermodynamics (GATE XE)*, Astral International Pvt. Ltd., 2022, ISBN: 978-9354610615.

BOOK CHAPTERS

Gogoi S, Nath B, Konwar B, Bora A, Banerjee S, Kashyap S, Kirtania S. Investigating Machinability of Microalloyed Al-Cu Alloys by Simulation of Cutting Force. In: *Recent Advances in Materials Processing and Characterization. Lecture Notes in Mechanical Engineering*. (Eds. Arockiarajan A, Duraiselvam M, Raju R, Reddy NS, Satyanarayana K), Springer Singapore, 2023, https://doi.org/10.1007/978-981-19-5347-7_23.

Das BM, Kirtania, Banerjee S, Kashyap S. Finite Element Analysis of Natural Hemp Fiber-Based Composite for Semi-elliptical Multi-leaf Spring, In: *Recent Advances in Materials Processing and Characterization. Lecture Notes in Mechanical Engineering*. (Eds. Arockiarajan A, Duraiselvam M,

Raju R, Reddy NS, Satyanarayana K), Springer Singapore, 2023, https://doi.org/10.1007/978-981-19-5347-7_19.

Bordoloi MM, Kirtania S, Kashyap S, Banerjee S. Investigation of Mechanical Properties of Carbon Fiber/Graphene Nanoplatelet/Epoxy Hybrid Nanocomposites. In: Recent Advances in Materials Processing and Characterization. Lecture Notes in Mechanical Engineering. (Eds. Arockiarajan A, Duraiselvam M, Raju R, Reddy NS, Satyanarayana K), Springer Singapore, 2023, https://doi.org/10.1007/978-981-19-5347-7_18.

Borah PP, Kashyap S, Kirtania S, Banerjee S. Modelling of Structural Responses for Pineapple Leaf Fibre Epoxy Composite. In: Recent Advances in Materials Processing and Characterization. Lecture Notes in Mechanical Engineering. (Eds. Arockiarajan A, Duraiselvam M, Raju R, Reddy NS, Satyanarayana K), Springer Singapore, 2023, https://doi.org/10.1007/978-981-19-5347-7_17.

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Bordoloi H, Dutta PP, Gohain RJB. Modelling of an improved biomass cook stove for rural application. In: *Tailored Functional Materials. Springer Proceedings in Materials.* (Eds. Mukherjee K, Layek RK, De D), Springer Singapore, 2022, https://doi.org/10.1007/978-981-19-2572-6_13.

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SEMINARS/CONFERENCES/WORKSHOPS/SYMPOSIA ATTENDED

Name of the faculty member	Event	Organized by	Date	Place/institute /venue
B Chowdhury	Faculty Induction Programme	UGC Human Resource Development Centre (HRDC) Aligarh Muslim University, Aligarh	06 February – 14 March 2023	Aligarh Muslim University, Aligarh (Online)
	5-day workshop on Innovation, Entrepreneurship and Start-Up for Young	NIT Mizoram	26-30 September 2022	NIT Mizoram (Online)
P Haloi	Performance Comparison of Diesel and Gasoline Engines Operating Under Indian Emission Standards: Application of Exergy Analysis	Department of Mechanical Engineering, Amity School of Engineering & Technology, Amity University Uttar Pradesh, Noida	03-05 August 2022	Amity University, Noida (Online)

S Kirtania	One-day Workshop on Fire Reaction Characteristics of Advanced Polymer and Composites Used in Building and Aviation Industry Sectors	Centre for Composites and Advanced Materials	21 February 2023	SRM Institute of Science and Technology, Tamilnadu
	Two-Day Workshop on Outcome Based Education with NBA Compliant PO/PSOs for UG/PG Programmes in Engineering	School of Engineering	19-20 September 2022	Tezpur University
	Evaluation of elastic properties of CNT/GNP/epoxy hybrid nanocomposite for different weight fractions of CNT and GNP	Department of Mechanical Engineering, SRM	22-24 February 2023	SRM Institute of Science & Technology, Kattankulathur Campus, Tamil Nadu
	Stress analysis through the thickness of graphene nanoplatelet/epoxy laminated nanocomposites at low graphene content.	Department of Mechanical Engineering, SRM	22-24 February 2023	SRM Institute of Science & Technology, Kattankulathur Campus, Tamil Nadu
	Analytical and finite element analysis of natural fiber reinforced composites for application in food packaging industry.	Department of Mechanical Engineering, SRM	22-24 February 2023	SRM Institute of Science & Technology, Kattankulathur Campus, Tamil Nadu
	Evaluation of elastic properties of graphene reinforced aluminum matrix nanocomposites.	Department of Mechanical Engineering, SRM	22-24 February 2023	SRM Institute of Science & Technology, Kattankulathur Campus, Tamil Nadu
	Fabrication and characterization of hybrid polyvinyl alcohol/carboxymethyl cellulose polymer films	Department of Mechanical Engineering, SRM	22-24 February 2023	SRM Institute of Science & Technology, Kattankulathur Campus, Tamil Nadu
	Mechanical and thermal characterization of jute fiber reinforced epoxy composites and lime sludge as a filler	Department of Mechanical Engineering, SRM	22-24 February 2023	SRM Institute of Science & Technology, Kattankulathur Campus, Tamil Nadu

	Modeling the mechanical properties and stress mapping of aluminium based metal matrix composite used in brake disc rotor	Department of Mechanical Engineering, SRM	22-24 February 2023	SRM Institute of Science & Technology, Kattankulathur Campus, Tamil Nadu
	Mechanical and optical characterization of hybrid PVA-CMC based biodegradable films	Department of Food Engineering and Technology, Tezpur University, and Department of Soils, Water and Agricultural Engineering, Sultan Qaboos University, Oman	19-20 October 2022	Tezpur University
	Investigation of mechanical property of a biodegradable composite for application in food packaging	Department of Food Engineering and Technology, Tezpur University, and Department of Soils, Water and Agricultural Engineering, Sultan Qaboos University, Oman	19-20 October 2022	Department of Food Engineering and Technology, Tezpur University
	Mechanical and thermal characterization of jute fiber reinforced epoxy composites for food packaging	Department of Food Engineering and Technology, Tezpur University, and Department of Soils, Water and Agricultural Engineering, Sultan Qaboos University, Oman	19-20 October 2022	Department of Food Engineering and Technology, Tezpur University

TALKS BY THE FACULTY MEMBERS ABROAD AND IN INDIA

Name of the faculty member	Event	Date	Place/institute/venue
D Datta	LaTex: Part I in Online Interdisciplinary Refresher Course (IDRC) on Academic Writing and Research	20 May 2022	Teaching Learning Centre (TLC) of Tezpur University (Online)
D Datta	LaTex: Part II in Online Interdisciplinary Refresher Course (IDRC) on Academic Writing and Research	24 May 2022	Teaching Learning Centre (TLC) of Tezpur University (Online)

SEMINAR/WORKSHOP/SYMPOSIA/INVITED LECTURES ORGANISED

Title	Date
"The Craft of Thesis Writing" Speaker: Prof UK Saha, IIT Guwahati	26 December 2022
"Scope after GATE Exam and How to prepare for it". Speaker: Mr. Anubhav Parashar, Scientific Officer, DGAQA, Ministry of Defence	25 August 2022

DISTINGUISHED VISITORS

Anoop K Dass, Professor, Department of Mechanical Engineering, IIT Guwahati

AWARDS & HONOURS/ NOTABLE ACHIEVEMENTS

- S Kirtania, Assistant Professor bagged best paper award 2023 in Second International Conference on Recent and Advanced Composite Materials.
- S Banerjee, Assistant Professor bagged best paper presentation award 2022 in 2nd International Virtual Conference on Current Scenario in Chemical Sciences (CSCS-2022).

NUMBER OF STUDENTS QUALIFIED IN NET-JRF/GATE/SLET:

Name of Qualifying Examination	Number of Qualified Students	Academic Programme
GATE2023	08	BTech

NOTABLE PLACEMENTS**BTech**

Name	Designation	Organization
Bitopan Das	Senior Officer/Engineer	OIL
Sasankajit Dihingia	Senior Officer/Engineer	OIL
Hirakjyoti Nath	Senior Officer/Engineer	OIL
Rishav Dutta Purkayastha	Graduate Engineer Trainee	Tata Technologies
Mustafa Siraj Barbhuiya	Graduate Engineer Trainee	Tata Technologies
Satyajit Borah	Graduate Engineer Trainee	Tata Technologies
Vikash Ranjan	Graduate Engineer Trainee	Tata Technologies
Pranjit Baruah	Graduate Engineer Trainee	Tata Technologies
Srinjoy De Joardar	Management Trainee	Saint Gobain
Aadipta Ghosh	GET	Larsen & Toubro
Rohan Srivastava	GET	Larsen & Toubro
Mousum Raj Sonowal	PO	LIC
P Kiran Kumar	Business Trainee	Medtronics
Arohan Neog	Programmer Analyst Trainee	Cognizant Technologies
Bhargav Nath	Project Engineer	Wipro
Chandanjyoti Das	Project Engineer	Wipro
Rikiraj Baishya	Project Engineer	Wipro
Harkha Jyoti Gogoi	ITC Infotech	Associate IT Consultant

Ambika swargiary	MTech programme	NIT Silchar
Himakshi Baishya	Project Fellow	IIT Guwahati

MTech

Name	Designation	Organization
Alankrita Priyadarshani	Junior Management Grade I	Federal Bank
Himanku Bordoloi	Post Graduate Engineer Trainee	Alstom
Mriganan Madhab Bordoloi	Post Graduate Engineer Trainee	Alstom
Piyali Dey	Junior Management Grade I	Federal Bank
Sandeep Kumar Vishwas	Junior Management Grade I	Federal Bank
Bitu Moni Das	Junior Assistant	PWD Assam

FACULTY MEMBERS

Professor

Dilip Datta, PhD (IIT Kanpur)
Specialization: Optimization/Design
E-Mail: ddatta@tezu.ernet.in

Tapan K Gogoi, PhD (Tezpur University)
Head of the Department (till 28 August 2022)
Specialization/Areas of interest: Thermal Energy and Environment Engineering
E-mail: tapan_g@tezu.ernet.in

Partha P Dutta, PhD (Tezpur University)
Specialization/Areas of interest: Energy Technology
E-mail: ppdutta@tezu.ernet.in

Associate Professor

Paragmoni Kalita, PhD (IIT Guwahati)
Head of the Department (since 29 August 2022)
Specialization/Areas of interest: Heat Power Engineering
E-mail: paragmk@tezu.ernet.in

Assistant Professor

Polash P Dutta, PhD (IIT Guwahati)
Specialization/Areas of interest: CAD/CAM
E-mail: polashd@tezu.ernet.in

Sushen Kirtania, PhD (IIT Guwahati)
Specialization/Areas of interest: Machine Design
E-mail: sushen@tezu.ernet.in

Sanjib Banerjee, PhD (IIT Guwahati)
Specialization/Areas of interest: Materials and Manufacturing
E-mail: sanjibb@tezu.ernet.in

Monoj Bardalai, PhD (Gauhati University)
Specialization/Areas of interest: Bioenergy, Thermal Engineering
E-mail: monojb@tezu.ernet.in

Prabin Haloi, PhD (Tezpur University)

Specialization/Areas of interest: Fluid and Thermal Engineering, Energy.

E-mail: haloi_p@tezu.ernet.in

Satadru Kashyap, PhD (Tezpur University)

Specialization/Areas of interest: Material Science, Mechanical Metallurgy, Characterization Techniques, Bioceramics

E-mail: satadru@tezu.ernet.in

Zahnupriya Kalita, PhD (Tezpur University)

Specialization/Areas of interest: Mechatronics

E-mail: zk@tezu.ernet.in

Barnali Chowdhury, PhD (Gauhati University)

Specialization/Areas of interest: Thermal Engineering, Six Sigma, Statistical Data Analysis and Optimization

E-mail: barnali@tezu.ernet.in

Seikh M Kamal, PhD (IIT Guwahati)

Specialization/Areas of interest: Plasticity, Autofrettage, Stress/Strain Analysis

E-mail: smkmech@tezu.ernet.in

Vivek K Mehta, PhD (IIT Kanpur)

Specialization/Areas of interest: Robotics, Optimization

E-mail: vkmehta@tezu.ernet.in

Sikha Bhuyan, MTech (NIT Silchar)

Specialization/Areas of interest: Thermal Engineering

E-mail: sikha5@tezu.ernet.in

Rakesh Bhadra, MTech (IEST Shibpur)

Specialization/Areas of interest: Manufacturing / Production Engineering

E-mail: r.bhadr@tezu.ernet.in

STAFF MEMBERS

Technical officer

Prabin K Bora, BTech

E-mail: pkbora@tezu.ernet.in

Senior Technical Assistant

Heman Malakar, BTech

E-mail: heman@tezu.ernet.in

Technical Assistant

Anup J Nath, Diploma

E-mail: anupn@tezu.ernet.in

Guna K Borah, Diploma

E-mail: gunakt@tezu.ernet.in

Technician

Dipak Gogoi, ITI

E-mail: dgogoi@tezu.ernet.in

Mitharam Handique, ITI
E-mail: mitharam@tezu.ernet.in

Khargeswar Rangpi, ITI
E-mail: rangpi@tezu.ernet.in

Poalsh Rabha, ITI
E-mail: prabha@tezu.ernet.in

Sasthendra K Nath, ITI
E-mail: sknath@tezu.ernet.in

Draftsman

Bhaskar Baruah, Diploma
E-mail: bbaruah@tezu.ernet.in

Uttam K Nath, Diploma
E-mail: uttam@tezu.ernet.in

Assistant

Dipanjali Sinha, MA (English), BEd
E-mail: dsinha@tezu.ernet.in

MTS

Maniram Bania
E-mail: m_bania@tezu.ernet.in

School of Humanities and Social Sciences

- Dean School of Humanities and Social Sciences
 - Dept of Assamese
 - Dept of Cultural Studies
 - Dept of Education
 - Dept of English
 - Dept of Foreign Languages
 - Dept of Hindi
 - Dept of Law
 - Dept of Linguistics and Language Technology
 - Dept of Mass Communication and Journalism
 - Dept of Social Work
 - Dept of Sociology
 - Centre for Endangered Languages
- Chandrabhabha Saikiani Centre for Women Studies
 - Dr. Ambedkar Chair

DEAN, SCHOOL OF HUMANITIES AND SOCIAL SCIENCES

The School of Humanities and Social Sciences, Tezpur University, consists of 11 Departments, 3 Centres and 2 Chairs.

The Departments are

1. Assamese
2. Cultural Studies
3. Education
4. English
5. Foreign Languages
6. Hindi
7. Law
8. Linguistics and Language Technology
9. Mass Communication and Journalism
10. Sociology
11. Social Work

The Centres are

1. Centre for Endangered Languages (Attached to the Dept. of LLT)
2. Centre for Inclusive Development (Independent)
3. Chandrabhabha Saikiani Centre for Women's Studies (Independent)

The Chairs are

1. Dr. Bhimrao Ambedkar Chair (Independent in the School of HSS)
2. Srimanta Sankardeva Chair (in the Dept of Assamese)

Out of these 11 Departments, 10 offer MA programmes along with other courses, either leading to a diploma or certificate or supplementing programmes in other Departments/Schools through Open Electives.

In addition to the regular MA programme (4 Semesters), the Department of English offers the Integrated MA programme (10 Semesters) with provision for lateral exit at the end of the sixth semester.

The Department of Foreign Languages offers Basic and Advanced Certificate Courses in Chinese, French and German across Schools and Disciplines.

Nine departments of the School offer PhD programmes at the moment (barring the Departments of Foreign Languages and Law). In addition to these, provisions have been made to offer Multidisciplinary Courses, Skill Based Courses, Ability enhancement Courses and Value Added Courses to the new four year Undergraduate Programme as per NEP2020.

After the successful completion of the NAAC Assessment in the first week of August 2022, Tezpur University took up the Planning and Design of courses as per NEP2020 guidelines for implementation in August 2023.

Accordingly, the School of HSS (along with other Schools) prepared courses for the 4 year UG programme (according to NEP 2020 guidelines) for commencement in August 2023.

In Tezpur university the FYUGP has been embedded in the Integrated MA Programme.

The Course division is as follows:

Major – English

Minor – Cultural Studies, Sociology and Linguistics (any two)

Multidisciplinary – Introduction to Film Studies; Introduction to Migration Studies; Introduction to Law and Legal Systems of India; Understanding Disability; Gender Inclusivity; Development and Change; Tribal Studies; Digital Media Literacy; Science Communication

Skill Enhancement – Basic French (FL), Basic German, Basic Chinese, Education Management, Cultural Heritage Management, Phonetics of Assamese and English, Creative Writing; Soft skills

Value added Courses (to be taken up in the 3rd Semester after two Environment Science Courses in the 1st and 2nd Semester) – Understanding Sankardeva; Understanding Assamese Culture; Introduction to Indian Philosophy: The Basics; Human Values and Ethics; NCC-1; Introduction to Cyber Law; Fundamental Rights and Duties; Mapping Gender Concerns: Feminist Interventions; Value Education and Spirituality; Culture and Communication

Ability Enhancement – Two courses each in Assamese, Hindi, English Communication. Students will take two courses in Assamese or Hindi and two courses in English Communication in the first four semesters of the four-year undergraduate programme (FYUGP).

Some common areas of study are

- Society and Culture • Traditional Knowledge Systems and India Studies • Migration Studies • Gender Studies • Translation and Translation Studies • Environmental Ethics Social Systems, Institutions and Movement • Literature • Film Studies • Lexicography • Ethnography • Philosophy • Human Rights • Philosophy of History • Life Writing • Travel Writing • Academic and Technical writing • Communication and Media Studies • Constitutional Law, Judicial Process • Criminology and Criminal Law Soft and Life Skills

The School of Humanities and Social Sciences is committed to enriching general awareness and critical dissemination of issues of contemporary relevance such as gender, disability, old age, community health (mental and physical), environment, as well as issues pertaining to Dalit and tribal communities through curricular and social outreach programmes. Film production and screening along with street plays, seminars and talks/lectures are built into academic programmes involving faculty members, research scholars, students, and staff to connect with the community at large.

Important Activities undertaken by Departments and Centres

- National Seminars; as well as Webinars; Invited Lectures by Distinguished Scholars, in most of the Departments under the School of HSS
- Outreach Programmes by the Dept. of Cultural Studies, Dept of Social Work, Dept of Sociology, Centre for Inclusive Development, The Women Studies Centre, Dept of MCJ....
- Short film production and Screening by the Dept of MCJ
- Sensitization programmes on Gender, Health and Hygiene, Substance Abuse and Mental Health, Good Academic Practices by the Dept. of Cultural Studies, Dept of Education, ,Dept of Social Work, Women Studiers Centre and the CID, Human Rights Awareness by the Dept of Law.
- Field Study trips to places of historical, cultural and ethnographic interest
- Celebration of special days like International Women's Day; Social Work Day; Heritage Day; Mother Language Day; Press Freedom Day
- Exhibitions in MCJ, Cultural Studies and Social Work

Personnel of the Dean's Office

Dean of the School

Farheena Danta, PhD

Professor, Department of English

Email: fdefl@tezu.ernet.in

Assistant

Amarjyoti Bharali

Email: amar@tezu.ernet.in

MTS

Tanka B Chetri

DEPARTMENT OF ASSAMESE

THE DEPARTMENT

Established in 2019 the Department of Assamese was initially started as the Centre for Assamese Studies in 2011. Currently, the Department offers an MA programme and PhD programme in Assamese. With the pursuit of conducting and promoting research in Assamese language and culture, the Department has accomplished establishing an extensive digital archive comprising different manuscripts and documents in Assamese literature from the medieval period to the present.

ACADEMIC PROGRAMMES AND STUDENT INTAKE

Programme	Intake
MA in Assamese	20
PhD in Assamese	Variable (08 in 2022-2023)

THRUST AREAS

- Assamese Language, Literature and Culture
- Textual Criticism
- Digital Humanities
- Translation Studies
- Film Studies
- World Literature

MAJOR FACILITIES/EQUIPMENT AVAILABLE

- Departmental Library
- Digital Archive

PUBLICATIONS

JOURNAL PUBLICATIONS

Borah P. DLCC: Deep Learning in Effective COVID-19 Classification. *Acta Scientific Computer Sciences*, 4(4): 7, 2022.

Das J. Homen Borgohair Kishor-Sahitya: Jijnasar Uttar aru Manasik Paripustir Samahar. *Satsori*, 17(10): 46-49, 2022.

Dutta J. Representation of Women in Life Writings of Colonial Assam. *Anvesan*, (15): 243-255, 2023.

BOOKS

Deka S. Khojar Sabda, Bipul Khataniar Smarak Grantha, (*Ed.*), Bipul Khataniar Sowarani Manca, Guwahati, 1st edition. July, 2022.

Deka S. Asam Andolanar Galpa, (*Ed.*), Banalata, Guwahati, 1st edition, January 2023.

Dutta J, Jintu Gitartha. Nirbachito Asamiya Queer Galpa (Select Assamese Queer Stories), (Ed.), Student House, Guwahati.2022.

Dutta J. Sahitya, Samaj aru Sahityatattva (Literature, Society and Literary Theory), (Ed.), Purbayon Publication: Guwahati, 2022.

Neog SJ. Asamar Natya Parampara (1970-2020), (Ed.). Vol-I, Assam Book Trust, Guwahati, 1st edition. 2022.

Neog SJ. Jyotir Jonaki Batedi. Students Stores, (Ed.), Guwahati, 1st edition. 2022.

BOOK CHAPTERS

Das J. Homen Borgohaier Atmakatha: Pragya aru Abhigyatar Barnadhya Kathakata. In: Homen Borgohain: Sahitya aru Sannidhya. (Eds. Lagashu N, Hatibarua M), Purbanchal Prakash, 2022.

Das J. Homen Borgohainr Kishor Sahitya. In: Homen Borgohair Sahitya Aru Sadhana. (Ed. Das DC), Sampriiti, Guwahati, pp. 255-262, 2022 ISBN 978-93-93476-14-2.

Dutta J. Overtime (translation of Ajanta's story into English). In: A Solitary Place. (Ed. Sheshagiri Rao VN), Bedakantha, Jorhat, pp. 172-183, 2022, ISBN 978-93-82931-97-3.

Dutta J. Phato Bihu of Dhakuakhana: An Attempt to Rediscover and Re-establish Identity. In: People's Art of Northeast India: History, Identity and Emerging Realities. Indira Gandhi Rashtriya Manav Sangrahalaya. Bhopal, pp. 51-66, 2023, ISBN: 978-81-7305-676-5.

Neog S J. Homen Borgohainr Gadya Sahityar Bhasasaili. In: Homen Borgohair Sahitya Aru Sadhana. (Ed. Das DC), Sampriiti, Guwahati, pp. 320-335, 2022, ISBN 978-93-93476-14-2.

ARTICLES IN CONFERENCE PROCEEDINGS

Das J. Asamiya Madhyamar Sikhya Buniad Nirmanat Padmanath Gohainbaruar Bhmika. In: Life and Works of Padmanath Gohainborooah, Hemchandra Goswami and Panindranath Gogoi, pp.124-126, North Lakhimpur College, N.L. College Publication, 2023.

PUBLICATION OF ARTICLES IN OTHER FORMS

Das J, Bora JK. Bhraman Lekhat Nadi aru Brahmaputra Abhijanmulak Britanta: Eti Samiksha. *Anviksa*, Department of Assamese, Dibrugarh University, Vol-VII, 25-34. 2022.

Das J. Ek Baudhik Andolanar Utsa aru Nephathya. *Gariyoshi*, 69-71, 2022.

Dutta J. Palak (Translated a short story titled 'The Wink' by Pema Bhum into Assamese). *Prakash*. Third Phase, 31-38. 2022. ISSN 2279-0683.

Dutta J. Sithikhan (Translation of a short story titled- The Letter by Tamsula Ao from English into Assamese). *Gariyoshi*, Vol. XXVIII, Issue No. 11. 68-71 2022. ISSN 2349-5324

Dutta J. Uttar Adhunikatabadar Alokak Bezbaroar Patmugi (Bezbaroa's Patmugi in the Light of Postmodernism). *Prakash*, Third Phase: 18-20. 2022. ISSN 2279-0683.

Dutta J. A short story -Benguniya Kanchanar Akash (The Sky with Violates Kanchan Flower). *Prakash*, Publication Board Assam. Third Phase: 129, 70-73, 2022. ISSN 2279-0683.

Deka S. Introduction. In: Anil Raichaudhury Racanavali, Bandhav Publication, Guwahati, 2022.

Deka S. Asamat Kshudha—Myth ne Bastav, muktosinta.org, 2022.

Neog SJ. Manju Borah's 'Ko:Yad'. E-Cine India, 2022.

Neog SJ. Saint on Celluloid. The Assam Tribune, 2022.

Neog SJ. Akashitorar Kathare: A significant addition to the tradition of Indian women-centric film. E-Cine India, 2023.

DEVELOPMENT OF COURSE MATERIAL

Dutta J. Sagar Dekhisa by Devakanta Barua, MIL Assamese Course, (Code BAALA-135) for the School of Humanities, Indira Gandhi National Open University (IGNOU), 2022

PEDAGOGY AND CONTENT DEVELOPMENT

Deka S. designed new courses, *New Perspectives in Assamese Language, Literature and Culture* (AS700) and *Studies on Nineteenth Century Assam* (AS708) for the PhD programme

Dutta J. designed new courses, *Research Methodology* (AS701), *Introduction to Literary Theory* (AS703), *Translation Studies* (AS705), *Ethnic Literatures of North East India* (AS706), and *Comparative Literature* (AS709) for the PhD Programme

Neog S. designed new courses, *New Perspectives in Assamese Language, Literature and Culture* (AS700), *Basic Concepts of Modern Theatre* (AS704) and *Film Theory* (AS710) for PhD Programme

CONFERENCE/WORKSHOP/SYMPOSIUM ATTENDED

Name of Faculty/Staff Member	Title	Date	Place
J Dutta	Delivered a Lecture on 'The Relevance of Celebration of Sri Sri Krishna Rasleela' at the Contemporary Context on the occasion of Golden Jubilee Celebration of Sri Sri Krishna Rasleela organized by Jalbhari Natya Samaj	07 November 2022	Jalbhari Natya Mandir; Assam
	Resourcing a session on 'Comparative Literatures, Indian Literature(s) and Literatures of North East India' in the Refresher Course, Comparative Indian Literature & Culture and Bharat	12 November 2022	Dept. of MIL, Guwahati University; (Online)

	Nirman		
	Delivered a Invited talk on ' <i>Comparative Literature, Indian Literature and Translation</i> '	13 February 2023	Joya Gogoi College, Khumtai, Golaghat, Assam
	Participated as a Resource Person in a session on ' <i>Translating Fiction from/into English: Challenges and Prospects</i> ' in Translation Workshop	22 March 2023	Dept. of English, Tezpur University
J Das	Presented a paper, ' <i>Padmanath Gohain Borooah's contribution to the foundation of Assamese Medium Education</i> ' in a National Seminar on Life and Works of Padmanath Gohainborooah, Hemchandra Goswami and Panindranath Gogoi	11-12 April 2022	Department of Assamese, North Lakhimpur College, Lakhimpur, Assam
	Participated as a Language Expert in the workshops on ' <i>Glossary of Engineering in Assamese as a part of the project to prepare Trilingual Glossary of Engineering</i> ' in Assamese to fulfill the objectives of NEP2020 at Tezpur University	04-08 April 2022, 02-06 May 2022, 28 Jun-02 July, 2022	CSTT, Ministry of Education, Govt. of India
	Participated in the Refresher course on ' <i>Literature of North East India, Translation and National Integration</i> ', organized by Teaching Learning Centre, Tezpur University in association with Department of Assamese, Tezpur University	13-27 December 2022	Teaching Learning Centre, Tezpur University in association with Department of Assamese, Tezpur University; (Online)
P Borah	Presented a poster on ' <i>IoT based Food Spoilage Monitoring System and Integrative Approach of Malware Detection</i> ' in the North East Research Conclave	20-22 May 2022	IIT Guwahati
S Deka	Chaired a Session in the Symposium on ' <i>Contemporary Assamese Literature: A Critical Discussion</i> '	30 April 2022	Sahitya Academy and IQAC, Majuli College, Majuli, Jorhat, Assam
	Resourcing a session in the Workshop on ' <i>Introducing Medieval Assamese Manuscript</i> '	14 October 2022	Department of Linguistics University of Delhi, New Delhi
	Delivered a talk in the Symposium on ' <i>Char-Chaparibasi aru Asamiya Jatisattva</i> ' Organized by Char-Chapari Sahitya Parishad, Assam	28 January 2023	Mandia, Barpeta, Assam
	Delivered a talk at the Symposium on ' <i>Epic and Legend-Based Modern Literature</i> ' organized by Sahitya	17 June 2022	KBVSA University, Nalbari, Assam

S J Neog	Akademi		
	Resourcing a session of a Refresher course (Assamese) Organized by Dept. of Assamese Gauhati University on 'From Page to Screen: A deliberation in the light of Adaptation Theory'	06 February 2023	UGC-HRDC, Gauhati University, Assam
	Resourcing a session, 'From Page to Stage: A deliberation in the light of Adaptation Theory' in Refresher course (Assamese) organized by Dept. of Assamese Gauhati University	07 February 2023	UGC-HRDC, Gauhati University, Assam

TALKS BY THE FACULTY ABROAD AND IN INDIA

Name of Faculty Member	Title	Date	Place/ Institute/ Venue
J Das	Delivered an invited talk on 'Nineteenth Century Assam, Colonial Modernity and the Dream of Enlightenment'	18 June 2022	Department of Assamese, North Lakhimpur College, Assam
	Delivered an invited lecture on 'Contemporary Assam in Colonial Life Writing: Colonial Construction and Reality' organized by the Department of English and History, HCDG College	02 March 2023	HCDG College, Nitaipukhuri
	Invited Talk on 'Portrayal of Contemporary Assam in Life Writing', organized by the Department of Assamese, Ujani Majuli Kherkatia College	04 March 2023	Ujani Majuli Kherkatia College, Majuli, Jorhat, Assam
S Deka	Delivered a lecture on 'Asamar Prabajan, Bhumi-Prasna aru Nimna-Barga: Parivartita Brittantar Ruprekha' on the occasion of Dr. Hemanta Kumar Baruwa Annual Endowment Lecture	05 April 2023	Lakhimpur Commerce College, North Lakhimpur, Assam
	Invited Talk on 'Asamiya Narir Gadya (1884-1930): Dristibhangi aru Bhavadarsha' Lecture Programme	02 March 2023	Dept. of Assamese, Moran Mahila Mahavidyalay, Jorhat, Assam
	Invited talk on 'Asamiya Nari Lekhakar Gadyasambhar (1884-1930): Purustantrar Punarlikhan?'	02 March 2023	IQAC, Hemchandra Deva Goswami College, Nitaipukhuri, Sivsagar, Assam
	Delivered a talk on 'Sahityar Pora Ami Jivanat Ki Bicar' at the Annual Lecture of Ramdhenu Sahitya Cakra	29 January 2023	Ramdhenu Sahitya Cakra, Darrang, Assam
	Delivered an invited talk on	13 May 2022	Suryya Kumar Bhuyan

	<i>‘Oupanibesik Asamat Print aru Path-Parampara’</i>		School of Social Sciences, K K Handiqui Open University, Guwahati, Assam
	Delivered an invited talk on <i>‘Lakshminath Bezbaroar Avadan’</i> on the occasion of Sahitya Divas	26 March 2022	Tezpur Sahitya Sabha, Tezpur, Assam
S Rajkhowa	Invited talk on <i>‘Recent Developments in Generative Syntax’</i>	17 May 2022	Department of Linguistics and Language Technology, Tezpur University, Assam

AWARDS/HONOURS/NOTABLE ACHIEVEMENTS

Name of Awardee	Designation	Achievement
Subrat J Neog	Associate Professor	State Film Award, 2023 for Best Writing on Cinema by Government of Assam
Juri Dutta	Assistant Professor	Sahitya Akademi Translation Award 2022 for translation of <i>Kocharethi: the Araya Woman</i> into Assamese as <i>Kocharethi: Araya Nari</i> by Sahitya Akademi

SEMINAR/WORKSHOP/SYMPOSIA/LECTURES ORGANISED

Event	Duration
Organized a national seminar, Identity in Assamese Literature.	23 August 2022
Organized an online Refresher Course, literature on North East India: Translation, and National Integration, in association with the Teaching Learning Centre, Tezpur University	13-27 November 2022
Organized a symposium on Assamese Fiction and Film	09 February 2023
Organized a workshop, Manuscripts Reading and Preservation, in the Asamiya Club of Tezpur	29 October 2022
Organized special Lectures on The Evolution of the Assamese Novel: From the Beginning to the Present	11-12 April 2022
Organized a special talk on Assamese Morphology	13 May 2022
Organized Special lectures on Plagiarism and Open Access Publication	20-21 October 2022
Organized a special lecture on Assamese Poetry	11 November 2022
Organized Distinguished Lecture Series, Contemporary Drama and Theatre	13-14 December 2022
Organized an online lecture, Post Modernism	24 January 2023

OTHER SIGNIFICANT ACTIVITIES

- The Departments of Assamese and Mass Communication and Journalism, Tezpur University in association with JB production, staged an Assamese play 'Ekanta Enisha' on 27 April 2022, at the Kalaguru Bishnu Prasad Raba Auditorium of the University.
- Organized a field study and an extension programme at Kacharichan village, Udalguri district on 9 June 2022. The selected topic of the field study was -Socio-Cultural Life of the Bodo: Tradition and Changes. A discussion on -Preservation of Indigenous Culture of Assam: Problems and Prospects was organized as an extension activity by the Department.
- The Department of Assamese in association with Swadhin Theatre, Guwahati staged an Assamese play-*Tomar Nibir Mayare* on 29 August 2022, at the Kalaguru Bishnu Prasad Raba Auditorium of the University.
- Students of the Department published the second issue of the annual e-magazine -Kixalaya (<https://kixalaya.wordpress.com>) on 11 November 2022.
- Staged a play, *Smriti tar Sugandhi Pakhila* in association with Surya Production, Guwahati on 10 February 2023.
- Celebration of Mother Language Day on 21 February 2023.

DISTINGUISHED VISITORS

- Karabi Deka Hazarika, Renowned Litterateur, Retd. Lakshminath Bezbarua Chair Professor, Dibrugarh University.
- Apurba Sharma, Eminent Storyteller and Film Critic, Assam.
- Devabrata Das, Eminent Author, Assam.
- Manoj Borpujari, Eminent Film Critic and Poet, Assam.
- Govinda Prasad Sharma, Eminent Critic, and Retd. Professor of English, Gauhati University.
- Lilabati Saikia Bora, Retd. Professor, Department of Assamese, Gauhati University.
- Gunakar Dev Goswami, a Noted Drama Personality of Assam.
- Rabijita Gogoi, Independent Performing Artist, Theatre Director & Theatre Skill Builder, Assam.

NUMBER OF STUDENTS QUALIFIED IN NET-JRF/SLET/GATE

Name of Qualifying Examination	Number of Qualified Students
UGC NET –JRF	5
UGC NET	7
SLET	3

FACULTY MEMBERS

Associate Professor

Subrat J Neog, PhD (Gauhati University)

Head of the Department

Specialization/ Area of Interest: Assamese Literature, Film Studies, Theatre Studies, Stylistics, Creative Writing (Play and Screenwriting)

Email: subrat@tezu.ernet.in

Assistant Professor

Juri Dutta, PhD (Rajiv Gandhi University)

Specialization/Area of Interest: Regional Literature, Comparative Literature and Translation, Creative Writing

Email: juri@tezu.ernet.in

Sanjib Deka, PhD (Gauhati University)

Specialization/Area of Interest: Study of Assamese Language, Medieval Assamese Language, Assamese Morphology, Nineteenth Century Assam, Printing History, Creative Writing

Email: sanjibd@tezu.ernet.in

Jyotishman Das, MPhil (Dibrugarh University)

Specialization/Area of Interest: Assamese Fiction, Assamese Mass Media, Creative Writing, Life Writing, Travel Writing

Email: jyotish@tezu.ernet.in

Guest Faculty

Sushanta Rajkhowa, MA (Tezpur University)

Specialization/Area of Interest: Assamese Morphology, Assamese Syntax, Syntax-Semantics Interface

Email: xuxanta@gmail.com

Parthajit Borah, MTech (Tezpur University)

Specialization/ Area of Interest: Machine Learning and Data Security

Email: parthajit@tezu.ernet.in

STAFF MEMBERS**Assistant**

Chandrasekhar Roy

Email: chaser@tezu.ernet.in

MTS

Malati Boro

DEPARTMENT OF CULTURAL STUDIES

THE DEPARTMENT

The Department of Cultural Studies, at Tezpur University is one of the earliest Departments in the country to be fully devoted to the pursuit of cultural studies. Founded in 1995, the Department engages with cultural products, practices, and forms with a special focus on North-East India. Its curricula focus on interdisciplinary approaches to traditional fields of study where the aim is to explore emergent cultural and cross-cultural phenomena from multiple points of view. Researchers and faculties, drawn from various disciplines like Anthropology, Performance Studies, Literature, Folklore, Media and Film, Gender Studies, Community Dance, and Dance Ethnography are actively engaged in exploring subjects like cultural history, folklore and culture, material culture, media, heritage, gender, cultural theory, oral history, comparative literature, translation, and art history.

ACADEMIC PROGRAMMES AND STUDENT INTAKE

Academic Programme	Intake
MA in Cultural Studies	30
PhD in Cultural Studies	Variable (04 in 2022-23)

THRUST AREAS

- Cultural History
- Media and Popular Culture
- Cultures of North-East India

MAJOR FACILITIES/EQUIPMENT AVAILABLE

- Facilities:
 - Departmental museum
 - Departmental library
 - Neelpawan Baruah Museum of Modern Art
 - Digital Archive of Cultural Resources
 - Audio-visual classroom cum seminar hall with projector
 - Wall of Heroes: A photo gallery of Indian freedom fighters
- Equipment:
 - NAS server
 - Workstations for audio-visual processing
 - DSLR cameras and video camcorders

RESEARCH PROJECTS (BOTH ONGOING AND NEW)

Project Title	Funding Agency	Amount (in INR)	Duration	Investigator(s)
SAP-DRS II: Sacred Spaces on the Banks of the River Brahmaputra	UGC	26.72 lakhs	2018-2023	DP Nath

Archiving, Modeling and Visualization of the Eco-Cultural Heritage of Majuli River Island of Assam	DST	47.17 lakhs	2019-2023	P Dutta
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PUBLICATIONS

JOURNAL PUBLICATIONS

Nath DP, Dowerah S. The Icons of Unadulterated Evil: Bollywood Villains of the 1980s. *Quarterly Review of Film and Video*. 2023. DOI: 10.1080/10509208.2023.2173474. ISSN: 1543-5326

Kalita S, Baruah M. Social History of the Refugees in the Refugee Camps through the Lens of Cultural Memory: Narratives from Bamunigaon Permanent Liability Centre, Assam. *History Today, Journal of History and Historical Archaeology*, 23: 44-49. 2022. (ISSN: 2249-748X)

BOOK CHAPTERS

Nath DP. Contextualizing Witch Hunting Practices in Assam. In: Black Magic, Witchcraft and Occultism Secret Cultural Practices in India. (Ed. Sajal Nag), Manohar Delhi, pp.583-588, 2023, ISBN: 978-93-91928-03-2.

Sarmah P, Nath DP. Folklore of Assam. In: Lokparampara. (Ed. Dilip Kumar Kalita), ABILAC, Guwahati, pp 378 -383, 2022, ISBN: 978-93-82680-59-8.

Konwar JG. Dr. Lila Gogoi Rosonat Byonga. In: Axomia Sahityat Hashya-Bongya. Sadou Asom Lekhika Samaroh Samiti, pp. 245-258, 2022, ISBN 978-93-92666-05-6.

Kandali M. Home as the constructed abode: Santiniketan and the trinity of modern art of Assam. In: 100 years of Kala Bhavana. (Ed. Mukhopadhyaya A), Lalit Kala Academy, New Delhi, Volume 2, pp.201-213, 2023, ISBN: 978-81-87507-81-0.

Kandali M. Modernity at Crossroads: Two decades of artistic mediation in Contemporary art. In: Lokparampara. (Ed. Kalita D), Anundoram Borooah Institute of Language, Art and Culture, pp.308-317, 2022, ISBN: 978-93-8268-059-8.

Kandali M. Aesthetics and Art: Jyotiparshad Agarwala. In: Ruptirth. (Ed. Borah M), All Assam Student's Union Annual Publication, Assam, pp.159-166, 2023, ISBN: 978-93-5780-465-3.

CONFERENCE/WORKSHOP/SYMPOSIUM/SEMINAR ATTENDED

Name of Faculty/Staff Member	Title	Organized By	Date	Place/Institute/Venue
JG Konwar	Presented a paper, Borderland Futures: Technologies,	International Institute for Asian Studies and Asian	23-25 June 2022	Leiden International Institute for Asian Studies and Asian Borderlands Research

	Zones, Co-existences	Borderlands Research Network, Leiden University		Network, Leiden University
M Baruah	Participated in FDP Cum Workshop on Digital Pedagogy	SS Jain Subodh Management Institute, Rajasthan	11-15 March 2023	S S Jain Subodh Management Institute, Rajasthan (Online)

TALKS BY THE FACULTY ABROAD AND IN INDIA

Name of Faculty Member	Event	Date	Place/Institute/Venue
DP Nath	Delivered a talk on ' <i>Adaptation in Indian Cinema</i> ' in the Seminar cum workshop on Literature, Films and Classroom Pedagogy	03 March 2023	Department of English, Tezpur University
	Delivered a lecture on ' <i>Translation and the Inequalities of Languages</i> ' in the Refresher Course on Indian Language and Literature	15 December 2022	Department of English, Utkal University
	Delivered a lecture on ' <i>Translation and Power</i> ' in the Refresher Course, Literatures of Northeast India, Translation and National Integration	21 December 2022	Department of Assamese and Teaching Learning Centre, Tezpur University
	Delivered a lecture on ' <i>feminist Methodology</i> ' in the ICSSR-sponsored Online Research Methodology Workshop	23 May 2022	Department of Cultural Studies, Tezpur University
JG Konwar	Delivered a talk on ' <i>Log Drum: A Lost Heritage</i> ' on World Heritage Day Celebration	19 April 2022	Department of Cultural Studies at Kendriya Vidyalaya, Tezpur University
	Delivered a lecture on ' <i>Dynamics of Ethnographic Research in Social Sciences</i> ' in the Research Methodology and Training Programme in Social Sciences Research organized by Institute of Tai Studies and Research	08 January 2023	Institute of Tai Studies and Research, Moranhat, Assam
	Delivered a talk on ' <i>Talking Film Techniques: from Cinematography to Effects</i> ' in the Seminar cum	03 March 2023	Department of English, Tezpur University

JV Das	workshop on Literature, Films and Classroom Pedagogy		
	Delivered a talk on ' <i>Academic Writing and Publishing</i> ' in the ICSSR-sponsored long Online Research Methodology Workshop	03 June 2022	Department of Cultural Studies, Tezpur University
	Delivered a lecture on ' <i>How to crack UGC Net: Tips and Tricks of Paper I</i> '	10 May 2022	Department of Music, Tripura University
M Kandali	Delivered a talk on ' <i>Cross-Cultural Identities: A Dialogue Through Art</i> ' in ICSSR-NERC sponsored Workshop on International Multidisciplinary Art	08 July 2022	ICSSR-NERC, NEHU, Shillong
	Delivered a talk on ' <i>Writers' deliberation on creative writing</i> ' in Meet the Author program	07 May 2022	Majha House for literature, art and ideas, Punjab; (Online)
	Delivered a lecture on ' <i>To Tell a Tale: The Art of Storytelling</i> ' in the Literature Festival River Talks	13 June 2022	The Assam Royal Global University, Guwahati

AWARDS/HONOURS/NOTABLE ACHIEVEMENTS

Name of Awardee	Designation	Achievement
Ngutoliy Swu	Research Scholar	Pitt Rivers Museum, Oxford, Visiting Scholarship

OTHER SIGNIFICANT ACTIVITIES

- Inauguration of the Neelpawan Baruah Museum of Modern Art on 9 April 2022, under the aegis of the Centre with Potential for Excellence in Particular Area (2016-2021), a special scheme awarded by the University Grants Commission to Tezpur University, curated by Dr Moushumi Kandali.
- Inauguration of the Digital Archive of Cultural Resources of the Department of Cultural Studies on 6 September 2022, by Professor Vinod Kumar Jain, Vice-Chancellor, Tezpur University.
- Dr Sayan Dey, a Postdoctoral Fellow at the WITS Centre for Diversity Studies at the University of Witwatersrand Johannesburg, delivered a lecture on *Afro-Indian Creoles: A Study of the Zikirs of the Siddi Community in Gujarat* on 4 March 2023.
- An interactive session on *Heritage* themes was organized on the occasion of World Heritage Day on 18 April 2022 at Napaam M V School and Kendriya Vidyalaya, Central University Tezpur. The session was coordinated by Dr Subhra Devi, Assistant Curator of the Department.
- An online lecture-demonstration was held on 4 May 2022, on the theme, *An Introduction to Indian Culture Portal: Exploring the Rich Cultural Heritage of North-East*, and Prof. Pradeep Varma, IIT Bombay was invited to resource the session.

- An outreach activity of guided visits organized by the Department for school students to its Departmental museums and guided tours to different Archaeological Sites of Tezpur on the occasion of the International Museum Day 2022. Dr Moushumi Kandali and Dr Subhra Devi conducted the tours.
- A Ten-Day Online Research Methodology Course sponsored by the Indian Council of Social Science Research (ICSSR) New Delhi, was organized for MPhil/PhD/Postdoctoral Fellows in Social Sciences during 23 May-3 June 2022.
- A Memorandum of Understanding (MoU) was signed between the Department of Cultural Studies, Tezpur University, and the Centre for Cultural Resources and Training, (CCRT), Ministry of Culture, New Delhi on 10 February 2023. The MoU intended to bring in projects designed to document the stories related to the Indian Freedom Struggle of all the districts, including the rich cultural repository and cultural heritage of India.

NUMBER OF STUDENTS QUALIFIED IN NET-JRF/ GATE/SLET

Name of Qualifying Examination	Number of Qualified Students
UGC NET-JRF	2
National Fellowship for SC Students	1

NOTABLE PLACEMENTS

Name of Student	Designation	Company/ Organization
Wanlaya Namtham	Guest Faculty	Rambhai Banni Rajbhat University, Thailand
Dina Swargiary	Principal	Nowgong Mission High School, Assam

FACULTY MEMBERS

Professor

Debarshi P Nath, PhD (Rajiv Gandhi University, Itanagar)

Head of the Department (since 1 February 2023)

Specializations/Area of Interest: Cultural Theory and Contemporary Culture and Films, Comparative Literature and Translation, Cultural Memory and Cultures of North East India
Email: dpnath@tezu.ernet.in

Associate Professor

Parasmoni Dutta, PhD (Tezpur University)

Head of the Department (till 31 January 2023)

Specializations/Area of Interest: Oral history, Digital culture, Heritage studies, Cinema and advertisements
Email: paras@tezu.ernet.in

Madhurima Goswami, PhD (Tezpur University)

Specializations/Area of Interest: Performance Studies, Women Studies, Indian Poetics
Email: mgs@tezu.ernet.in

Assistant Professor

Juri G Konwar, PhD (Dibrugarh University)

Specializations/Area of Interest: Anthropology of Textile, Anthropology of Food, Ethnicity
Medical Anthropology
Email: jgkon@tezu.ernet.in

Jayanta V Das, PhD (Tezpur University)
Specializations/Area of Interest: Media and Culture Comparative Media Studies Media and
Globalization
Email: jvdas@tezu.ernet.in

Hashik Nadukkandiyil, PhD (Hyderabad University)
Specializations/Area of Interest: Performance studies, Community Studies, Cultural History
Email: hashikk@tezu.ernet.in

Moushumi Kandali, PhD (MS University, Baroda)
Specializations/Area of Interest: Visual art and culture
Email: moushumi@tezu.ernet.in

Guest Faculty

Samikshya Madhukulya, PhD (USTM)
Specializations/Area of Interest: Folklore
Email: madhusami1000@gmail.com

Bornil J Phukan, MA (Tezpur University)
Specializations/Area of Interest: Film Studies, Indian Traditional Knowledge Systems
Email: borniljonak@gmail.com

Adjunct Faculty

Alison East, MPhEd (University of Otago)
Specializations/Area of Interest: Dance Ethnography
Email: alieast41@gmail.com

Barbara H Snook, PhD (University of Auckland)
Specializations/Area of Interest: Community Dance
Email: b.snook@auckland.ac.nz

STAFF MEMBERS

Assistant Curator

Subhra Devi, PhD (National Museum Institute, New Delhi)
Specializations/Area of Interest: Conservation, Ethnography
Email: sd@tezu.ernet.in

Assistant

Suren Baruah
Email: suren@tezu.ernet.in

MTS

Luhit Bhuyan

DEPARTMENT OF EDUCATION

THE DEPARTMENT

The Department of Education was established in the year 2014 under the School of Humanities and Social Sciences. At present, the Department is running four programmes, out of which one programme is in collaboration with the Departments of Mathematical Sciences, Chemical Sciences, and Physics. Both BEd & Integrated BSc BEd programmes are designed to equip the trainee teachers with well-versed knowledge, pedagogy, and communication skills which are integral parts of the curricula. The Department started Postgraduate and Doctoral programmes in Education in 2015. These programmes provide learners a wider, and more comprehensive understanding of education as a field of knowledge. The faculty members of the Department have a wide range of expertise/specializations to enable the learners with the necessary competencies, skills, and knowledge so that they can participate in educational activities in different areas of education effectively as a professional. Our trainee teachers are well placed not only as regular Govt. teachers in Assam but also in Kendriya Vidyalaya Sangathan (KVS), Army Public School, Delhi Public School, the Assam Valley School, and other reputed schools of the country. The students enrolled in postgraduate and doctoral programmes, after completing their degrees get recruited in various prestigious institutes serving in various posts such as assistant professors/lecturers/Graduate teachers and in other administrative jobs.

ACADEMIC PROGRAMMES AND STUDENT INTAKE

Programme	Intake
BEd	63
Integrated BEd with BSc/BA	50
MA in Education	38
PhD in Education	Variable (04 in 2022-23)

THRUST AREAS

- Curriculum and Pedagogical Studies - School Education
- Contemporary Educational Issues in North East India
- Inter-Disciplinary Research
- Teacher Education
- ICT in Education
- Science Education
- Early Childhood Child and Care Education
- Cognitive Psychology
- Inclusive Education
- Gender Issues in Education
- Educational Leadership and Management

MAJOR FACILITIES AND EQUIPMENT AVAILABLE

- Psychology Resource Centre
- Art and Craft Resource Centre
- Curriculum Laboratory

- ICT Resource Centre
- Departmental Library
- SMART Classroom

RESEARCH PROJECTS (BOTH ONGOING AND NEW)

Project Title	Funding Agency	Amount (in INR)	Duration	Investigator(s)
Substance abuse and suicidal behavior among college students in North East India	ICMR, New Delhi	28.24 lakhs	12 Months	NR Roy (Co-PI)
National Cadet Corps as an Open Elective Credit Course in the universities within the Framework of NEP 2020	ICSSR, New Delhi	3.48 Lakhs	12 Months	H Sharma

PUBLICATIONS

JOURNAL PUBLICATIONS

Das B, Roy NR. Scientific aptitude of the Secondary Level students. *Third Concept-An International Journal of Ideas*, 36(424),36-38, 2022.

Dey A, Roy NR. Influence of Gender on Emotional Intelligence and Professional Commitment: A Study in West Bengal, *Education India: A Quarterly Refereed Journal of Dialogues on Education*, 11(2), 1-8, 2022.

Dey A, Roy NR. A Study of Emotional Intelligence of Teachers in Relation to Gender and Teaching Experience, *European Online Journal of Natural and Social Science*, 11(3), 722-732.

Pal R, Roy NR. Addressing the anomalies in the factorial structure of student engagement construct: A Study, *Bharatiya Shiksha Shodh Patrika*, 41 (1), 79-83, 2022.

Pal R, Roy NR. Gender Gap in Student Engagement Across Academic Grades: A Comparative Study in West Bengal, *Education India: A Quarterly Refereed Journal of Dialogues on Education*, 11 (3), 1-9, 2022.

Dey A, Roy NR. Construction and Validation of Emotional Intelligence Scale for Secondary School Teachers, *Educational, Cultural and Psychological Studies, ECPS Journal*, 26, 2022 <https://www.ledonline.it/ECPS-Journal/Online>, 2022.

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Mushahari M, Sharma H. A study on Guidance Needs of Scheduled Tribe Students in Sonitpur District of Assam. *Shodhasamhita*, 9(1), 2022.

Gohain M, Padmavathy RD. RAN and Reading Ability among the Primary School Children. *Third Concept: An International Journal of Ideas*, 36(424), 2022.

Bora S, Padmavathy RD. Role of ICTs in Personal, Social, Cultural and Educational Empowerment of Women Students in Higher Education: A case study. *NeuroQuantology*, 20(10), 2022.

Boruah T, Padmavathy RD. A study on relationship between Academic Procrastination and Emotional Intelligence among university students of India. *NeuroQuantology*, 20(10), 2022.

Chakrawarty S, Saikia J. Proficiency of the BEd Teacher-Trainees of Nagaon District in Relation to their ICT Knowledge during the COVID-19 Pandemic. *Education India: A Quarterly Refereed Journal of Dialogues on Education*, 11(3), 2022.

Chetri H, Pradhan S. Study of school teachers freezing in their profession within the sphere of East Siang district in Arunachal Pradesh. *Education and Society*, 47(1), 2023.

Saikia S, Sultana Y. Appraising the Awareness, Attitude and Usage of Creative Commons License by Central University Faculty Members. *Indian Journal of Educational Technology*, 4(2), 2022.

Borah M, Sultana Y. Academic Resilience of Adolescent Students during Covid-19 Pandemic situation. *Journal of Indian Education*, 48(2), 2022.

BOOKS

Padmavathy RD, Garg S, Vijayalakshmi S, Kumar R. *Essentials of Educational Psychology: Enhancing learners*, Academic Guru Publishing House, Bhopal, India, 2022.

Padmavathy RD, Saxena MC, Bhanushali M. *Role of IOT and Artificial Intelligence in Real-world Systems*. Scientific International Publishing House, India, 2022.

BOOK CHAPTERS

Roy NR. Interdisciplinary, Multidisciplinary and Transdisciplinary Curriculum: A Conceptual Framework. In: National Education Policy: The Road Ahead (With Special Focus on North East India). (Eds. Ahuja VK, Poddar D), pp.78-88, National Law university and Judicial Academy, Assam, 2022, ISBN NO: 978-81-954276-1-1.

Dey A, Roy NR. Influence of teaching experience on professional commitment and teacher engagement: A study in West Bengal. In: Vision for India @ 2047 (Eds. Anjantha B, Pathasarathi), Vol-2, pp. 68-8, Emerald Publishers, 2022, ISBN No. 978-93-92188-25-1.

Paul R, Roy NR. Professional Commitment, Teacher Engagement and Satisfaction in Teaching: A Study in Secondary School. In: Vision for India @ 2047. (Eds. Anjantha B, Pathasarathi), Vol-1, pp. 301-315, Emerald Publishers, 2022, ISBN No. 978-93-92188-25-1.

Dey A, Roy NR, Singh D. Emotional intelligence: An effective weapon to eradicate inequality and differences in thought process. In: SGD 10: Tackling Inequalities. (Eds. Singh D, Islam MS), pp. 44-59, Book Age Publication, New Delhi, Agra, 2022, ISBN No.978-81-950791-1-7,

Koch P, Sharma H. The Foundation Stage: A National Education Policy 2020 Perspective. In: Language Literature and Education. (Eds. Deepa, et al), pp.9-16, Banalata, 2022, (ISBN 978-93-91060-89-3)

Mushahari P, Sharma H. Experiential Learning in schools of India: Current Scenario and Future Prospects. In: New Horizons of Teaching and Learning, (Eds. Pratik U, Dubey R), Ashish Books, pp.94-102, 2022, (ISBN 978-93-91979-07-2)

Padmavathy RD. Extend Duration of BEd & MEd Programme: Augment Excellence among Aspiring Teachers. In: Contemporary Issues in Multidisciplinary Subjects. (Ed. Sruthi, S), pp.15-22, Red Shine Publications, Volume:3, 2022, ISBN: 978-93-93239-58-7.

Saikia S, Padmavathy RD. Impact of ICT on Teaching and Learning. In: Empowering Teacher Education and Its Vision by 2021. (Eds. Anbalagan S, Jeyalakshmi P), pp. 49-76, Insta Publishing House, New Delhi, 2022, ISBN: 978-93-90719-129.

Singh H, Kumar YP, Ahamad S, Jaiswal S, Dharani MK, Padmavathy RD, Gupta A. Environmental Behaviour Analysis and Monitoring with IOT for COVID-19. In: An Interdisciplinary Approach the Post CIVID-19 Pandemic Era. (Eds. Pandey D, Pandey BK, Sindhwani N, Anand R, Nassa VK, Dadheech PK), pp.145-152, Nova Scientific Publishers, New York, 2022, ISBN: 979-8-88697-185-9.

Padmavathy RD. Carl Rogers Person Oriented Approach Ameliorate Higher Order Thinking Skill among University learners during COVID-19. In: Learning to Learn to Transform the Society. (Eds. Pathak U, Dixit P), pp. 65-75, University Book House Ltd. Jaipur, 2022, ISBN: 978-93-95215-14-5.

Chakrawarty S, Khatiwora D. Role of Teacher in Implementation of National Education Policy 2020 and its challenges in the aspects of Teacher Education. In: National Education Policy 2020: Challenges and Opportunities in Higher Education. pp. 72-81, Rudra Publishers and Distributers, 2023 ISBN: 978-93-92108-68-6.

Das S. Professional Education in India: Exploring the gendered dimension. In: Marginality in India: Perspectives of marginalization from the Northeast. (Eds. Kikhi,K, Gautam, DR), pp 239-258, Routledge-London, 2023.

Mukherjee T, Asif M, Sultana Y. Online Examination during COVID-19 in Higher Educational Institutes: Tezpur University Students Perspective. In: Learning to Learn to Transform the Society. (Eds. Pathak U, Dixit P), pp. 55-64, University Book House Ltd, 2022. ISBN: 978-93-995215-14-5.

Gogoi N, Sultana Y. Input-based TBLT: A Requisite for Beginners. In: An Outcome Based Curriculum and Pedagogy: Contemporary Research Studies. (Eds. Zahoor N, Ahmed J, Khan A), pp. 132-139, V L Media Solutions 2023. ISBN:978-93-91308-50-6

Saikia S, Sultana Y. Measuring Digital Competence and Uses of Open Educational Resources: An Exploratory Study on Teacher education Institutes of Assam. In: An ICT integration in Education. (Eds. Zahoor N, Ahmed J, Khan A), pp.56-64, Shipra Publication, New Delhi, 2023.

Saikia S, Sultana Y. OER: A Catalyst to Innovative Educational Practices in India. In: Education in North East India. (Ed. Ahmed S), pp. 8-18, New Academic Publishers, 2022, ISBN: 978-81-953037-4-8.

STANDARDIZATION OF RESEARCH TOOLS

Dey A, Roy NR. Fivefold Emotional Intelligence Scale for Teachers, published by National Psychological Corporation (NPC), Agra, New Delhi, 2022.

Dey A, Roy NR. Social Intelligence Scale for Teachers, published by National Psychological Corporation (NPC), Agra, New Delhi, 2022.

Pal R K, Roy NR. Student engagement in Learning Scale, published by National Psychological Corporation (NPC), Agra, New Delhi, 2022.

Pal R K, Roy NR. Perceived Teachers Engagement Scale, published by National Psychological Corporation (NPC), Agra, New Delhi, 2022.

SEMINARS/CONFERENCES/WORKSHOPS/SYMPOSIA ATTENDED

Name of the faculty member	Event and Title of the Paper	Date	Organizer and Venue
RD Padmavathy	Presenting a paper, <i>Social Media as a Learning Platform in 21st Century</i> in a International E-Conference on-Recent Interdisciplinary studies in Agricultural, Forestry and Allied Sciences	30 November 2022	Savitiribai Phule Mahila Mahavidyalaya, Satara and Pangeae Geographical Association, Maharashtra India (Online)
	Presenting a paper, <i>Prospect & Challenges of MOOCs in Higher Education</i> in a National Seminar on-National Educational Policy 2020: Challenges and Prospects with special reference to Teacher Education for Continuous Professional Development	07-08 February 2023	Jorhat College, Jorhat Assam (Offline)
	Presenting a paper, <i>Potential of MOOC in achieving NEP 2020 Goals for Sustainable Development</i> in a National Seminar on Social Problems, Issues & Sustainable Developments Contemporary Indian Society	27 March 2023	Biswanath College, Biswanath Chariali, Assam (Offline)
S Chakrawarty	Presenting a paper, <i>Perception of pre-service teachers on inclusive of visually impaired students</i> in a Seminar on- Education: Affirmative Action and Inclusion in North-East India	22 September 2022	Department of Education, RGU, AP in collaboration with ICSSR-NERC, Shillong; (Online)
	Presenting a paper, <i>NEP 2020: Towards a Multidisciplinary Approach to Education</i> in an	16 February 2023	The Bhopal School of Social Sciences, Bhopal (Online)

	International Conference on-Multidisciplinary Research Perspectives		
S Pradhan	Participating in an Interdisciplinary Refresher Course- on Academic Writing and Research	16-30 May 2022	Teaching Learning Centre, Tezpur University (Online)
	Presenting a paper, <i>Metacognitive skills and self-concept of Mishing Tribe Undergraduate Students in relation to their Academic Achievement</i> in an International seminar cum AIAER conference	09-11 November 2022	Education Department, Rajiv Gandhi University Arunachal Pradesh (Online)
	Presenting a paper, <i>NEP 2020: A critical analysis based on teacher's perspective</i> in a ICSSR sponsored National Seminar on- National Education Policy 2020: Challenges and Prospects with special reference to Teacher Education for Continuous Professional Development	07- 08 February 2023	Department of Education Jorhat College in Collaboration with IQAC Jorhat College, Jorhat (offline)
Y Sultana	Presenting a paper, <i>Socio-Emotional Skills: Enhancing Academic Resilience among Adolescent School Students</i> in an International Conference on-Reconstruction of Education for Sustainable Development	09 November 2022	Jointly by AAIER and RGU, Arunachal Pradesh (Online)
	Presenting a paper, <i>A study on ICT competencies of pre-service Teachers in Sonitpur District</i> In a National Seminar on-ICT and e-governance applications in rural development	24 January 2023	National Institute of Rural Development and Panchayati Raj, Guwahati (Online)

TALKS BY THE FACULTY ABROAD AND IN INDIA

Name of the faculty member	Event	Date	Place
NR Roy	ICSSR sponsored National Seminar, Talk on- NEP 2020 with respect to Digital and Online Education	10-11 June 2022	Department of Education, Kampur College, Kampur, Nagaon, Assam.
	ICPR sponsored National Seminar, Talk on-Importance of Yoga for human well being	07-08 July 2022	Department of Education, Kumar Vaskar Verma Ancient and Sanskrit University, Nalbari
	Talk on- Philosophy behind Assessment and Evaluation	06-30 September 2022	TLC, Tezpur University

	Talk on-World Literacy Day	08 September 2022	Department of Education in collaboration with IQAC, Nowgong College, Nagaon, Assam
	ICSSR sponsored National Seminar, Talk on-National Education Policy 2020: Challenges and Opportunities in Higher Education	18-19 November 2022	Dimoria College, Guwahati, Assam
	Weeklong Blended FDP on Effective Teaching Pedagogy, Talk on- Pedagogy to Heutagogy	24 January 2023	Teaching Learning Centre (TLC), Tezpur University, in the association with NIPER, Guwahati, Assam
S Das	ICSSR sponsored Two Day National Seminar on-Towards Social Equality: Multiple Contexts and Approaches with Special Reference to North-East India, Talk on-Burgeoning violence against women: Role of social mores in checking the effectiveness of existing laws	02-03 November 2022	Dr. Ambedkar Chair, Tezpur University, Assam
Y Sultana	One Day Workshop for School Teachers, Talk on- Teaching Learning Materials: How to Design, Implement and Evaluate For English Teaching	22 December 2022	Department of English, Tezpur University
	ECCE in the Light of NEP 2020, Talk on-NEP 2020 and ECCE Goals	19 September 2022	Department of Education, Tezpur University

AWARDS & HONOURS/ NOTABLE ACHIEVEMENTS

Hitesh Sharma, Assistant Professor, Department of Education achieved the Best Associate NCC Officer Award awarded by the Directorate of Sports and Youth Welfare & Sports, Govt of Assam.

OTHER IMPORTANT ACTIVITIES

- The Department organized a workshop on Early Childhood Care and Education in the wake of the National Education Policy (NEP) 2020 for the teachers of Takshashila Vidyapeeth on 19 September 2022.
- National Education Day 2022 was celebrated on 11 November 2022.
- Talk and Movie Screening on the theme - Tribal Empowerment, as part of the Celebration of Azadi ka Amrit Mahotsav on 24 March 2023

- National workshop on-Quality Education for Sustainable Development was organized on 25 March 2023.

NUMBER OF STUDENTS QUALIFIED NET-JRF/GATE/SLET:

Name of Qualifying Examination	Number of Qualified Students	Academic Programme
NET	06	MA in Education
NET-JRF	01	
NET	03	BEd
NET -JRF	01	
SLET	03	
CTET UP	29	
CTET LP	28	

NOTABLE PLACEMENTS

Name	Designation	Organization
Prarthana Borah	Post Graduate Teacher	Rajdhar Bora Higher Secondary School, Kamrup Metro
Geeta Chetri	Assistant Professor	Barnagar College, Barpeta
Mayuri Borah	Assistant Professor	LOKD College, Dhekiajuli
Jharna Gohain	Assistant Professor	THB College, Jamugurihat, Sonitpur
Dikhya Dey	Assistant Professor	Govt. Model College, Borkhola
Seema Rani Das	Assistant Professor	MNC College, Nalbari
Sandip Sutradhar	Assistant Professor	Pandit Deendayal Upadhyaya Govt. Model College
Monica Das	Assistant Professor	Jawaharlal Nehru College, Boko
Mrigakshi Sharma	Assistant Professor	MSSV, Nagaon

FACULTY MEMBERS

Professor

Nil R Roy, PhD (Assam University)

Head of the Department

Specialization/Areas of interest: Curriculum Development, Educational Planning and Administration, Teacher Education, Education for Disadvantaged groups, Measurement and Evaluation

Email: niledn@tezu.ernet.in

Assistant Professor

Yeasmin Sultana, PhD (Assam University)

Specialization/Areas of interest: Language Education, Educational Technology, Research Methodology in Education

Email: yeasmin@tezu.ernet.in

RD Padmavathy, PhD (Pondicherry University)

Specialization/Areas of interest: Mathematics Education, Research Methodology & Statistics in Education, Educational Psychology, Cognitive Science, Educational Technology, e-content Development, Guidance and Counseling, Environmental Education, Adult and Continuing Education

Email: padma@tezu.ernet.in

Hitesh Sharma, PhD (DAVV Indore)

Specialization/Areas of interest: Educational Psychology, ICT in Education, Research Methodology and SPSS, Educational Administration, Guidance and Counseling, Method of Teaching Physical sciences, Method of Teaching Biological sciences, Early Childhood Education

Email: hitesh@tezu.ernet.in

Sashapra Chakrawarty, PhD (Banaras Hindu University)

Specialization/Areas of interest: Educational Psychology, Educational Research, Special Needs Education, Method of Teaching in Biological Science/Elementary Education

Email: sashapra@tezu.ernet.in

Pratima Pallai, PhD (University of Lucknow)

Specialization/Areas of interest: Pedagogy of Social Science, ICT in Education, Teacher Education Measurement and Evaluation

Email: pratima@tezu.ernet.in

Md Asif, MEd (Jamia Millia Islamia New Delhi)

Specialization/Areas of interest: Contemporary Indian Education, Teacher Education, Educational Technology, Pedagogy of Social Science

Email: mdasif@tezu.ernet.in

Sradhanjali Pradhan, PhD (Utkal University)

Specialization/Areas of interest: Pedagogy of Physical Science, Educational Technology, and ICT in Education, Measurement and Evaluation

Email: sradha@tezu.ernet.in

Rajinder Singh (On-Lien), PhD (Panjab University)

Specialization/Areas of interest: Educational Technology, Teacher Education, Language Education

Email: badotra@tezu.ernet.in

Sanghamitra Das, PhD (NIEPA, New Delhi)

Specialization/Areas of interest: Gender and Education

Email: sdas19@tezu.ernet.in

Gopal Singh, PhD (RIE Ajmer, NCERT, MDSU, Ajmer)

Specialization/Areas of interest: Science Education, Learning & Teaching, Guidance & Counselling/Constructivism & Thinking Skills

Email: drgrana@tezu.ernet.in

STAFF MEMBERS

Technical Assistant

Amarnath Sah, MCA (Sikkim Manipal University)

Email: amarsah@tezu.ernet.in

Laboratory Assistant

Nilakshi Saikia, MA (Tezpur University)

Email: nilakshi@tezu.ernet.in

Library Attendant

Chandan Nath, MCom (Dibrugarh University)

Email: nathchn@tezu.ernet.in

Laboratory Assistant

Anupam Saikia, MSc (Madurai Kamaraj University)

Email: anupams@tezu.ernet.in

Assistant

Suman Handique, BA (Gauhati University)

Email: sumanh@tezu.ernet.in

MTS

Nitai Bauri

Email: nitai12@tezu.ernet.in

DEPARTMENT OF ENGLISH

THE DEPARTMENT

The Department of English, earlier named Department of English and Foreign Languages, was established in 1994, with a Diploma programme in English Language Teaching. The current two-year MA programme in English began in January 1997. The academic programmes offered by the Department of English are - Integrated MA in English, MA in English, and PhD. The Department of Foreign Languages and the Department of Linguistics, which were a part of the Department of English, became separate departments in 2019 and 2022 respectively. The Department received assistance from the UGC under its Department Research Support-Special Assistance Programme (DRS-SAP-Phase II, 2015-2020). The thrust areas are (1) Understanding Colonial and Alternative Modernities in Travel and Life Writings in Assam and (2) Examining Asian and Indian Influences on Modern Assamese. The Department aims to become a leading research hub in Language and Literary Studies in South Asia and to emerge as a center for Modernity Studies and Translation Studies in South Asia. The Department further aims to enable students to critically engage beyond conventional disciplinary borders and develop a sense of social responsibility and professional commitment in students.

ACADEMIC PROGRAMMES AND STUDENT INTAKE

Academic Programme	Intake
MA in English	63
Integrated MA in English	25
PhD in English	Variable

THRUST AREAS

- Understanding Colonial and Alternative Modernities in Travel and Life Writings in Assam.
- Examining Asian and Indian Influences on Modern Assamese.

PUBLICATIONS BY FACULTY AND STAFF MEMBERS

JOURNAL PUBLICATIONS

Gogoi B. Adaptation is a 'Profound' Process: Susan Orlean's *The Orchid Thief* and Spike Jonze's Metafilm Adaptation. *Margins: A Journal of Literature and Culture*, 11: 53-70, 2022.

Gogoi B. Review of Indira Goswami: *Margins and Beyond*. *Muse India: the literary e-journal*, 103, 2022.

Gogoi B. Reading the Novel and Film Adaptation of John Fowles' *The French Lieutenant's Woman*. *Drishti: The Sight*, 11(1): 26-30, 2022.

Saikia B and Medhi H. "'Pretty thing, is it not? —sweet miniature': Portrait Miniatures in Victorian Fiction". *Victorians: A Journal of Culture and Literature*, 141: 24-36, 2022.

CONFERENCE/WORKSHOP/SYMPOSIUM/SEMINAR ETC. ATTENDED

Name of Faculty/Staff Member	Purpose of Attending	Title of Event	Date/Period	Organizer and Venue (Online/Offline)
Bashabi Gogoi	Paper presentation, <i>Partition, Trauma and Women: Reading the Novel and the Film Adaptations of Pinjar and Ice- Candy Man</i>	Borders and Conflicts in Cinema(s)	04-06 November 2022	3rd AFSSA Online Conference
Debasish Mohapatra	Paper presentation	EMI, ICLHE and Englishization: reflecting on the changing university	18-21 October 2022	Maastricht University, Netherlands
Debasish Mohapatra	Paper presentation	Teaching English in Rural Areas of Northeast India: Using Innovative Bilingual methods	03-04 November 2022	ICSSR-NERC, EFLU, Shillong
Hemjyoti Medhi	Session Chair	Tezpur Literary Festival	10 December 2022	Tezpur Literary Festival, 2022

TALKS BY THE FACULTY ABROAD AND IN INDIA

Name of Faculty Member	Title of the Talk	Title of the Event	Date	Organizer and Venue
Bashabi Gogoi	<i>English Language and Literature</i>	UGC sponsored Online Refresher Course in English Language and Literature	16 May 2022	UGC-HRDC, Bharathidasan University, Tiruchirappalli. Online
Hemjyoti Medhi	<i>Poharir Mel: Early Women's Associations in Assam</i>		15 March 2023	Dr LRS Lakshmi Memorial Lecture, Laxmibai College, University of Delhi
Hemjyoti Medhi	<i>Gendering Academia</i>	United Nations Global Women's Breakfast 2023 "Breaking Barriers in Science"	14 February 2023	IIT Guwahati
Hemjyoti Medhi	<i>Curating Memories: Saikiani and The Mahila Samitis in</i>	University of Delhi, Khalsa College Encore Lecture Series	20 February 2023	Khalsa College, University of Delhi

	<i>Colonial Assam</i>			
Hemjyoti Medhi	Resource Person: <i>Position Paper on Gender Education for the Development of SCF in the Light of NEP 2020</i>	SCF Preparation	05 April 2022	SCERT, Assam

OTHER SIGNIFICANT ACTIVITIES OF THE DEPARTMENT

- Day long Workshop on Spoken English, in collaboration with Sarva Sikkha Abhijan for Primary School Teachers, Balipara Block, Sonitpur, Assam funded by Tezpur University, 22 December 2022
- Invited Talk by Dr Kiran Keshavamurthy, IIT Guwahati, 21 February 2023
- Invited Talk by Dr Kaushik Bakshi, Jadavpur University, 25 April 2023

FACULTY MEMBERS

Professor

Bijay K Danta, PhD (Utkal University)

Specialization/Area of Interest: American Literature, Critical Theory

Email: bkdanta@tezu.ernet.in

Farheena Danta, PhD (Dibrugarh University)

Specialization/Area of Interest: American Literature, Modernist Poetics

Email: fdel@tezu.ernet.in

Prasanta K Das, PhD (Gauhati University)

Specialization/Area of Interest: Indian Writing in English, Book History, Missionary writings, Non-Fictional Prose

Email: prsnt@tezu.ernet.in

Sravani Biswas, PhD (NEHU Shillong)

Specialization/Area of Interest: Indian Writing in English, Postcolonial Studies with special interest in Partition Literature, Migration and Diaspora studies

Email: sravani@tezu.ernet.in

Associate Professor

Debasish Mohapatra, PhD (EFLU Hyderabad)

Specialization/Area of Interest: Curriculum Development, Materials Production, Language Policy

Email: deva@tezu.ernet.in

Sanjib Sahoo, PhD (Tezpur University)

Specialization/Area of Interest: Life Writing, Indian Writing in English, Popular Culture, Travel Writing

Email: ssahoo1@tezu.ernet.in

Hemjyoti Medhi, PhD (Delhi University)
Specialization/Area of Interest: Gender and Literature, Women's Movements, Vernacular Public Spheres, Oral History, Digital Humanities
Email: hjyoti@tezu.ernet.in

Assistant Professor

Reetamoni Narzary, PhD (Tezpur University)
Specialization/Area of Interest: Representation in Literature, Gender and Literature, New Literatures in English, Postcolonial Literature
Email: reita@tezu.ernet.in

Pallavi Jha, PhD (University of Hyderabad)
Specialization/Area of Interest: Children's Literature, Indian writing in English, Popular Culture/Literature, New Literatures in English
Email: pjefl@tezu.ernet.in

Bashabi Gogoi, PhD (Gauhati University)
Specialization/Area of Interest: Indian Writing in English, Film Studies and Adaptation theories
Email: b_gogoi@tezu.ernet.in

Esther Daimary, PhD (Gauhati University)
Specialization/Area of Interest: Contemporary South Asian English Literature, British Literature from Northeast India, Partition Literature
Email: esther@tezu.ernet.in

Sarat Doley, PhD (EFLU Shillong)
Specialization/Area of Interest: ELT
Email: dolesar@tezu.ernet.in

Raktima Bhuyan, MA (Tezpur University)
Specialization/Area of Interest: Modernity studies, visual studies, African American literature, Health, and Medicine
Email: rbeng@tezu.ernet.in

STAFF MEMBERS

Technical Assistant

Hemen Das, MSc
Email: hemen@tezu.ernet.in

Assistant

Jayanta K Gogoi
Email: jayanta@tezu.ernet.in

MTS

Pranab K Borah
Email: pkbora@tezu.ernet.in

DEPARTMENT OF FOREIGN LANGUAGES

THE DEPARTMENT

The Department of Foreign Languages was established in 2019. Prior to this, it was part of the erstwhile Department of English and Foreign Languages and, in that capacity, its faculty offered certificate-level and introductory-level language courses in German (introduced in 2001), Chinese (introduced in 2003), and French (introduced in 2007). The new Department of Foreign Languages offers open elective courses in German, Chinese, and French to meet the specific requirements of varying categories of students. In addition, it has used its expertise and the experience gathered over the years to introduce customised courses in Chinese for the Indian Army to help create a pool of Chinese-language proficient personnel for national security purposes.

The Department is committed to fostering professionals with proficiency skills in languages, intercultural communication, international affairs, and cultural understanding from various nuanced perspectives. The Department envisages promoting intensive language courses in Chinese, German, and French at various levels. It also envisions offering a wide choice of modules and scholarly engagements, across literature, translation, history, contemporary politics, culture, and comparative studies.

THRUST AREAS

To promote intensive language programmes in Chinese, German, and French at various levels

ACADEMIC PROGRAMMES AND STUDENT INTAKE

Programme	Intake
Certificate in Chinese	49
Open Elective in Chinese	80
Open Elective in German	80
Open Elective in French	80

MAJOR FACILITIES AND EQUIPMENT AVAILABLE

One smart classroom with one ICT-enabled

PUBLICATIONS

JOURNAL PUBLICATIONS

Pallavi. Nexus of Memory, Forgetting and History_White Russian as Prisoner in the Nazi Concentration Camps: Memoir of Alexandra Jusefowitsch. *CRITIC: Journal of the Centre of Russian Studies*, (accepted), Issue no. 21, 2023.

BOOK CHAPTERS

Pallavi. Gaining Visibility Through Emotions in Partition-Narrative: Jealousy, Fear and Shock of Male Character in Lajwanti. In: Revisiting Partition: Identity, History and Memory. (Ed. Arzuman Ara), Pencraft International, pp.189-201. 2022.

SEMINARS/CONFERENCES/WORKSHOPS/SYMPOSIA ATTENDED

Name of the faculty member	Title of the Paper	Organized by	Date	Place/institute/venue
D Lanamai	Presented a paper, <i>Influence of Chinese Vloggers in Manipur: A study on the vlogs of Li Ziqi and Dianxi Xiaoge</i>	15 th All India Conference of China Studies, Institute of Chinese Studies (ICS), Delhi and IIT, Guwahati in cooperation with Gauhati University, Guwahati and OKDISC, Guwahati in partnership with Konrad-Adenauer-Stiftung.	17-19 November 2022	(Online)
Pallavi	Presented a paper, <i>Analyzing the translation of Geetanjali Shree's Mai from Hindi into German</i>	International Conference on- Haben Literaturen Grenzen? Deutsche interkulturelle/transkulturelle Literatur. Zentrums- und Peripheriediskurse organised Centre of German Studies, Jawaharlal Nehru University, New Delhi.	04-05 November 2022.	Jawaharlal Nehru University, New Delhi
	Presented a paper, <i>Visual Representation of Hildegard von Bingen (1098-1179): Emotions and Female Agency Through Feminist Lens</i>	National Seminar on- Thinking and Feeling in a Language: Narratives from Foreign Languages, Cultures and Societies through Cross-Cultural Perspectives Organized by Department of Foreign Languages, Tezpur University	17 March 2023	Department of Foreign Languages Tezpur University, Assam
	Participated in a consultation workshop on- Towards Gender Diverse Inclusivity at Higher Educational Institutions in consonance with SDG Goal 5: Gender Equality	Tezpur University, Assam	26-27 April 2023	Tezpur University, Assam

TALKS BY THE FACULTY ABROAD AND IN INDIA

Name of the faculty member	Event	Date	Place
D Lanamai	Resourcing a session on- Navigating Careers in Foreign Languages at the 1 st Foundation Day of Enchanté Institute of Foreign Languages, Manipur.	21 August 2022	Enchanté Institute of Foreign Languages, Manipur (Online)
	Invited lecture on-Decoding Chinese culture through personal names Organized by the Department of Asian Languages (Chinese), The English and Foreign Languages University, Hyderabad.	23 January 2023	The English and Foreign Languages University, Hyderabad (Online)
Pallavi	Delivered an invited lecture on- Women in Conflict Situations: Witnessing and Writing Violence of 1945 in a diary 'Eine Frau in Berlin, 1959' ('A Woman in Berlin, 1954'), Online Guest Lecture Series on German Women's Writing organized by O.P. Jindal Global University, in collaboration with the German Academic Exchange Service	27 March 2023	Centre for Foreign Languages, Office of English and Foreign Languages, O.P. Jindal Global University, Sonapat, India (Online)
R Chakraborty	Delivered an invited talk on - Women in Chinese and Khasi Folktales: A Comparative Study on the mother and the wife in the National Conference on- India-China Relations and the Way Forward, organized by Cheena Bhavana, Visva-Bharati University.	01- 02 December 2022	Cheena Bhavana, Visva-Bharati University, Santiniketan (Offline)

SEMINAR/WORKSHOP/SYMPOSIA/INVITED LECTURES ORGANISED

Event	Date
Organized a National Seminar on -Thinking and Feeling in a Language: Narratives from Foreign Languages, Cultures and Societies through Cross-Cultural Perspectives	17 March 2023

DISTINGUISHED VISITORS

- Madhu Sahni, Professor, Centre for German Studies, School of Language, Literature and Culture Studies, JNU.
- Hemant Adlakha, Professor, Centre for Chinese and South East Asian Studies, School of Language, Literature and Culture Studies, JNU.
- Deepak Kumar Pandey, PhD, Sector Commandant, Sector HQ ITBP, Tezpur Rangamati Camp, Sonitpur District, Assam.

OTHER ACTIVITIES

- Celebrated 2nd edition of the United Nations Chinese Language Day, 21 April 2023.
- Organized Spring Festival marking the coming of new year, 30 January 2023.

FACULTY MEMBERS

Professor

Prasanta K Das, PhD (Gauhati University)

Head In Charge of the Department

Specialization/Areas of interest: Indian Writing in English, American Literature

Email: prsntdas@tezu.ernet.in

Assistant Professor

Rathijit Chakraborty, MPhil (JNU New Delhi)

Specialization/Areas of interest: Chinese language and Literature, Chinese Folk literature, Teaching Chinese language, Translating Technical and Non-technical documents [from Chinese to English & vice versa], Chinese calligraphy

Email: rathijit@tezu.ernet.in

Daveirou Lanamai, MA (JNU New Delhi)

Specialization/Areas of interest: Chinese Language, Literature & Culture, Onomastic Studies (Anthroponymy & Toponym), Intercultural Studies

Email: davei@tezu.ernet.in

Pallavi, PhD (JNU New Delhi)

Specialization/Areas of interest: German Literature and Language, Study of Emotions, Literature, Violence and Emotions, Holocaust Literature, Post-War Literature, Partition Literature, Gender Studies, Intercultural Studies, Literary Translation

Email: manjari23@tezu.ernet.in

STAFF MEMBERS

Assistant

Chandra S Roy

Email: chaser7@tezu.ernet.in

MTS

Ranjit Saikia

Email: saikia@tezu.ernet.in

DEPARTMENT OF HINDI

THE DEPARTMENT

The Department of Hindi was established in January 2010 and it started an MA programme in Hindi in 2013. Along with this program, the Department runs the following programmes at present: Post Graduate Diploma Programme in Translation (Hindi), Hindi as a Modern Indian Language (MIL), PhD in Hindi literature/language. Apart from these programmes, the Department also runs a Certificate Course on Official Hindi (Level-1), which is meant for the employees of the University.

ACADEMIC PROGRAMMES AND STUDENT INTAKE

Programme	Intake
Certificate Course	10
PG Diploma in Translation	31
MA in Hindi	31
PhD	Variable (5 in 2022-2023)

THRUST AREAS

- Modern Hindi Literature
- Fiction
- Poetry
- Bhasha Vigyan
- Indian & Western Poetics
- Folk literature
- Hindi Journalism

PUBLICATIONS

JOURNAL PUBLICATIONS

Tripathi S. Professor Pandey: Sabake Apne. Sankhya, Hindi Academy. pp. 263-265, 2022,

Meena P. Bhagat Singh Ka Samatamulak Rashtriya. Sablog, Kishan Kaaljayee- New Delhi, 16-17, 2022,

Meena P. Buniyadi Sawalon Se Muh Chhipati Rajneeti. Samayantar. Pankaz Bisht, New Delhi, 53(7): 25-27, 2022.

Meena P. Sarkari Aur Gair Sarkari Hinsa Ke Beech Visthapit Hoti Aadivasi Asmita. Banas Jan-Special issue on Bastar. Pallav, New Delhi, 14 (58): 32-57, 2022.

Meena P. Nafrat Aur Ghrana Ke Beech Rasta Dikhata Gandhivadi Rashtrivad Apani Maati (E Magazine), Apani Maati Sansthan Chittorgarh, 9:(45), 2022.

Meena P. Samay Ke Safarname Se Hota Dastavejekar. Satrachee, Satrachee Foundation, Patna. 10(37): 9-18, 2022.

Meena P. Munafakhorkhatron Se Aagah karate Chetna. Samayantar, Pankaz Bisht, New Delhi, 55(2): 57-58, 2023.

Meena P. Insaf Kee Maang Kartee Baizzat Rihaiyon Kee Aapbeeti. Samayantar, Pankaz Bisht New Delhi, 55(3): 42-44, 2023.

Lata A. Parijaat: Jivan me AasthakaUpanyaas. Visva-Bharati Patrika, Visva-Bharati. Santiniketan, 2022.

Lata A. Web series me laingikasamantakeprashan, Streekaal,

Jasmeena A, Lata A. Mahamari: Vibhishikaye Evam Paristhitiyan. Pahlvankidholak. Kahanikevishessandarbh me. ApniMaati (E-Magzine), 2022.

Sahni P, Lata A. Shanikeupanyas Kala Jal me abhivyaktjivanMulay. DvibhashiRastrasevak, Assam RashtrabhashaPracharSamiti, Guwahati, pp. 41-45, 2022.

Anushabda. MamuliWishayonkeGairmamuliKawi: Om Bharati. DwibhashiRashtraSewak. Assam Rashtrabhasha PracharSamiti, Guwahati, pp. 47-50, 2023,

BOOKS

Anushabda. Assam ki lok sanskriti mein Ram, Vani Prakashan, Delhi, 2022. ISBN No. 978-93-5518-276-0.

BOOK CHAPTERS

Tripathi S. Kahani aur kahanikaar Nishank ki kahaniyan, In: Dr. Nishank ki rachanshilata ke vividh aayam. (Ed. Sharma YN), Arun, Anang Prakashan, Delhi, pp. 169-175, 2022. ISBN: 978-93-80845-51-7

Meena P. Ambedkar, Gandhi and the Right to Conversion. In: Ambedkar and Ambedkar. (Ed. Pramod R) BFC Publication, Lucknow. pp. 57-77, 2022, ISBN: 978-93-5632-022-2.

CONFERENCE/WORKSHOP/SYMPOSIUM/SEMINAR ETC. ATTENDED

Name of Faculty/Staff Member	Title	Date	Place
Anushabda	Participated in a day long national workshop on Quality Education for Sustainable Development	25 March 2023	Dept. of Education, Tezpur University
	Presented a paper, <i>Rashtriya ekta ka Bhashai, Sahityik evam Sanskritik Paksh at the seminar jointly organized by Uttar Pradesh Hindi Sansthan,</i>	12 -13 March 2023	Biswanath Chariali Rashtrabhasha Prabodh Vidyalay, Biswanath, Assam

	Lucknow & Biswanath Chariali Rashtrabhasha Prabodh Vidyalay, Biswanath, Assam		
	Presented a paper, <i>Hindi bhasha ke wibhinna roop at a seminar</i> organized by Kendriya Hindi Nideshalaya, New Delhi in collaboration with Biswanath Chariali Rashtrabhasha Prabodh Vidyalay, Biswanath, Assam	01 September 2022	Biswanath Chariali Rashtrabhasha Prabodh Vidyalay, Biswanath, Assam
	Moderated a panel discussion on -Hindi Men Sahkarmee Sameeksha: Nafa-Nuksan Ka Lekhajokha	20 September 2022	Janvikalp, Patna (Online)
P Meena	Presented a paper, Adivasi <i>Deshaj Jyanparampara</i> in ICSSR sponsored National seminar jointly organized by Dept. of Philosophy, Mohanlal Sukhadia University, Udaipur, Rajasthan	09 -10 December 2022	Dept. of Philosophy, Mohanlal Sukhadia University, Udaipur, Rajasthan
	Presented a paper, <i>Rashtriya ekta ka Bhashai, Sahityik evam Sanskritik Paksh</i> at the seminar jointly organized by Uttar Pradesh Hindi Sansthan, Lucknow & Biswanath Chariali Rashtrabhasha Prabodh Vidyalay, Biswanath, Assam	12 -13 March 2023	Biswanath Chariali Rashtrabhasha Prabodh Vidyalay, Biswanath, Assam
S Tripathi	Presented a paper, <i>Raskhan ki kavita</i> organized jointly by U.P. Hindi Sansthan, Lucknow, Sahitya Academy, New Delhi, LBSPG College, Chandauli & Vidysree Nyas, Gorakhpur	14 -16 January 2023	Varanasi

TALKS BY THE FACULTY ABROAD AND IN INDIA

Name of Faculty Member	Event	Date	Place/ Institute/Venue
Anushabda	A talk delivered on-Assam mein Hindi Shiksha ka Itihas	19 August 2022	Madhya Kamrup College, Subha, Assam & Shodh Samvad Research Forum, Delhi
	A talk delivered on-Bhasha ki Paribhasha, Prakriti evam	11 September	Shabda-Bharati (Hindi Sansadhan Kendra),

	Sanrachana	2022	Tezpur
	A talk delivered on Hindi ka bhawishya aur bhawishya ki Hindi	14 September 2022	Hindi Sahitya Sammelan, Tezpur
	A talk delivered on Jan-Jan ki Bhasha Hindi	18 September 2022	Poorvottar Hindi Sahitya Academy, Tezpur, Assam
	A talk delivered on-Nai Shiksha Niti, Bharatiya Bhashayen aur Hindi	18 December 2022	Hindi Sahitya Sammelan, Tezpur
P Meena	A talk delivered on- Hindi Pathya Pustakon Ka Vishleshan (Assam Ke Sandarbh Men)	19 -20 August 2022	Jointly organized by Madhya Kamrup College, Subha, Assam & Shodh Samvad Research Forum, Delhi
	A talk delivered on- Adivasi Sahitya Ka Itihas-bodh on 16 September 2022	05-18 September 2022	Organized by UGC Human Resource Development Centre, University of Allahabad, Prayagraj, UP
	A talk delivered on- Hindi Cinema Aur Dalit-Adivasi Vimarsha on 14 November 2022	11-24 November 2022	Organized by UGC Human Resource Development Centre, Dr. Harisingh Gour Vishwavidyalaya, Sagar, MP
	A talk delivered on- Adivasi Kala, Sanskriti Evam Navachar on 17 December 2022	06 -19 December 2022	Organized by UGC Human Resource Development Centre, Ranchi University, Ranchi, Jharkhand
	A talk delivered on- Shodh Kee Gunvatta Aur Shodh Bhasha	02 - 03 March 2023	Jointly organized by Dept. of Hindi, Nehu, Shilong & Bharteey Bhasha Samiti, Ministry of Education, Govt. of India, New Delhi
S Tripathi	A talk delivered on-The Life and Contribution of Shrimant Shankardev	14 March 2023	Shrimant Shankardev Chair, Panjab University, Chandigarh

NUMBER OF STUDENTS QUALIFIED IN NET-JRF/SLET/GATE

Name of Qualifying Examination	Number of Qualified Students
UGC-NET	1
SLET	3

NOTABLE PLACEMENT OF STUDENTS

Name of Student	Designation	Company/ Organization
Gitika Sharma	Graduate Teacher Hindi	Under Adarsha Vidyalaya Sangathan Department of School Education, Govt. of Assam
Gayatri Hazarika	Elementary Teacher	Rowmari Pam LP school, Nagaon
Satabdi Mahanta	Graduate Teacher Hindi	Under Adarsha Vidyalaya Sangathan Department of School Education, Govt. of Assam
Upasana Barman	PGT Hindi (MIL) Teacher	Under Adarsha Vidyalaya Sangathan Department of School Education, Govt. of Assam
Joyshree Nath	Graduate Teacher Hindi	Under Adarsha Vidyalaya Sangathan Department of School Education, Govt. of Assam
Prarthana Gogoi	Assistant Professor	Nowgong Girl's College, Nagaon
Nafisa Ahmed	Assistant Professor	Rupahi College, Nagaon
Kismat Talukder	Assistant Teacher	DPB ME School, South-Salmara Mankachar

FACULTY MEMBERS

Professor

Suryakant Tripathi, PhD (Banaras Hindu University)

Specialization/Areas of Interest: Applied Linguistics, Indian Poetics, Folkloristic

Email: sktripathi@tezu.ernet.in

Pramod Meena, PhD (IGNOU New Delhi)

Specialization/Areas of Interest: Dalit –Tribal vimarsh, Street Theater, cinema studies, Media

Email: pmeena@tezu.ernet.in

Associate Professor

Anju Lata, PhD (Tezpur University)

Specialization/Areas of Interest: Medieval Poetry, Fiction

Email: anju@tezu.ernet.in

Assistant Professor

Anushabda, PhD (University of Delhi)

Specialization/Areas of Interest: Linguistics, Media, Poetry, Indian and Western Poetics.

Email: anush@tezu.ernet.in

Pramod K Sharma, PhD (University of Hyderabad)

Specialization/Areas of Interest: Medieval Poetry

Email: pramods@tezu.ernet.in

Shipra Shukla, MPhil (University of Delhi)

Specialization/Areas of Interest: Modern Hindi Literature

Email: shipras@tezu.ernet.in

Shambhu N Mishra, PhD (Jamia Milia Islamia New Delhi)

Specialization/Areas of Interest: Katha Alochana, Madhaykaleen Sahitaya

Email: smishra@tezu.ernet.in

Guest Faculty

Santosh Vishnoi, PhD (Banasthali University, Rajasthan)

Specialization/Areas of Interest: Katha Sahitya

Email: santosh.vishnoi2010@gmail.com

STAFF MEMBERS***Assistant***

Sashi Ingti

Email: ingti@tezu.ernet.in

MTS

Ajoy Kr. Nath

Email: ajoy@tezu.ernet.in

DEPARTMENT OF LAW

THE DEPARTMENT

The Department of Law was established in the year 2017 under the School of Humanities and Social Sciences with a vision to produce legal luminaries to add value in the field of teaching, judiciary, law-making, law enforcement officers, and those who could work for society as good citizens. Presently, the Department is offering a two-year Master of Laws (LLM) programme with specializations in Human Rights Laws and Criminology and Criminal Law. The objective of the programme is to make the Department a vibrant entity of legal education and research and allow all aspirants who want to be good academicians, researchers and to work for social transformation. Two batches of the Department have successfully post-graduated in the years 2020 and 2021 respectively.

The Department is making progress with the existing four young and energetic permanent faculty members along with Guest faculties who are giving meaning to the designed curriculum both from theoretical and pragmatic perspectives emphasizing teaching inter-disciplinary facets. The faculty members have a wide range of interests and expertise in areas such as Constitutional Law, Judicial Process, Jurisprudence, Human rights, Migration laws, Environment Laws, Criminal laws, Juvenile Justice, etc. The Department makes an effort to expose the students to the prevailing social realities and legal developments through activities such as outreach programmes, Seminars, Workshops, Panel Discussions, etc. Moreover, it is the Department's priority to inculcate among students teaching methods & and ethics, promote inter-disciplinary research, provide free legal assistance for persons in need, and inspire students for competitive examinations. The department is proposed to start subsequently the Five-Year BA LLB (Hons) and PhD programmes.

ACADEMIC PROGRAMMES AND STUDENT INTAKE

Academic Programme	Intake
Master in Laws (LLM) (Specialization in Human Rights Laws, & Criminology & Criminal Law)	25

THRUST AREAS

- Constitutional Law
- Judicial Process
- Law and Social Transformation
- Criminal Law
- Human Rights Laws

MAJOR FACILITIES/ EQUIPMENT AVAILABLE

- Central Library with law books, reference books and journals
- Subscription of SCC Online and Manupatra
- Smart classroom/ICT-enabled classroom
- Computer Lab

PUBLICATIONS

JOURNAL PUBLICATIONS

Sharma SD, Kumar PR. Issue of Non-Evaluation of Answer Script in Competitive Examination by Artificial Intelligence (AI) Technology: Judicial Approach, *Dehradun Law Review*, 14(1): 15-25. 2022.

Madhumita A, Samraggi C. Right to Livelihood of Elderly Persons with special reference to Assam, *Journal of Education: Rabindra Bharati University*, XXV, 4(II), 2022.

BOOK CHAPTERS

Sharma C K, Syiem AH. Covid-19 Pandemic and its impact on the Indian Education System, In *Coronasphere: Narratives on COVID-19 from India and its Neighbours*, Routledge Publication. ISBN: 9781003282815; DOI: 10.4324/9781003282815.

CONFERENCE/WORKSHOP/SYMPOSIUM/SEMINAR ATTENDED

Name of Faculty/Staff Member	Title	Organized by	Date	Place/ Institute/ Venue
PR Kumar	Attended National Conference on- Geographical Indication in India- Prospects and Challenges	DPIIT Chair & N.C Banerjee Centre for IPR Studies, NALSAR University of Law, Hyderabad	18 May 2022	DPIIT Chair & N.C Banerjee Centre for IPR Studies, NALSAR University of Law, Hyderabad; (Online)
M Acharjee	Two Weeks Faculty Development Program on- Research Methodology and Applied Econometrics for Social Sciences	Department of Business Administration, Assam University, Silchar	05 -17 September 2022	Department of Business Administration, Assam University, Silchar; (Online)

TALKS BY THE FACULTY ABROAD AND IN INDIA

Name of Faculty Member	Title	Date	Place/ Institute/ Venue
AH Syiem	Talk on- Fundamental Rights, Organized by the Department of Law	26 November 2022	Kendra Vidyalaya, Tezpur University
M Acharjee	Talk on- Directive Principles of State of Policy, Organized by the Department of Law	26 November 2022	Kendra Vidyalaya, Tezpur University

PR Kumar	Talk on- Law Making in Process in Indian Parliament - An Analysis	12 February 2023	Department of Law, Sant Gadge Baba Amravati University; (Online)
	Talk on- Parliamentary Proceedings in India - Significance of Question Hours, Motion and Resolution	12 February 2023	Department of Law, Sant Gadge Baba Amravati University; (Online)
	Talk on- Artificial Intelligence and Human Rights Issues and Challenges	25 July 2022	UGC-Human Resource Development Centre, Kumaun University, Nainital; (Online)
	Talk on- India, the mother of Democracy: Constitutional Values	26 November 2022	Department of Law, Tezpur University

SEMINAR/ WORKSHOP/ SYMPOSIA/LECTURES ORGANISED

Event	Duration
Organized a workshop on- the SSC Online Database in association with Eastern Law Agency	12 April 2022
Organized a workshop on- SCC Orientation cum Training	24 January 2023
Organized a virtual seminar on -The Right Against Discrimination under Indian Constitution	25 January 2023
Organized Legal Aid Camp Prohibition of Child Marriage at Punioni Village, Tezpur with 200 participants in it	28 March 2023

OTHER IMPORTANT ACTIVITIES

- Pariksha Pe Charcha, live interaction (online) of the Hon`ble Prime Minister of India was displayed in the Department on 01 April 2022.
- On the eve of the 73rd Constitution Day, Quiz and Elocution Competition was organized in collaboration with Dr. Ambedkar Chair, Department of Sociology and Centre for Women Studies at Council Hall, Tezpur University on 25 November 2022.
- Reading of the Preamble and talk on constitutional values and duties was organized at the Department of Law on the occasion of Constitution Day on 26 November 2022.
- Other Events like Quizzes and Drawing Competition for the Students of 9 to 11 Standard was carried out at Kendriya Vidyalaya, Tezpur University on the occasion of Constitution Day on 26 November 2022.

NUMBER OF STUDENTS QUALIFIED IN NET-JRF/SLET/GATE

Name of Qualifying Examination	Number of Qualified Students
AIBE	13
UGC-NET	3
UGC-NET-JRF	1
Assam Judiciary	1

NOTABLE PLACEMENTS

Name of Student	Designation	Company/ Organization
Aditya Vikram Das	Assam Judicial Service, Grade III	Gauhati High Court
Gitika Bora	Assistant LADCS, District Hojai	DLSA, Hojai Government
Keya Sarkar	Assistant Professor	KL College of Law, Andhra Pradesh
Stella Phangchopi	Assistant Professor	Ajmal Law College, Hojai
Devlika Das	Assistant Professor	Ajmal Law College, Hojai
Nayanmoni Dutta	Faculty	Jiba Nath Hazarka Udayan College, Dergaon
Sushma Kharka	Faculty	Tezpur Law College
Pinki Das	Faculty	Tezpur Law College
Rimlee Mahanta	Faculty	Tezpur Law College

FACULTY MEMBERS

Associate Professor

Priya R Kumar, PhD (Gauhati University)

Head of the Department

Specialization/Areas of Interest: Constitutional Law, Administrative Law, Judicial Process, Jurisprudence, Law of Contract, and Socio-Economic Offences

Email: pranjan@tezu.ernet.in

Assistant Professor

Madhumita Acharjee, PhD (Assam University)

Specialization/Areas of Interest: Criminal Law, Criminology, Juvenile Justice, and Rights of elderly persons

Email: madhuap@tezu.ernet.in

Debajit K Sarmah, LLM (IP University, New Delhi)

Specialization/Areas of Interest: Criminology and Criminal Law

Email: dksarmah@tezu.ernet.in

Angel H Syiem, LLM (Symbiosis Law School, Pune)

Specialization/Areas of Interest: Human rights, International Law, and Tribal issues

Email: angelsy@tezu.ernet.in

Guest Faculty

Bhagyashree Das, LLM (Gauhati University)

Specialization/Areas of Interest: Criminal Law, Penology, and Environmental Law

Email: bhagyashreedas18@gmail.com

Sriparna Rajkhowa, PhD (Gauhati University)

Specialization/Areas of Interest: Human Rights Laws, Humanitarian Law, and Medical Law

Email: sriparna1009@gmail.com

Devapreeti Sharma, LLM (Tezpur University)

Specialization/Areas of Interest: Criminology and Criminal Law

Email: devapreeti2702@gmail.com

STAFF MEMBERS

Assistant

Meetaly Tamuly

Email: meetaly@tezu.ernet.in

MTS

Chand Mohammad

Email: chandmd@tezu.ernet.in

DEPARTMENT OF LINGUISTICS AND LANGUAGE TECHNOLOGY

THE DEPARTMENT

Established in March 2022 as an independent Department, the *Department of Linguistics and Language Technology*, which was part of the Department of English before, offers a two-year Master's in Linguistics and Language Technology and guides PhD research in the discipline. The Department has expertise in Syntax, Cognitive Linguistics, Philosophy of Language, Language Documentation, Field Linguistics, Ethnolinguistics, Phonetics, Phonology, Semantics, Historical Linguistics, Experimental Phonology, Sociolinguistics, and Computational Linguistics. The Department, in collaboration with the *Centre for Endangered Languages*, which was established 2014 at the University and is now attached to it, carries out research in linguistics with a special focus on the languages of the Northeast, perhaps linguistically the richest yet most diverse area in India with its majority of lesser-known or under-studied languages.

The vision of the Department is to become a leading Centre of linguistic inquiry and research in the country as well as Southeast Asia. Its mission is to impart knowledge on the major branches of modern linguistics and linguistic thought to the students through quality teaching with a learner-centered approach with a well-designed masters course syllabus covering the latest developments in the discipline and encourage excellence in linguistic research; to produce young linguists who will have a clear understanding of how language, 'the most valuable single possession of the human race', works and why; who can build and test theories based on accurate descriptions of languages, sound empirical methodologies and results from a range of disciplines; who can meaningfully apply the knowledge of linguistics in modern technology for technology transfer; in language teaching and also in linguistic issues of the society; to encourage study of all aspects of the lesser known and endangered languages, especially the one spoken in this region, supplementing the efforts of their preservation and revitalization.

ACADEMIC PROGRAMMES AND STUDENT INTAKE

Academic Programme	Intake
MA in Linguistics and Language Technology	38
PhD in Linguistics and Language Technology	Variable (03 in 2022-23)

THRUST AREAS

- Linguistic theory
- Language technology
- Typological study of Indian languages with specific focus in Tibeto-Burman languages
- Research revitalization activities on the Endangered languages of Northeast India
- Description and Documentation of languages of Northeast India

MAJOR FACILITIES/EQUIPMENT AVAILABLE

- Department library
- Documentation-Archiving-cum-Recording Laboratories
- Phonetic Laboratory
- Sound-proof recording studio

- Advanced multipurpose Seminar-cum Conference Halls

MAJOR RESEARCH AND DEVELOPMENT FINDINGS

Faculty/Researcher	Salient Research Findings
All the faculty members of the Department	Seven primers of the following endangered languages have been published: Biata, Khelma, Hrangkhoh (Assam); Onaeme, Purum (Manipur); and Yimchunger and Liangmai (Nagaland). Three separate volumes on the syntax, morphology, and phonology of the above-mentioned languages also have been published. Also, seven separate tri-lingual dictionaries of these languages are in the making. A common online version of these seven dictionaries will also be made available once their offline versions are ready along with a comprehensive ethnographic account of these languages
M Barbora	Documentation and Revitalization of Ntenyi, Khongdei and Zyphe, three endangered languages of Northeast India. Two field trips and two data verification workshops have been completed by the staff of the Centre for Endangered Languages. The data collected are being analyzed
A Gope	Speech Datasets and Models for Tibeto-Burman Languages (Speed-TB)

RESEARCH PROJECTS (BOTH ONGOING AND NEW)

Project Title	Funding Agency	Amount (in INR)	Duration	Investigator(s)
Centre for Endangered Languages	UGC	600 lakhs	2014-2024	M Barbora (Co-Ordinator) GK Borah AK Nath B Patgiri A Gope
Documentation and Revitalization of Ntenyi, Khongdei and Zyphe: Three Endangered Languages of Northeast India	NEC	79.1 lakhs	2020-2023	M Barbora (PI) AK Nath (Co-PI)
Speech Datasets and Models for Tibeto-Burman Languages (Speed-TB): under the Project titled National Language Translation Mission (NLTM): BHASHINI 9 sponsored by Ministry of Electronics & Information Technology, Government of India	MeitY	34.95 lakhs	2022-2023	A Gope

PUBLICATIONS BY FACULTY AND STAFF MEMBERS

JOURNAL PUBLICATIONS

Chetry S, Barbora M. Negation in Nepali Complex Predicates. *Indian Journal of Language and Linguistics*, 3(4): 28 – 35, 2022

Das G, Barbora M. Tense and Aspect in Banai. *Vaak Manthan*, 8(1): 1 – 16, 2023.

Borah GK, Shil P. Mental Spaces in Mood and Modality in Sylheti: Some Observations. *Jadavpur Journal of Languages and Linguistics*, 5(2): 70 - 78, 2023.

Pal A, Gope A, Sengupta A. Drying of Bio-colloidal Sessile Droplets: Advances, Applications, and Perspectives. *Advances in Colloids and Interface Science*, 314, 2023. <https://doi.org/10.1016/j.cis.2023.102870>

Pal A, Gope A, Iannacchione, GS. Hierarchical Exploration of Drying Patterns Formed in Drops Containing Lysozyme, PBS, and Liquid Crystals. *Processes*, 10(5): 1 - 18, 2022. <https://doi.org/10.3390/pr10050955>.

Ahmed IA, Rajkhowa B, Nath AK. Linguistic Imperialism: A Study of its Impact on the Assamese Language in the Greater Sivasagar District of Assam. *Indian Journal of Language and Linguistics*. 4(2): 6 – 17, 2023. <https://doi.org/10.54392/ijll2322>.

Phukan K, Nath AK. Locating a cultural identity in the use of metaphorical proverbs among the Tai Ahoms of Assam: a study through oral literature. *Journal of the Royal Asiatic Society*, 33(2): 477 – 487, 2023. <https://doi.org/10.1017/S1356186322000293>.

Gayam PM, Nath AK. Semantic Transparency and Productivity in Assamese Derivation. *Language in India*, 22(8): 105-121. 2022.

Nath AK. Bipodapanna Bhaxar Bakdhara aru Iyar Nichitokoron Podhoti EGIDSor Eti Somu Abhax (The Discourse of Language Endangerment and its Identifying Method 'EGIDS' Discussion). *Journal of Darrang Zila Sahitya Sabha Patrika*, 41: 21 - 25. 2022.

Patgiri B. An OT Account of Voicing Assimilation in Mising, a Tani language of Assam and Arunachal Pradesh. *Interdisciplinary Journal of Linguistics*, 15: 29 - 48. 2023.

Patgiri B, Tripura K. Syllable Structure and Phonotactics in Tripura Language. *Aligarh Journal of Linguistics*, 13: 303 – 327, 2023.

Patgiri B. Phonological Processes affecting Consonantal Segments in Nalbaria Assamese. *Aitihya, The Heritage*, 14(1): 40 – 53. 2023.

Patgiri B. Serial verb as Complex Predicate Construction in Assamese. *Vaak Manthan*, 8(1): 55 – 60, 2023.

Patgiri B. Issues and Challenges of Teaching Mishing Language in Assamese Medium Schools. *Language and Language Teaching*, 12(23): 117 – 128, 2023.

BOOKS

Nath A K. *Bhaxa Cinta aaru Xamaj Chetana* (Language Thought and Social Consciousness), Purbayon Publication, Guwahati, 2022. ISBN: 978-93-95103-93-0

BOOK CHAPTERS

Nath A K. *Jonogosthiyo Bhaxa Rokhyarthe Xohobhagir Koronio: Eti somu obolokan* (Duties and responsibilities of all stakeholders in saving Tribal Languages: A brief reflection). In: *Axomor*

Jonogosthiyo Biponno Bhaxa Aaru Sanskriti: Endangered Ethnic Languages and Cultures of Assam. (Eds. Baruah Gogoi K, Shyam S), Women's College, Tinsukia, 2022. ISBN 978-93-91953-52-2.

Patgiri B. *Choice of Script for the Unwritten Mother Tongues of India.* In: National Education Policy 2020: Issues and Challenges (Ed. Sarmah B), LGB Girls' College, Tezpur, 2022: 93 - 109. ISBN 978-81-957112-2-2.

CONFERENCE/WORKSHOP/SYMPOSIUM/SEMINAR etc. ATTENDED

Name of Faculty/Staff Member	Purpose of Attending	Title of Event	Date/Period	Organizer and Venue (Online/Offline)
M Barbora	Chaired a session	NCLL23 (National Conference on Language and Linguistics)	17-18 March 2023	Department of Linguistics and Language Technology, Tezpur University
GK Borah	<i>The Tutsa NP: Grammar and Meaning</i>	International Conference of SALA-36 & LSN-43	26-29 November 2022	Linguistic Society of Nepal, Kathmandu, Nepal
GK Borah	Chaired a session	NCLL23 (National Conference on Language and Linguistics)	17-18 March 2023	Department of Linguistics and Language Technology, Tezpur University
B Patgiri	Paper presentation: <i>Prosodic Structure and the Template in Assamese Reduplication</i>	12th International Conference of the Northeast Indian Linguistics Society (NEILS-12)	3-5 February 2023	Department of Linguistics, Gauhati University, Assam
B Patgiri	Paper presentation: <i>Ethnographic Account of Food Culture of the Mishings in Assam: A Case of Cultural and Language Shift</i>	Two-day National Conference on Nature, Culture and Literature in Northeast India	20-21 March 2023	ICSSR and Department of English, Rajiv Gandhi University, Doimukh, Arunachal Pradesh
B Patgiri	Paper presentation: <i>Phonological Typology of Reduplicants in Some Indo Aryan Languages</i>	National Conference on Languages and Linguistics (NCLL23)	17-18 March 2023	Department of Linguistics and Language Technology, Tezpur University
B Patgiri	Paper presentation: <i>An Ethnolinguistic Survey on the Culinary Traditions of the Mishings in Assam</i>	3 rd International Conference of Tibeto-Burman Linguistics Association of Northeast India	19-20 January 2023	Department of Linguistics, Assam University, Silchar
B Patgiri	Paper presentation: <i>Selecting Output Constraints for the</i>	44 th International Conference of Linguistic Society	24-26 November 2022	Centurion University of Technology and Management, Odisha

	<i>Fixed Melodic Material in Assamese Partial Reduplication</i>	of India (ICOLSI – 44)		
B Patgiri	Paper presentation: <i>Prosodic Structure of Nalbaria Assamese: An OT Account</i>	The 9th meeting of Linguistics Beyond and Within (LingBAW-9)	13-14 October 2022	Institute of Linguistics, John Paul II Catholic University of Lublin, Poland
B Patgiri	Participation	3-Day training programme using PRAAT for Speech Analysis of NE Indian languages	19-21 July 2022	Department of Linguistics, Assam University and Centre for Studies in Language, Literature and Culture, Utkal University, Odisha
B Patgiri	Paper presentation: <i>Output Constraints in Assamese Reduplication: Perspectives from Generalized Alignment</i>	49 th All India Conference of Dravidian Linguists (AICDL – 49)	28-30 June 2022	Department of Linguistics, Faculty of Arts, Banaras Hindu University, Varanasi
B Patgiri	Paper presentation <i>Acculturation in the Mishing: Change of Food Habits</i>	International Conference of Tibeto-Burman Linguistics Association of Northeast India (ICTiBLANEI – 2)	8-10 April 2022	IIT Guwahati (Online)
A Gope	Participation	Faculty Development Program on Artificial Intelligence under TechSaksham Program	01 April 2022	Microsoft and SAP India

TALKS BY THE FACULTY ABROAD AND IN INDIA

Name of Faculty Member	Title of the Talk	Title of the Event	Date	Organizer and Venue
M Barbora	Plenary talk: <i>Typology of Non-verbal Predicates in Tibeto-Burman Languages of India</i>	NCLL23 (National Conference on Language and Linguistics)	17-18 March 2023	Dept of Linguistics and Language Technology, Tezpur University
GK Borah	Keynote address	International	22-25	Birangana Sati Sadhani

		Conference on Development of Language and Literature	November 2022	State University, Assam Administrative Staff College, Dispur, Guwahati
GK Borah	Plenary talk: <i>The Bare Noun in the Languages of the Northeast</i>	NCLL23 (National Conference on Language and Linguistics)	17-18 March 2023	Department of Linguistics and Language Technology, Tezpur University
AK Nath	<i>Language Endangerment, Linguistic Human Rights and the Northeast India</i>	Indigenous Peoples' Day'	09 August 2023	Department of English Studies, Central University of Tamilnadu
AK Nath	<i>Language Politics: Inter languages and intra-language</i>	Short Term Course on Contemporary socio-cultural Issues and Challenges	11 March 2023	UGC-HRDC, Gauhati University
AK Nath	<i>Matribhasa ba Sthaniyo Bhaxar Madhyamere Prathamik Xikhya: Ek Bigyanxonmoto Bislexan"</i> (Imparting Primary Education through Mother Tongue or Local Languages: A Scientific Analysis)	Golden Jubilee Celebration Session of All Rabha Sahitya Sabha (Bebak Rabha Kraurang Runchum)	24 February 2023	Loharghat, Kamrup, Assam
AK Nath	<i>Clashing Against itself: Language Politics, Accent-shamming and the Politics of Standardization in Assam</i>	One-week short-term Course on Applied Linguistics and Assamese Language	24 February 2023	UGC-HRDC, Gauhati University
AK Nath	<i>Translanguaging and Education</i>	Short-term Course on Applied Linguistics and Assamese Language	23 February 2023	UGC-HRDC, Gauhati University
AK Nath	<i>Matribhasar Madhyamere Prathamik Xikhya: Ek Bigyanxonmoto Bislexan"</i> (Imparting Primary Education through Mother Tongue: A Scientific Analysis)	International Mother Language Day	21 February 2023	Department of Assamese, Tezpur University, Assam
AK Nath	<i>Let's Learn Together and Grow Together- a Translanguaging Perspective in</i>	Six-day National Online Faculty Development Programme on Integrating the	17-23 December 2022	SRM Institute of Science and Technology College of Engineering and Technology, Tamil

	<i>Higher Education in India</i>	Contemporary Discourses in English Language and Literature Studies		Nadu
AK Nath	<i>NEP 2020 and Higher Education through Indian Languages</i>	Two-day National Seminar	6 December 2022	Commission for Scientific and Technical Terminology (CSTT), New Delhi in collaboration with the Department of Library and Informatics Science, Manipur University, Manipur
B Patgiri	<i>Documentary Linguistics: Bridging between Language, Culture, Traditions, and Identity</i>	Short term Course on Applied Linguistics and Assamese Language	24 March 2023	UGC Human Resource Development Centre (HRDC), Gauhati University
B Patgiri	<i>Studies in Linguistics- Perspectives from Culture, Traditions and Technology</i>	Studies in Linguistics- Perspectives from Culture, Traditions and Technology	02 November 2023	Department of English, MNC College, Nalbari
A Gope	Resource Person	International Training Program on Language Documentation of Endangered Languages	06-17 February 2023	Centre for Endangered Languages (CFEL), Central University of Karnataka, Kalaburagi in collaboration with the Central Institute of Indian Languages, Mysuru
A Gope	Resource Person	Training Program on Language Documentation	17-31 May 2023	Scheme for Protection and Preservation of Endangered Languages (SPPEL), CIIL Mysuru, at CIIL Mysuru
A Gope	Sphot 2.0	Sphot 2.0 The event brings together luminaries from the world of AI, language, and business	01 February 2023	<i>Saarathi.ai</i> in Mumbai
A Gope	<i>Socio-Cultural and Ethnic Identity of Nagas: A Narrative on Chokri, Maram, Yimchunger, and Liangmai</i>	Indian Anthropology Congress - 2022	21-23 February, 2022	Department of Anthropology, University of Hyderabad in collaboration with Indian National

				Confederation and Academy of Anthropologists
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OTHER SIGNIFICANT ACTIVITIES OF THE DEPARTMENT

- *National Conference on Language and Linguistics* was organized and held on 17-18 March 2023 to mark the successful completion of one year of the newly established Department. The conference was attended by participants across the country and a total of 62 papers were presented. Prof. Uma Maheshwara Rao, President, Linguistic Society of India, and formerly, Director, Centre for Applied Linguistics and Translation Studies (CALTS), University of Hyderabad gave the Keynote Address on Recent Trends and Directions in Theoretical and Applied Linguistics. Prof. Girish Nath Jha, Special Centre for Sanskrit Studies, JNU & Chairman, Commission for Scientific and Technical Terminology (CSTT) Ministry of Education, Government of India, Delhi University of India, gave a plenary speech on Methods in Linguistics, Natural language Processing (NLP) and Artificial Intelligence (AI)
- A talk on *Language Structure in Mental Computation* by Prof Rajesh Kumar, IIT Madras, 26 April 2022
- A talk on *Significance of Resume Preparation in Placement* by Deena Devy, Training and Placement Officer, Tezpur University, 28 April 2022
- A talk on *Recent Development on Generative Syntax* by Sushanta Rajkhowa, Guest Faculty in Department of Assamese, Tezpur University and PhD Scholar (SRF), EFL University, Hyderabad, 17 May 2022
- A talk on *Citation and Referencing* by Reetom Borkotoky, PhD Scholar, Department of Linguistics and Language Technology, Tezpur University, 18 May 2022
- A talk on *Mental Health and Clinical Psychology* by Dr Ashish Pratim Borah, Consultant Clinical Psychologist, 30 May 2022
- A talk on *Description and Documentation of Lesser-Known Languages of Northeast India* by Dr Tim Bodt, SOAS, UK, 11 November 2022

NUMBER OF STUDENTS QUALIFIED IN NET-JRF/SLET/GATE etc.

Name of Qualifying Examination	Number of Qualified Students	Academic Programme
NET	8	MA in LLT
NET-JRF	1	MA in LLT

NOTABLE PLACEMENT OF STUDENTS

Name	Academic Programme	Placement Designation	Company/ Organization	Type of Selection (On-Campus/ Off-Campus)
Vishal Das	MA in LLT	Azim Premji	On campus
Mushkan Sharma	MA in LLT	Instructor	Teach for India	On campus
Vasudha Raje	MA in LLT	Resource Person (NTM)	CIL, Mysore	Off campus

Gyandeep Chetia	MA in LLT	Resource Person (SPEEL)	CIL, Mysore	Off campus
Plabita Borah	MA in LLT	Knowledge Service Analyst	Deloitte	Off campus
Gitashree Borah	MA in LLT	Assistant Teacher	Assam Govt. School (SEBA)	Off campus
Amrit Baruah	MA in LLT	Trust and Safety Associate	Accenture	Off campus
Jyotimala Hazarika	MA in LLT	Assistant Teacher	Assam Govt. School (SEBA)	Off campus
Priyanka Adhyapak	MA in LEL	Linguist	Saarathi.ai	Off campus
Panchami Gowala	MA in LEL	Assistant Teacher	Kasturba Gandhi Balika Bidyalaya	Off campus
Riju Moni Rajput	MA in LLT	Assistant Teacher	Kasturba Gandhi Balika Bidyalaya	Off campus
Gitanjali Chetry	MA in LLT	Assistant Teacher	Kasturba Gandhi Balika Bidyalaya	Off campus
Tusmita Deka	MA in LLT	Assistant Teacher	Assam Govt. School (SEBA)	Off campus
Chayanika Borah	MA in LLT	Assistant Teacher	Assam Govt. School (SEBA)	Off campus
Radhika Boruah	MA in LLT	Junior Assistant	Industry, Commerce and Public Enterprise, Government of Assam	Off campus

ENROLLMENT OF STUDENTS IN OTHER INSTITUTES FOR HIGHER STUDIES

Name of Student	Academic Programme (in TU)	Name of the Institute	Enrolled Academic Programme
Rijushna Gogoi	MA in LLT	Central University of Rajasthan	Ph. D
Rashmika Goswami	MA in LLT	Central University of Rajasthan	Ph. D
Gyandeep Chetia	MA in LLT	EFLU, Shillong	Ph. D
Nisha Upadhyaya	MA in LLT	EFLU, Hyderabad	Ph. D
Gargi Duarah	MA in LLT	IIT, Patna	Ph. D
Ishita Goswami	MA in LLT	Dibrugarh University	Ph. D
Sikha Smita Borah	MA in LLT	Tezpur University (Centre for Multidisciplinary Research)	Ph. D

FACULTY MEMBERS

Professor

Madhumita Barbora, PhD (Tezpur University)

Specialization/Areas of Interest: Syntax, Psycholinguistics Field Linguistics, Language Documentation

Email: mmb@tezu.ernet.in

Gautam K Borah, PhD (NTNU Norway)

Specialization/Areas of Interest: Linguistics (Syntax: Construction Grammar, Semantics), Cognitive Linguistics, Philosophy of Language, Cognitive Poetics, Literary Theory

Email: gkb@tezu.ernet.in

Assistant Professor

Arup K Nath, PhD (JNU New Delhi)

Specialization/Areas of Interest: Language Typology, Morphology, Sociolinguistics, Language Documentation, Field Linguistics

Email: akn@tezu.ernet.in

B Patgiri, PhD (Tezpur University)

Specialization/Areas of Interest: Phonetics, Phonology, Historical Linguistics, Sociolinguistics, Typology, Semantics, Ethnolinguistics, Language Documentation

Email: bipasha@tezu.ernet.in

A Gope, PhD (IIT Guwahati)

Specialization/Areas of Interest: Acoustic Phonetics, Experimental Phonology, Computational Linguistics, and Language Documentation

Email: amalesh@tezu.ernet.in

STAFF MEMBERS

Assistant

Dipali S Nayak

Email: dipasn@tezu.ernet.in

MTS

Wahiduj Jaman

Email: wahiduj@tezu.ernet.in

DEPARTMENT OF MASS COMMUNICATION AND JOURNALISM

THE DEPARTMENT

The Department of Mass Communication and Journalism was established in 2001 with a Master's program, MA in Mass Communication and Journalism (MAMCJ). Later, it launched PhD program in 2010 and MA in Communication for Development (MAC4D) in 2016. Currently, the Department is offering two MA programmes, MAMCJ and MAC4D in addition to the PhD programme to equip students with the theory and practice of Media and Communication with a mission that underscores professional excellence with social commitment. The Department offers a conducive learning environment driven by a passion for Media and Communication Studies. With a vision to become a globally recognised Department in media and communication studies, the Department strives to impart quality training in emerging fields of communication and media through innovative mix of classroom and field-based pedagogy.

The Department is dedicated to the interdisciplinary understanding of communication in an increasingly networked society. The pursuit of the courses offered by the Department is to develop effective writing, oral, visual, and digital communication skills to harness the responsibility as a journalist, communicator as well as a media student. The Department enables students to learn and apply ethical communications, and principles and inculcates a culture of research and innovation. The programmes are designed in a way that could develop critical and epistemological thinking of students in global politics, local development, ethics, culture, religion, social institutions, and their interconnectedness with the media in a continuously evolving social environment with constant technological advancement.

Over the years, the Department has evolved as a nodal centre for teaching-learning, training, and research in communication studies with national and international collaborations. This is epitomized in the numerous accolades it has received over time. The Department had earned the honour of top position among Indian universities in the Times Higher Education Asia University Ranking 2018 in the category of Communication and Media Studies. Besides, our students are well-placed in various reputed academic institutions, national and international media houses, and government and non-government organizations. The faculty members, with a variety of specializations and wide-ranging experience, not only stimulate the students with intellectual curiosity but also facilitate professional competency that is much demanded in an ever-changing communication environment.

THRUST AREAS

- Media, culture and society
- Political economy of media
- Communication for social change and development
- Community communication

ACADEMIC PROGRAMMES AND STUDENT INTAKE

Programme	Intake
MA in Mass Communication and Journalism	44
MA in Communication for Development	15
PhD in Media and Communication Studies	Variable (01 in 2022-23)

MAJOR FACILITIES/ EQUIPMENT AVAILABLE

- SCREENING HALL
- TV STUDIO Facilities
 - 14 Apple computers with Final Cut Pro software for video editing
 - TV studio with Panasonic P2 Camera (05 nos.)
 - Teleprompter and other studio recording facilities
 - UHF RODE Wireless Mic (01 no)
 - FOR-A Video mixer with accessories (01 no)
- AUDIO STUDIO with the existing equipment
 - Desktops with Sony Sound Forge with Pro Tools Console for audio editing (11 nos.)
- PHOTOGRAPHY Facilities/ Equipment
 - Sony DSR 570wspl Camera (02 nos.)
 - Canon 5D Mark III (01 no.), Canon 1500D (05 nos.)
 - DSLR FLSH GODOX (01 no)
- PRINT LAB & NEW MEDIA PRODUCTION LAB
 - Windows Intel i7 Desktops with Quark Xpress and Adobe software for print media practical (18 nos.)
 - Desktop computer (26 nos.)
 - Orion Online UPS 10 KV (01 no)

RESEARCH PROJECTS (BOTH ONGOING AND NEW)

Project Title	Funding Agency	Amount (in INR)	Duration	Investigator(s)
Science and Technology Communication, Publication and Expansion (SCoPE)-Assamese Project	Vigyan Prasar (DST), Delhi	20 lakhs	2021-2023	A Bora
Creating Online Multimedia Language and Cultural Resource Centre (Minor Project)	ICSSR	4.74 lakhs	2022-23	M Deori

PUBLICATIONS

JOURNAL PUBLICATIONS

Bora A. Assamese Print Media and freedom struggle – an insight. *Communicator*, VII(1), 2022.

Vansanglura, Deori M. Activism in a Digital Age: Measuring Social Media Activism in Relation to Offline Activism in the Mizo Context. *GUINEIS Journal*, IX: 185-195, 2022.

Hazarika M, Chakraborty J. Reaching Child Audience through Folktale-based Assamese VCD Films: A Textual Analysis. *Global Media Journal-Indian Edition*, 14(1), 2022.

Chattopadhyay R, Chakraborty J. Rethinking Folk Media in Digital Era: A Study on Bhaona Performances of Assam, India. *Global Media Journal-Indian Edition*, 14(1), 2022.

Daimari PJ, Bhowmick A. Objectification of Women in Mirzapur Web Series. *Journal of Media and Communication*, 6(2), 2022.

Malakar K, Choudhury R. Information Privacy and Surveillance: A Study of the Use of Digital Media by the Consumer. *International Journal of Research and Analytical Reviews*, 10(1), 2023.

BOOKS

Malakar K. Gender Divide and Women Empowerment in the Digital Age, Atlantic Publishers, and Distributors (P) LTD, New Delhi, March 2023, ISBN: 9788126935604

BOOK CHAPTERS

Chakraborty J. Bridging the biases in journalism and mass communication education: Does NEP 2020 provide an emancipatory framework? In: National Education Policy 2020-Issues and Challenges. (Ed. Barnali Sarmah), Publication Cell. LGB Girls' College, pp. 132-142, 2022, ISBN 978-81-957112-2-2

Chakraborty J, Borah A. The Dying Languages of Northeast India: Strategies for Revival and Conservation. In: Language, Culture, and Identity. (Eds. Mrinal Chatterjee et. al), IIMC Dhenkanal, pp. 65-78, 2022, ISBN 9-789356-806030

PUBLICATION OF ARTICLES IN OTHER FORMS

Bora A. Synergizing print and digital media. Sanchar Srijan. Indian Institute of Mass Communication (IIMC), Delhi, 2(4). October-December, 2022

Bora A. Unity in diversity in Indian media. Sanchar Srijan. Indian Institute of Mass Communication (IIMC) Delhi, 2(2), April-June, 2022.

Bora A. Tribute to the journalist fraternity. The Assam Tribune (Editorial page). November 16, 2022

Bora A. One-click at a time. Sunday Reading. The Assam Tribune, September 25, 2022

SEMINARS/CONFERENCES/WORKSHOPS/SYMPOSIA ATTENDED

Name of the Faculty Member	Event and Title of the Paper	Date	Place/institute/venue
A Bora	Attended Biswa Bangla – SCOPE-Bengali consultative meet for two days	26-27 April 2022	Indian Institute of Chemical Biology, Jadavpur, Kolkata
A Borah	Attended FDP on Diverse Aspects of Indian Knowledge Systems organized by Centre for Indian Knowledge Systems, Dibrugarh University	8-12 August 2022	Dibrugarh University

J Chakraborty & Debopriya Roy	Presented a paper, <i>Mapping the Maneuvers and ethical perils of Crafted Identity: An Exploratory Study of Female Virtual Influencers</i> at the International Conference for Gender and Politics in Media and Literature	10 February 2023	Amity School of Communication and Amity Institute of Social Sciences, New Delhi
K Malakar	Presenting a paper, <i>Rethinking Public Diplomacy: An Analysis of Institutions and Traditions, Contemporary Shifts and Its Prospects</i> in International Conference on Borderless Communication: Reimagining Global Mediascapes	17-18 November 2022	Department of Mass Communication, Mizoram University; (Online)
	Participated in a consultation workshop on- Towards Gender Diverse Inclusivity at Higher Educational Institutions in consonance with SDG Goal 5: Gender Equality	26-27 April 2023	Tezpur University, Assam

TALKS BY THE FACULTY ABROAD AND IN INDIA

Name of the Faculty Member	Event	Date	Place
A Borah	Delivered a Session on- Communication, Mass Communication and Communication Skills during a Workshop on Mass Communication Organized by Lahoal College, Dibrugarh	27 December, 2022	Lahoal College, Dibrugarh, Assam
	Delivered a Session on -New Education Policy and Media Education during a Five Days Faculty Development Program on Recent Developments and Pedagogy in Research and Industry Trends	18 - 22 July 2022	Amity University, Kolkata
J Chakraborty	Invited panelist for the Media Conference on- Development Journalism organized by Press Club Kolkata in collaboration with UNICEF, West Bengal	12-14 December 2022	Press Club, Kolkata

SEMINAR/WORKSHOP/SYMPOSIA/INVITED LECTURES ORGANISED

Event	Duration
Organized a workshop on Community-Based Participatory Research for capacity building of college and university faculty as master trainers organized with support from UGC as part of the Regional Hub at Tezpur University	26-28 July 2022
Organized an event, <i>Dear Zindagi</i> to Commemorate World Suicide Prevention Day	09 September 2022
Organized a workshop on Raising Social Awareness Among Students of TU in Collaboration with the Buddha Institute	12-13 September 2022
Organized interactive sessions on the Safety of Journalists in collaboration with the Committee to Protect Journalists	13 October 2022
Organized a workshop on Theatre of the Oppressed for MA MCJ and MA-C4D students	17-20 October 2022
Organized a workshop on Puppetry for MA-MCJ and MA-C4D students	26-29 October 2022
Organized a national level seminar sponsored by ICSSR, Delhi on -Media for an inclusive and self-reliant nation: The roadmap for Atmanirbhar Bharat with about 30 participants from different areas of the country	17-18 November 2022
Organized the National Press Day that commemorates the contribution of the journalists towards the profession as well as the greater democratic process of the country	16 November 2022
Organized a Two-Day workshop on NGO Functioning and Management, designed to provide exposure to the students on the working strategies of NGOs, organizational processes, and tools of NGO management.	21-22 November 2022
Organized a state-level convention with about 20 delegates from various organizations for detailed discussion and preparation of a concrete roadmap for the programme's future journey of the SCoPE-Assamese programme. A small-scale book fair on the theme was also organized during the programme.	23-24 November
Organized a Three-Day workshop on- Digital and Social Media Marketing	7-9 December 2022
Organized a Two- Day workshop on Mental Health, Resilience and Conscious Living	23-24 December 2022
Organized a Two-Day workshop on Digital Campaign and Media Planning Strategies to equip students with new media skills and demonstrate their ability and critical reflection on user-generated content. In two days, students are trained on how to use digital media successfully, appropriately, and responsibly to drive change in social and behavioral communication among men women, youth, and teens.	19-20 January 2022

PEDAGOGY AND CONTENT DEVELOPMENT

Malakar K. Contributed to the content development of Unit 5: Journalism: Nature and Types for the Course- Introduction to Journalism and Digital Media of BA (JDM) Programme for IGNOU, 2023

- Malakar K. Contributed to the content development of Unit 14: Social Movements and Digital Media for the Course- Introduction to Journalism and Digital Media of BA (JDM) Programme for IGNOU, 2023

COURSE DESIGN

- Borah A. Designed Course (SDC) titled Soft Skills I for 4 years Bachelors' Program complying to NEP implementation, 2023
- Chakraborty J. Designed Course (MDC) titled Science Communication for 4 years Bachelors' Program complying to NEP implementation, 2023
- Malakar K. Designed Course (MDC) titled Digital Media Literacy for 4 years Bachelors' Program complying to NEP implementation, 2023

DISTINGUISHED VISITORS

- Arup Misra, Professor and Chairman, Pollution Control Board, Assam, Guwahati
- Sanjay Dwivedi, Professor and former Director General, Indian Institute of Mass Communication, Delhi
- Shahid Rasool, Professor and Dean, Media Studies, Central University of Kashmir, Ganderbal
- Umesh Arya, Professor, Mass Communication Department, Guru Jambheshwar University of Science & Technology, GJUST, Hissar, Haryana
- KS Arul Selvan, Professor and Director, of the School of Journalism and New Media Studies, IGNOU
- Nakul Parashar, Ph.D. former Director, of Vigyan Prasar, Delhi
- Sachin Gogoi, Editorial Lead, Asia Pacific, BBC News (Department's Alumni of the First Batch of MA MCJ)
- Colin Pereira, Chief Strategist, Committee to Protect Journalists (CPJ)
- Kunal Mazumdar, Journalist and India Representative, Committee to Protect Journalists (CPJ)
- Wasi Md Alam, Senior Specialist, Capacity Development, Coalition for Disaster Resilient Infrastructure (CDRI)
- Atul Sinha, Ph.D. Assistant Professor, AJK MCRC, JMI, New Delhi
- Ravi Ramaswamy, Faculty and Theatre Practitioner, Centre for Community Dialogue and Change, Bengaluru
- Kshiradhar Baruah, Eminent Science Communicator, Assam

OTHER IMPORTANT ACTIVITIES

Science and Technology Communication, Publication and Expansion (SCoPE)-Assamese project conducted with a monthly newsletter –Sandhan' (online) was published regularly as a part of this project.

NUMBER OF STUDENTS QUALIFIED NET-JRF/GATE/SLET

Name of Qualifying Examination	Number of Qualified Students
UGC-NET	2

NOTABLE PLACEMENTS

Name	Designation	Organization
Prabhat Kumar	Assistant Professor, English Journalism	Indian Institute of Mass Communication, Amravati, Maharashtra
Mrinmoy Buragohain	Senior officer (Public Affairs)	Oil India Limited, Duliajan, Assam
Ambarish Bordoloi	Officer corporate communication	Engineers India Limited
Madhusmita Bordoloi	Senior officer (Public Affairs)	Oil India Limited
Nilutpal Timsina	Correspondent	Reuters News Bengaluru, Karnataka
Kalpa Jyoti Bhuyan	Guest Faculty, Department of Mass Communication, Journalism and Media Studies	Cotton University, Guwahati
Aditi Jain	Apprentice	Pradan NGO, Sirohi, Rajasthan
Subham Goswami	Sub Editor	News18 Assam (Network18), Guwahati
Deepsikha Choudhury	Social Media Expert	CSC e-Governance Services, New Delhi
Purvesh Yadav	Gandhi Fellowship	Piramal Foundation, New Delhi
Dimple Baro	Client Service Executive (WFH)	Cirrus, New Delhi
Bishal Roy Choudhury	Video Editor	Acadecraft Inc, Noida, Uttar Pradesh
Nikita Buragohain	Copy Editor	Green Hub, Guwahati
Zeenat Mazid	PR Executive Crypto Wing	Jajabor Brand Consultancy, Gurugram, Delhi
Joyshree Patgiri	Junior Consultant, Outreach	Advancing Northeast Portal Project, NEDFi, Guwahati
Ankita Bhowmick	Content Development	write4u, New Town, Kolkata
Chandrika Srutikar	Social Media Executive	Radio Gupshup, Guwahati
Rashmi Debi	Content writer	Nation with NAMO, New Delhi
Parthona Phukan	MIS and Documentation Coordinator	FXB India Suraksha, Mangaldoi, Assam
Arpita Deb	Executive Content Writer	Policybazaar.com, Gurugram
Shruti Dutta Banik	Content Writer	Accion Labs, Andheri, Mumbai

FACULTY MEMBERS AND STAFF

Professor

Abhijit Bora, PhD (Gauhati University)

Head of the Department (since 12 September 2022)

Specialization/Areas of interest: Radio and Development Communication, Journalism, Media Writing, Community Radio, Science and Health Communication

Email: abhijitb@tezu.ernet.in

Joya Chakraborty, PhD (University of Hyderabad)

Head of the Department (till 11 September 2022)

Specialization/Areas of interest: ICT for Development, Development Communication, Women and Media, Traditional Media
Email: jc@tezu.ernet.in

Assistant Professor

Perosh J Daimari, PhD (Tezpur University)
Specialization/Areas of interest: Film Studies, Photography
Email: daimari@tezu.ernet.in

Kapou Malakar PhD (Tezpur University)
Specialization/Areas of interest: Political Communication, International Relations, Human Rights, Digital Media, Media and Culture, Convergent Journalism
Email: kapou@tezu.ernet.in

Anjuman Borah, PhD (Tezpur University)
Specialization/Areas of interest: Media and Children, Children's Participation, Participatory Communication, Advertising and Public Relations
Email: anjuman@tezu.ernet.in

Manoj Deori, PhD (Berhampur University)
Specialization/Areas of interest: New Media Journalism, Multimedia Production, Media and Disaster Management, E-learning
Email: manojdeori@tezu.ernet.in

Junali Deka, PhD (Assam University)
Specialization/Areas of interest: Digital media and Society, Cultural Studies
Email: junalid@tezu.ernet.in

STAFF MEMBERS

Technical Officer

Ratul Chandra Nath, PhD (Tezpur University)
Email: ratul@tezu.ernet.in

Senior Technical Assistant

Chanchal Singha, BCA, KKHSOU
Email: chansan@tezu.ernet.in

Assistant

Nikita Saikia
Email: nikitasaikia234@gmail.com

MTS

Bubul Das

DEPARTMENT OF SOCIAL WORK

THE DEPARTMENT

The Department of Social Work, Tezpur University was established in 2014 to respond to the dearth of good Social Work schools and trained social work professionals in the Northeast Region (NER) of India. The Department follows a rigorous theoretical and field-based pedagogy with a special focus on the issues of the NER. The Department offers Masters and PhD programmes in Social Work.

ACADEMIC PROGRAMMES AND STUDENT INTAKE

Academic Programme	Intake
MA in Social Work	22
PhD in Social Work	Variable (08 in 2022-2023)

THRUST AREAS

- Psychiatric Social Work.
- Public Health, Nutrition, and Conflict studies.
- Urban and Rural Community Development.
- Gender and Social Movements.
- Social Work Education, Women's Studies

MAJOR FACILITIES/EQUIPMENT AVAILABLE

- ICT enables multipurpose hall
- ICT enable conference hall

RESEARCH PROJECTS: ONGOING AND NEW

Project Title	Funding Agency	Amount (in INR)	Duration	Investigators
NCARe Nutrition and Community Action Resource	UNICEF and POSHAN Abhiyaan, Govt. of Assam	73.24 lakhs	2020-2023 (Ongoing)	CK Sharma, Rajesh K & N Sharma

PUBLICATIONS BY FACULTY AND STAFF MEMBERS

JOURNAL PUBLICATIONS

Saha A, Marbaniang MA, Kakoty M, Barooah S. Perceived Risk Factors and Preventive Measures for Suicide in Lesbian and Gay Youth. *Journal of Psychosexual Health*, 2023, DOI:10.1177/26318318231174291

Bora D, Deuri SP, Saha A. Depression among Married Women in Assam: A Qualitative Study: *Indian Journal of Social Psychiatry*, 39(1):77-83, 2023.

Saha A, Kerketta E. Sustainable Development Goals and Small Tea Growers of North-east Assam. *Economic & Political Weekly*, 58(5): 24-27, 2023

Nair SS, Kalarivayil R. Mothering and Radical Self-care: An Autoethnography of Participating in a Facebook Parenting Group. *Feminist Encounters: A Journal of Critical Studies in Culture and Politics*, 2023. DOI:<https://doi.org/10.20897/femenc/12890>.

BOOK CHAPTERS

Saha A, Lama A. The Summit (Various Aspects of Ageing). In: Old Age Population in India- Issues, Programmes, Policies and Social Work Intervention. (eds. Dutta S, Rajendra R), Concept Publishing Company Pvt. Ltd., 2023, pp. 3-15, ISBN: 978-93-5594-151-0.

Sharma N. Traditional Knowledge in Modern Classrooms. *Learning Curve*, A Periodical of Azim Premji University, 2022, pp. 33-36, ISBN:080-66144900.

Sharma N. NGOs in the times of COVID-19. In: Coronasphere - Narratives on Covid 19 from India and its neighbour (eds. Sharma CK, and Banerjee R), Routledge, India, 2022, ISBN 9781032667928.

CONFERENCES/ WORKSHOPS/ SYMPOSIUM/ SEMINARS ATTENDED

Name of the faculty member	Title of the paper	Organised by	Date	Place/institute/venue
A Saha	Presented a research proposal on "Effectiveness of Community-based Intervention for Perinatal Depression and Anxiety: A Multicentric study" at Grantathon - Empowering Mental Health Researchers, National level workshop for project funding	ICMR, New Delhi	08-11 August 2022	The National Institute of Health and Family Welfare, New Delhi
	Participated in workshop on- Swachhata Mission Life	NSS Regional Directorate, Guwahati	27-28 March 2023	Indian Institute of Technology, Guwahati
	Presented a paper titled Psychosocial Distress among Rescued Children Living in Institutional Care Home at the 7th National Conference of WAPR - Indian Chapter	LGBRIMH, Tezpur	17-18 March 2023	LGBRIMH, Tezpur
N Sharma	Participated in a workshop on- Preparing the activity book for the National Children's Science Congress	ASTEC	18-20 October 2022	ASTEC, Guwahati

N Sharma	Attended International conference on- Strengthening Research, Education and Innovation for Climate Smart Crops in Southeast Asia (AdaptNET)	AdaptNET	13-15 June 2022	AdaptNET India, Goa
S Barooah	Presented the paper titled, 'Field Work Insights and NEP 2020: Best Practices from North East India'	Nirmala Niketan, Mumbai	21-22 November 2022	Nirmala Niketan Mumbai (online)
	Panel discussion presentation on the topic 'Gender Empowerment', during the Gender Workshop	Bodoland University and The Action Northeast Trust	23 March 2023	Bodoland University, Kokrajhar
	Facilitated and Presented on the topic, 'Understanding Intersectionality: Self & Society'	Free Library Network and Akam Foundation, Jorhat	25 March 2023	Bosco Institute, Jorhat
	Presented a paper titled Patriarchy and Gendered Power Relations with Reference to Disasters at Workshop on Incorporating Gender Concerns in Disaster Management	NIPCCD Delhi	27-28 September 2022	Session for All India Participants from Disaster Management Authority (online)
	Presented a paper titled Ageing, Disability, and Queerness: Intersectional Reality at ICSSR Sponsored Two-Day National Seminar Towards Social Equality: Multiple Contexts and Approaches with Special Reference to North-East India	Tezpur University	02-03 November 2022	Tezpur University
	Participation and Film Presentation in Rainbow Stories Performative Digital Storytelling Workshop	6-day workshop organised by the Story Circle, Theatre Alliance, and the US Consulate, Kolkata	04-10 December 2022	American Centre, United States of America Consulate, Kolkata

INVITED TALKS

Name of the faculty member	Event	Date	Place/institute/venue
N Sharma	Delivered a talk on -Bridging the gap between Science and Social Science, organised by Indian National Young Academy of Science	10 February 2023	Tezpur University
S Barooah	Delivered a talk on -the Use of Triangulation in Qualitative Research	22 August 2022	TISS, Guwahati
	Delivered a talk on- Concept of Transgender and Transgender Community in Assam (Resource Speaker along with Ms. Damji M.A. Department of Hindi)	22 March 2023	Conference Hall, Zilla Parishad Office Tezpur
	Delivered a talk on -Key insights into Social Work Education in North East India from the NEP 2020 perspective	18 June 2022	MS Gore Centenary Celebration, School of Social Work, Tata Institute of Social Sciences, Mumbai (online)

SEMINAR/WORKSHOP/SYMPOSIA/INVITED LECTURES ORGANISED

Event	Date
Organised International Day of Persons with Disabilities, 2022	06 December 2022
Organised a talk on movement Building, Community Mobilisation, and Feminist Leadership Creation	23 January 2023
Organised a Theatre Workshop	15-16 February 2023
Organised a Public Lecture on the Mental Health of Students in a Post Pandemic World: A Case for Peer Initiatives and Joint Action on the occasion of World Social Work Day	17 March 2023
Organised a talk on the Scope of Psychiatric Social Work	18 March 2023

DISTINGUISHED VISITORS

- Srilatha Juvva, Professor, Centre for Equity and Justice for Children and Families, School of Social Work, TISS, Mumbai
- Sonia Deuri, Professor, Department of Psychiatric Social Work, LGBRIMH
- Kalpana Sarathy, Professor, Social Work and Former Deputy Director, TISS, Guwahati
- Kaustav Padmapati, Ph. D. Assistant Professor, School of Modern Media, UPES, Dehradun, Uttarakhand
- Papari Medhi, Theatre Expert, National School of Drama, New Delhi
- Rituparna, Founder, Akam Foundation and Associate Vice Chairperson Transgender Welfare Board, Assam
- Renjith R Pillai, Professor, Post Graduate Institute of Medical Education and Research, Chandigarh
- Santa Khurai, Indigenous Transgender Activist, Secretary of All Manipur Nupi Manbi Association, Manipur, India

AWARDS & HONOURS/ NOTABLE ACHIEVEMENTS

Research Scholars/Students

- Moumita Kakati was awarded the Gold Medal in the Weightlifting Tournament for Sonitpur District on 25 September 2022. Silver in Powerlifting and Weightlifting and Bronze in Arm Wrestling on 11 February 2023
- Abhishek Mahanta was awarded 1st prize in Skit (group event) 2nd prize in classical dance and 3rd prize in creative dance on 05, and 04 February 2023 respectively
- Upasana Deka and Jahnabi Sarma were awarded the Cognizant Foundation Scholarship for Social Sciences.

NUMBER OF STUDENTS QUALIFIED NET-JRF/GATE/SLET

Name of Qualifying Examination	Number of Qualified Students
UCC-NET	02

NOTABLE PLACEMENTS

Name	Designation	Organisation
Phoebe Vanlalzuimawi Thiek	Associate	Azim Premji Foundation, Uttarakhand
Chimi Sharma	Fellowship Programme (Vidushi)	Drishti Foundation, Sonitpur
Parismita Changmai	Fellowship Programme (Vidushi)	Drishti Foundation, Sonitpur
Sabita Biswas	Fellowship Programme (Vidushi)	Drishti Foundation, Sonitpur
Utpal Saikia	Fellowship Programme (Vidushi)	Drishti Foundation, Sivasagar
Gunjan Kalita	Fellowship Programme (Vidushi)	Drishti Foundation, Sivasagar
Upasana Deka	Young Professional	Rajasthan Grameen Aajeevika Vikas Parishad, Rajasthan
Sanchit Patne	TMRE Fellow 2023-24	Quality Education Support Trust, Maharashtra
Prerona Phukan	Pursuing M Phil in Psychiatric Social Work	LGBMHRI, Tezpur
Uddipta Thakuria	Project Manager (Project Sohail), Rural Multimedia Publicity and Promotion, Hojai	Assam AIDS Control Society, Hojai
Pradhiti Kashyap	Edu Warrior (Project Roots to Wings)	Earth Kids Humanity Foundation, Gandhinagar

FACULTY MEMBERS

Professor

Chandan K Sharma, PhD (Delhi University)

Head of the Department

Specialization/Area of Interest: Development; Environment; Urbanisation; Agrarian Structure; Social Movements; Ethnicity; Migration; Culture; Society and Politics of Northeastern India.
Email: chandan@tezu.ernet.in

Assistant Professor

Apurba Saha, PhD (NIMHANS Bangalore)
Specialization/Area of Interest: Social Work & Mental Health, Psychosocial Care in Disaster Management, Street Children, and Application of Social Work Methods
Email: apurbasaha@tezu.ernet.in

Rajesh Kalarivayil, PhD (JNU New Delhi)
Specialization/Area of Interest: Biomedical Governance, Innovation Studies, Science and Technology in Rural Development
Email: rajeshk@tezu.ernet.in

Prerana Banik, MPhil (TISS Mumbai)
Specialization/Area of Interest: Gender and livelihood
Email: banikbp@tezu.ernet.in

Namami Sharma, PhD (Delhi University)
Specialization/Area of Interest: Environment and Social Work, Community Development, Gender issues
Email: namamis@tezu.ernet.in

Samhita Barooah, PhD (TISS Guwahati)
Specialization/Area of Interest: Social Work Practice, Gender Queer Awareness, Organisational Communication and Interactive Pedagogy, North East India
Email: samhitab@tezu.ernet.in

STAFF MEMBERS

Assistant

Kiran Mahaliya
Email: kiran@tezu.ernet

MTS

Gunadhar Bora
Email: guna@tezu.ernet.in

DEPARTMENT OF SOCIOLOGY

THE DEPARTMENT

The Department of Sociology was established in 2006 with a Master's program. Subsequently, it launched PhD program in 2008. The Department is dedicated to creating competent and socially sensitive graduates through rigorous teaching/training programs and extension activities. The curriculum lays emphasis on the teaching and learning of general concerns of sociology as well as the issues of sociological significance in northeast India which constitute a special focus of the teaching and research of the department. A combination of participatory, experiential, and creative pedagogy is used for transacting the curricula with a view to fostering dialogue, mutual learning, and critical reflection. The pedagogical practices also utilize an interdisciplinary framework combining classical approaches in conjunction with emerging areas of research. The students pursuing their Masters in the Department not only have to learn critical approaches and perspectives in the classroom but are also encouraged to participate in short field visits during vacations as part of their mandatory research projects. The Department also takes care to expose the students to the prevailing social realities through activities such as outreach programs, regular film screenings, seminars, and other programs in collaboration with other social organizations. The faculty members of the Department have a wide range of interests and expertise and are currently engaged in research in areas such as Development, Education, Environment, Ethnic Conflicts, Governance, Health, Migration, Social Movements, Science Studies, and so on.

THRUST AREAS

- Sociology of Northeast India
- Identity Politics and Migration
- Climate Change, Disaster and Society
- Urbanisation
- Gender Studies

ACADEMIC PROGRAMMES AND STUDENT INTAKE

Academic Programme	Intake
MA in Sociology	38
PhD in Sociology	Variable (04 in 2022-23)

MAJOR FACILITIES/EQUIPMENT AVAILABLE

- Smart Classroom
- Air-Conditioned Research Scholar's Room
- Book Club cum Reading Room
- Conference Hall with Smart Board

RESEARCH PROJECTS (BOTH ONGOING AND NEW)

Project Title	Funding Agency	Amount (in INR)	Duration	Investigator(s)
Work, mental health and gender: a sociological study on women police in Dibrugarh district of Assam	ICSSR	4.34 lakhs	1 year	P Hagjer

PUBLICATIONS

JOURNAL PUBLICATIONS

Choudhury A, Das AK. Care as work: ayahs and eldercare practices in India. *International Journal of Care and Caring*, 2023, <https://doi.org/10.1332/239788221X16704462186238>

Das S, Hazarika BO, Pathak S. Everyday sexism in higher education: narratives of women in Indian academia. *Journal of Gender Studies*, 32 (6): 588-599, 2023.

Das S, Hazarika BO. Everyday Sexism in Higher Education: narratives of women in Indian Academia. *Journal of Gender Studies*, 32, 2023. <https://www.tandfonline.com/doi/full/10.1080/09589236.2023.2191313>.

Sarma I, Das S. Urbanisation and its impact on the Peri-Urban Areas: A Study in Guwahati, Assam. *Explorations*, ISS e-journal, 6 (1): 3-21, 2022.

Dutta M, Das AK. When orange becomes sweeter: understanding climate variability, situated knowledge and development in an Eastern Himalayan region of India. *Third World Quarterly*, 44:4, 631-648, 2022. DOI: 10.1080/01436597.2022.2140037

Hazarika BO, Das S. Woes of Online Education in English Medium Schools: Reflections from Lower Income Groups in Assam. *The Eastern Anthropologists*, 75(3-4): 359-374, 2022.

Gogoi N, Sumesh SS. We Are Just Mazdoors! A Decolonial Ethnographic Account of Health Inequalities, and Inequities Among Tea Garden Laborers in Assam, India. *NEW SOLUTIONS: A Journal of Environmental and Occupational Health Policy*. 32(4), 252-264, 2023.

Sharma CK, Borkataki D. Social Network, Trust and Rural Informalities: Transfer of Tribal Land Ownership in Protected Tribal Areas of Assam. *Asian Ethnicity*, Taylor & Francis. 24(3): 445-462, 2023.

Sharma CK, Hazarika N. Disappearing Urban Commons and Emerging Public Spaces: A Case Study of Wetlands in Guwahati city, Northeast India. *Explorations: e-journal of Indian Sociological Society*, 6(2): 125-145, 2022.

BOOKS

Das AK. Grassroots Democracy and Governance in India: Understanding Power, Sociality and Trust, Singapore, Springer, 2023, ISBN- 978-981-19-5109-1.

Sharma CK, Banerjee R. Coronasphere: Narratives on COVID-19 from India and its Neighbours. Routledge. London/New York/New Delhi, 2022, ISBN 9781032206646.

BOOK CHAPTERS

Sharma CK, Syiem Angel H. Covid-19 Pandemic and its Impact on the Indian Education System. In: Coronasphere: Narratives on COVID-19 from India and its Neighbours. (Eds. Sharma CK, Banerjee R), Routledge. London/New York/New Delhi, pp. 94-105, 2022, ISBN 9781032206646.

PUBLICATION OF ARTICLES IN OTHER FORMS

Sharma CK. Apne Tute Samaj Ko Kaise Jode Manipur (How to Salvage the divided society in Manipur). In: Hindustan, June 28, 2023, <https://www.livehindustan.com/blog/latest-blog/story-hindustan-opinion-column-8363512.html>

Sharma CK. Purane Manmutao aur Naye Ghav ka Manipur (Manipur: Old rifts and new wounds). In: Hindustan, May 10, 2023, <https://www.livehindustan.com/blog/latest-blog/story-hindustan-opinion-column-10-may-2023-8146679.html>

CONFERENCE/WORKSHOP/SYMPOSIUM/SEMINAR ATTENDED

Name of Faculty/Staff Member	Title of Event	Date	Organizer and Venue
N Goswami	Presented a paper, <i>Educational Transformations: Crisis and Resilience</i> in 12th International Comparative Education Society of India Conference on Contemporary Discourses of Girlhood in Assam	09-11 December 2022	MANUU, Hyderabad

TALKS BY THE FACULTY ABROAD AND IN INDIA

Name of Faculty Member	Title of the Talk	Title of the Event	Date	Organizer and Venue
CK Sharma	Plenary Lecture- <i>Conceptualising Northeast India and Sociological Studies in the Region</i> at the Plenary session on- North East India in Sociological and Social Anthropological Studies: Emerging Issues and Challenges	47 th All India Sociological Conference, University of Science and Technology Meghalaya (USTM)	22 December 2022	University of Science and Technology Meghalaya
	Lecture on- Changing Waterscapes in the Brahmaputra Valley of	Inaugural Graduate Series Online Lecture	30 October 2022	Dept. of Social Work and Social Development,

	Assam and Emerging Conflict Scenario among the Riparian Communities			University of Cape Town (Online)
	Lecture on-Meaning and Seriousness of Plagiarism	ICSSR-sponsored 10-day Online Research Methodology Course	03 June 2022	Dept. of Cultural Studies, Tezpur University, (Online)
N Goswami	Talk on- The elusive ideals of equality: Reflections on Education in Neo-Liberal Times	National Seminar on- Towards Social Equality: Multiple Contexts and Approaches with Special Reference to North-East India	02-03 November 2022	Tezpur University

SEMINAR/ WORKSHOP/ SYMPOSIA/LECTURES ORGANISED

Event	Duration
Department of Sociology, Tezpur University in collaboration with The Cultural Studies Cell, School of Arts and Humanities, Christ University, Bangalore, India, organized an International Conference on- Migrant Workers, Cultural (Re)Production, and The Culture Industry in South Asia	17-18 October 2022

OTHER IMPORTANT ACTIVITIES

Department of Sociology organized Outreach Activities on the occasion of International Women's Day on 08 March 2023 which included a Solidarity Walk, a Gender Sensitization and Awareness Session at Napam MV School with NRHM staff, and a skit on the theme of 'A step towards inclusivity' by the students.

DISTINGUISHED VISITORS

- Amarjeet Singh, Professor, Centre for North East Studies and Policy Research, Jamia Millia Islamia
- Aman Madan, Professor, School of Education, Azim Premji University, Bangalore

AWARDS & HONOURS/ NOTABLE ACHIEVEMENTS

Subhadepta Ray was a Visiting Post-Doctoral Fellow at Department of Anthropology, University of Texas Austin (June 2022- May 2023)

NUMBER OF STUDENTS QUALIFIED NET-JRF/GATE/SLET

Qualifying Examination	Number of Qualified Students
UGC NET	03
UGC-JRF	01

NOTABLE PLACEMENTS

Name of Student	Academic Programme	Placement Designation	Company/ Organization
Shreeyoshi Snigdha Borah	MA	Assistant Professor	Nowgong College
Ritisha Boruah	MA	Research Fellow	Gandhi Fellowship
Akriti Saikia	MA	Research Fellow	Parimal foundation
Sushmita Sutradhar	MA	Research Fellow	Gandhi Fellowship
Priyakhi Kaushik	MA	Research Fellow	CSC-E-Governance
Kabir Sharma	MA	Research Assistant	UNICEF Project
Manash Pratim Saikia	MA	Research Assistant	UNICEF Project
Toninaro Chongpho	PhD	Assistant Professor	Sao Chang Govt. College, Nagaland

FACULTY MEMBERS AND STAFF

Professor

Chandan K Sharma, PhD (University of Delhi)

Specialization/Areas of interest: Development, Environment, Urbanisation, Identity Politics, etc.

Email: chandan@tezu.ernet.in

Rabin Deka, PhD (Dibrugarh University)

Head of the Department

Specialization/Areas of interest: Social Movements, Social Exclusion, Agrarian Studies

Email: rdeka@tezu.ernet.in

Kedilezo Kikhi, PhD (NEHU Shillong)

Specialization/Areas of interest: Sociology of Development, Sociology of Northeast India, Tribal Studies

Email: kedi@tezu.ernet.in

Associate Professor

Amiya K Das, PhD (Tezpur University)

Specialization/Areas of interest: Sociology of Governance, Sociology of Health and Illness, Research Methodology

Email: amiyadas@tezu.ernet.in

Assistant Professor

Sumesh SS, PhD (University of Kerala)

Specialization/Areas of interest: Body, Gender and Sexuality, Masculinity studies, Identity and Exclusion

Email: sumesh@tezu.ernet.in

Nirmali Goswami, PhD (IIT Kanpur)

Specialization/Areas of interest: Identity Politics and Education, Gender Politics, Language Ideologies

Email: nirmalig@tezu.ernet.in

Sarmistha Das, PhD (Tezpur University)

Specialization/Areas of interest: Agrarian Studies, Kinship Studies, Land and Livelihood

Email: sarmistha@tezu.ernet.in

Subhadeepta Ray, PhD (University of Delhi)

Specialization/Areas of interest: Sociology of Science. Sociology of Anthropocene, Sociology of Knowledge

Email: sray@tezu.ernet.in

AS Shimreiwung, PhD (JNU New Delhi)

Specialization/Areas of interest: Sociology of Mass Media, Sociology of Religion, Northeast India Studies

Email: shim@tezu.ernet.in

Pamidi Hagjer, PhD (Gauhati University)

Specialization/Areas of interest: Ritual Studies, Kinship Studies, Industrial Sociology

Email: pamidi@tezu.ernet.in

STAFF MEMBERS

Assistant

Amarjyoti Bharali

Email: amar@tezu.ernet.in

MTS

Jogen Das

CENTRE FOR ENDANGERED LANGUAGES

THE CENTRE

The Centre for Endangered Languages (CFEL) was established in the University by the Ministry of Human Resource Development in 2014 with an approved grant in-aid of Rs. 6,00,00,000/- (Rupees six crore) with a mission to conduct linguistic research and to create a digital archive of seven endangered languages of Assam, Nagaland, and Manipur namely, Biate, Khelma, Hrangkhoh, Purum, Onaeme, Liangmai and Yimchunger and to develop awareness about revitalization and preservation among the native speakers. The Centre is now attached to the Department of Linguistics and Language Technology, which was earlier a part of the Department of English and Foreign Languages of the University.

The Centre for Endangered Languages, Tezpur University is the Nodal Centre for the consortium of Northeast India comprising Rajiv Gandhi University, Arunachal Pradesh and Sikkim University, Sikkim. The Centre for Endangered Languages is a major research project, funded by UGC for a period of 3 years with yearly extension which is now extended till 2024.

MAJOR FACILITIES

- Phonetic Lab (With 20 seat capacity)
- Documentation Lab (Recording and Editing Suite)
- Multipurpose Hall
- 3 Classrooms with Smart board and Projector facilities

EQUIPMENT AVAILABLE

- 30KVA Online UPS System
- Smart board TM Interactive White Board
- Projector Optima Short Throw
- Digital Voice Recorder
- Digital Camera
- HD camera
- Headphone Amplifier
- Soundcard for Editing Machine
- 12 Channel Professional Mixing Console
- Workstation for Recording and Editing
- Professional Grade Installed Recording Device

ONGOING ACTIVITIES OF THE CENTRE

The Trilingual Dictionary app for the seven languages has been developed during this reporting period.

RESEARCH PROJECTS (BOTH ONGOING AND NEW)

The NEC (North Eastern Council) project of CFEL, titled "Documentation and Revitalization of Nthenyi, Khongdei and Zyphe, three endangered languages of Northeast India" awarded to Centre for Endangered Languages, Tezpur University in 2020 with an approved allocation of Rs 79 lakhs 10 (ten) thousand only.

FACULTY MEMBERS

Professor

Madhumita Barbora, PhD (Tezpur University)

Coordinator of the Centre

Specialization/Areas of Interest: Syntax, Field Linguistics: Documentation of Tibeto-Burman languages of Northeast India and Applied Linguistics

E-mail: mmb@tezu.ernet.in

Gautam K Borah, PhD (NTNU Norway)

Specialization/Areas of interest: Linguistics (General and Cognitive), Philosophy of Language

E-mail: gkb@tezu.ernet.in

Assistant Professor

Arup K Nath, PhD (JNU New Delhi)

Specialization/Areas of interest: Language Typology, Morphology, Language Endangerment, Multilingualism, Sociolinguistics.

E-mail: akn@tezu.ernet.in

Bipasha Patgiri, PhD (Tezpur University)

Specialization/Areas of interest: Phonetics, Phonology, Historical Linguistics, Dialectology and Language Typology, Semantics

E-mail: bipasha@tezu.ernet.in

Amalesh Gope, PhD (IIT Guwahati)

Specialization/Areas of interest: Acoustic Phonetics with special interest in Tone, Psychoacoustics, Computational Linguistics, International Phonology and Language Documentation

E-mail: amalesh@tezu.ernet.in

CHANDRAPRABHA SAIKIANI CENTRE FOR WOMEN STUDIES

THE CENTRE

The Chandraprabha Saikiani Centre for Women Studies started the journey of women's studies at Tezpur University a few years ago. The establishment of this new discipline, 'Women Studies,' has been a new identity among other disciplines of the University. Women Studies refers to a self-conscious determination to show that both the form and the content of the existing knowledge are related to the unequal distribution of social power between men and women. Northeast India, being a region of diversity, positions women differently from the rest of the country in terms of race, class, ethnicity and sexuality. This politics of difference is a major proposition in the current times as it calls into question ideas of immediate and transparent personal experience and face-to-face community interaction. At present, the Centre has a fundamental obligation to disseminate women's studies and scholarship and also to be an active participant in the socio-political domains at every level.

ACADEMIC PROGRAMMES AND STUDENT INTAKE

Programme	Intake
PG Diploma in Women Studies	20
PhD in Women Studies	06

THRUST AREAS

- Gender Studies
- Performance Research
- Gender and Mental Health
- Anthropology and Cultural Studies
- Women and Folklore

MAJOR FACILITIES/EQUIPMENT AVAILABLE

- Desktop54
- Laptop
- Furniture
- MMP

RESEARCH PROJECTS (BOTH ONGOING AND NEW)

Project Title	Funding Agency	Amount (in INR)	Duration	Investigator(s)
Lives of the Ritual Priestesses of Assam: A Study with Special Reference to the Institution of Doudinis in the Bodo Society	Indian Council of Historical Research (ICHR), New Delhi	2.5 Lakhs	2021-23	M Goswami
Gender Advancement for Transforming Institutions (GATI)	Gender Advancement for Transforming	8 Lakhs	2021-23	

	Institutions (GATI)			
Economic Empowerment of ST population through Science, Technology and Innovation STI Hubs via Bamboo Intervention	DST	(Project Approved; Sanction letter is yet to be received)	2023-26	

PUBLICATIONS

JOURNALS PUBLICATIONS

Mahanta M. Axomia Sristixil Xahityat Mohila Manaxik Rogi. *Satsari*, 18(2): 62-64, 2022.

BOOK CHAPTERS

Goswami M. Women Trafficking: Subtle lying challenge towards building equity. In: Comprehending Equity. (Eds. Kikhi K, Gautam DR), Routledge: London & New York, pp.137-147, 2022, ISBN:978-1-032-23411-3.

Daimary E, Daimary I. Ecofeminism and Bodo Folktales and Folk Songs. In: Indian Feminist Ecocriticism. (Eds. Douglas AV, Anae N), Lexington Books: London, 2022, ISBN-978-166690-871-8.

Mahanta M. Mahapurush Sankardeva Nari Charitrar Krititwa. In: Satriya Sanskritir Prabandha Sambhar. (Ed. Goswami BP), pp.196-199. 2022.

CONFERENCE/WORKSHOP/SYMPOSIUM ATTENDED

Name of Faculty/Staff Member	Title	Date	Organizer and Venue
	Presented a paper, <i>Gender-specific Capacity Building for Transformative Social Change: Challenges and the Road Ahead</i> in a Conference on Gender Justice: Fostering Diversity, Equity and Inclusion	04-05 April 2022	Christ University, Bangalore; (Online)
	Participated in National Workshop on Empowering Women's Development Cells of Universities and Colleges	27-29 September 2022	Department of Educational Administration, National Institute of Educational Planning and Administration, New Delhi

M Goswami	Presented paper, <i>The Question of Safe Motherhood</i> in National Seminar on -Towards Social Equality: Contexts and Approaches with Special Reference to North-East India	02-03 November 2022	Dr. Ambedkar Chair, Tezpur University
	Presented a paper, <i>The Culture of Incarceration and Women Prisoners: A Study of Two Central Jails of Assam</i> in International Seminar on Fusion: Intellectual and Cultural Exchanges	01-02 June 2022	Department of English and Research Committee, Dimapur Government College (DGC), Dimapur in Collaboration with The Highland Institute, Kohima and Internal Quality Assurance Cell, DGC, Dimapur, Nagaland
	Resourcing a session on the National seminar on-Towards Social Equality: Contexts and Approaches with Special Reference to North-East India	02-03 November 2022	Dr. Ambedkar Chair, Tezpur University, Assam

TALKS BY THE FACULTY ABROAD AND IN INDIA

Name of Faculty Member	Title of the Talk	Title of the Event	Date	Organizer and Venue
M Goswami	Sexual Harassment of Women at Workplace: Prevention, Prohibition and Redressal	Awareness programme	12 May 2022	Institute of Advanced Study in Science and Technology, Guwahati

SEMINAR/WORKSHOP/SYMPOSIA/LECTURES ORGANISED

Event	Duration
Organized Tilottama Barooah memorial lecture and Tilottama Barooah Memorial Award presentation.	09 May 2022
Invited speaker, Member of Parliament Mr Kamakhya Prasad Tasha graced the event. Keynote speaker Hon'ble Smriti Zubin Irani, Ministry of Women and Child Development joined online and spoke extensively on the changes brought about in the New Education Policy with regard to girl students.	09 May 2022
Organized the International Day of the Girl Child. 40 female students of the Panchmile Higher Secondary School, Tezpur participated in the event.	11 October 2022
Organized a focus group discussion with women from Sita Basti, Sonabeel tea garden in Balipara Block of Sonitpur District to understand the status of maternal health of women.	12 November 2022
A five-day self-defense training program was conducted to provide a platform for the young women to enable themselves to attempt self-	11-15 November 2022

defense in situations of threat.	
Organized a basic computer literacy training programme in the light of the International Women's Day theme -DigitAll: Innovation, Technology for Gender Equality at Tezpur Mahila Samiti.	02-06 March 2023
A session on Women in Development Paradigm, an Entrepreneurial Initiative was organized in collaboration with the Internal Quality Assurance Cell, at Tezpur University. The programme was facilitated by Janitri, an organization devoted to funding and investments (WICCI).	13 March 2023
Organized a Public Exhibition on Sisters of Tezpur (Revisiting the Golden History of Tezpur Mahila Samiti) in collaboration with the Indian Association for Women's Studies, Delhi, and Tezpur Mahila Samiti, Tezpur.	16-18 March 2023
Organized an experiential and interactive one-day programme on Science, Gender and Spirituality with participants comprising women activists from Tezpur Mahila Samiti, Jeuti Mahila Samiti, Aparajita Mahila Samiti, Shishu Bharati school and Kamala Prasad Memorial school, Tezpur.	21 March 2023

OTHER SIGNIFICANT ACTIVITIES

Madhurima Goswami and Ivy Daimary are invited to share their viewpoints on Bathou religion in Bathou Anchalik meeting, a gathering of 13 villages in Borpukhuri Anandpur Gohpur, Assam on 19 April 2022.

DISTINGUISHED VISITORS

- Sheila Bora, Retired Professor, Department of History, Dibrugarh University, Assam
- Smriti Zubin Irani, Ministry of Women and Child Development (Online Meet)
- Kamakhya Prasad Tasha, Member of Parliament, India
- BK Vidhatri, Brahma Kumari, Om Shanti Retreat Centre, Gurugram
- BK Hussain, Brahma Kumari, Om Shanti Retreat Centre, Gurugram
- Jayadev Sahoo, Ex-Dean and Head, Faculty of Education, Rajiv Gandhi University, Arunachal Pradesh
- Prabhsharan Kaur, Self Defence Trainer cum Instructor, Krav maga expert, Delhi

FACULTY MEMBERS

Associate Professor

Madhurima Goswami, PhD (Tezpur University)

Head of the Centre

Specialization/ Research Area: Women's History, Culture and Religion, Performance Studies

Email: mgs@tezu.ernet.in

Assistant Professor

Mousumi Mahanta PhD (Tezpur University)

Specialization/ Research Area: Gender and Mental Health, Women's Studies, Sociology of Health, Mental Illness, Feminist Research Methodology, Anthropology and Cultural Studies.

Email: mousumi@tezu.ernet.in

STAFF MEMBERS

Research Associate

Ivy Daimary, PhD (Tezpur University)

Specialization/Research Area: Women and Folklore, Women and Media, Cultural Studies, Women Studies

Email: ivy2@tezu.ernet.in

Data Entry Operator

Pranjal K Sharma

Email: pranjal@tezu.ernet.in

Professional Assistant

Abhijit Baishya

Specialization/Research Area: Web and graphic designing

Email: abhi@tezu.ernet.in

MTS

Malati Boro

Email: malati@tezu.ernet.in

DR. AMBEDKAR CHAIR

Dr. Ambedkar Chair, Tezpur University was established by Dr Ambedkar Foundation, Ministry of Social Justice and Empowerment, New Delhi in the year 2016, to serve as the core centre for Northeast India furthering ideas and philosophy of Dr. BR Ambedkar and emancipation of the disadvantaged sections. The Chair was set up with the following objectives:

- Teaching and research
- Building a library
- Conducting research projects
- Organising public lectures
- Conducting awareness and skill development programs

The scheme of Dr Ambedkar Chair was revised in the year 2022 by the Ministry of Social Justice & Empowerment and a new MoU was signed to the effect. The focus of the chair was henceforth more on the research and publications apart from other activities about the socially disadvantaged categories.

THRUST AREAS

The thrust area of the Chair is to conduct research on issues related to disadvantaged communities in the context of Northeast India with particular emphasis on their marginalisation, development and participation.

RESEARCH PROJECTS (BOTH COMPLETED AND ONGOING)

Principal investigator(s)	Research highlights	Duration
K Kikhi & DR Gautam	Completed a consultancy project about the evaluation of micro-finance schemes (of NBCFDC) in the state of Assam. The project was sponsored by NBCFDC, New Delhi, with an amount of 4.37 lakhs and had the aim to evaluate the beneficiaries of the micro-finance credit scheme offered by NBCFDC in the state of Assam.	December 2021- August 2022

PUBLICATIONS

JOURNAL PUBLICATIONS

Kikhi K, Hibo V. Khitsobo: The legendry wild Pear tree at Makhel. *Journal on Frontier Studies*, 8: 12-16. 2022.

Kikhi K, Hibo V. Cartographic Lines, Oral Narratives and Linguistic Contours in Northeast (India) Borders: A Case of Manipur-Nagaland Border Site. *Journal of the Anthropological Survey of India*, 72(1): 7-20, 2022.

Gautam DR. Making of the Sacred in India: Religious or Social Othering? *Contemporary Voice of Dalit*. 2022. DOI: 10.1177/2455328X221095909

Gautam DR, Malish CM, Kikhi K. Professor of Practice: The Need to Add Social Viability in the Indian Context. *Economic and Political Weekly*, LVIII (9): 10-13. 2023

BOOKS

Kikhi K, Gautam DR. Comprehending Equity: Contextualising India's North-East, India: Routledge, 2023, ISBN 978-1032022901.

Kikhi K, Gautam DR. Marginality in India: Perspectives of marginalization from the Northeast India. Routledge, 2023, ISBN: 978-1-032-02210-9, DOI: 10.4324/9781003279679.

Kikhi K, Singh MA, Jose K. SVD. India@75: Policy, Governance and Development. Global Publishing House India, Vishakhapatnam, 2022, ISBN 978-93-95606-03-5.

BOOK CHAPTERS

Kikhi K, Gautam DR. Marginality in India: An Introduction. In: Marginality in India: Perspectives of marginalisation from the northeast. India. (Eds. Kikhi K, Gautam D R), Routledge, pp. 1-14, 2023, ISBN: 978-1-032-02210-9, DOI: 10.4324/9781003279679.

Kikhi K. Rekindling Traditions and Collating Modernity: A Nuanced Perspective to Read Naga Culture. In: State, Governance and Development in Northeast India. (Eds. Theunuo T, Dangti N, Thou K), pp.19-27, DVS Publishers, Guwahati, 2023, ISBN978-93-85839-72-6.

Kikhi K, Singh MA, Jose K SVD. Introduction. In India@75: Policy, Governance and Development. (Eds. Kikhi K, Singh MA, Jose K SVD), pp. 11-18, Global Publishing House India, Vishakhapatnam, 2022, ISBN 978-93-95606-03-5.

Dutta P, Kikhi K. Critiquing Governance, Citizenship and Development: Contextualising North East India. In: India@75: Policy, Governance and Development (Eds. Kikhi K, Singh MA, Jose K SVD), pp. 139-152, Global Publishing House India, Vishakhapatnam, 2022, ISBN 978-93-95606-03-5.

Hibo V, Kikhi K. Dzükou: The Heritage and Ethereal Garden of the Nagas. In: The Cultural Heritage of Nagaland. (Eds. Chophy G K, Chaudhuri S K), pp. 143-164, Routledge India, New Delhi, 2022. ISBN 9781003362807.

Kikhi K, Gautam DR. Introduction: Equity and differing contexts in Northeast India. In: Comprehending Equity: Contextualising India's North-East, India. (Eds. Kikhi K, Gautam D R), pp 1-14, Routledge, 2022, ISBN 9780367530747.

Talks by the Faculty

K Kikhi delivered a Plenary Lecture in a National Conference on *Youth and Wellbeing* (online) organised by the Department of Sociology, Rajiv Gandhi National Institute of Youth Development (RGNIYD), Ministry of Youth Affairs & Sports, GOI, Sriperumbudur, 29 March 2023.

K Kikhi delivered a keynote Lecture in a programme, '*The Role of Tribal Leaders in India's Freedom Struggle*', organised by Tezpur University & National Commission for Scheduled Tribes (NCST), GOI, New Delhi 29 September 2022.

SEMINAR/ WORKSHOP/ SYMPOSIA/LECTURES ORGANISED

Event	Duration
A two-day National Seminar on Towards Social Equality: Multiple Contexts and Approaches with special reference to North-East India was organized in collaboration and support from ICSSR, New Delhi	02-03 November 2022
Organized Nasha Mukta Bharat Abhiyan	04 August 2022
Organized 73 rd Constitution Day (Samvidhan Diwas)	25-26 November 2022

DISTINGUISHED VISITORS

- Debi Chatterjee, Retd. Professor, Department of International Relations, Jadavpur University, Kolkata
- Bhupen Sarmah, Professor, OKD Institute of Social science, Guwahati

BRIEF OF THE ORGANISED EVENTS AND OTHER ACTIVITIES

- In compliance with the pre-determined aim shared with ICSSR, New Delhi, to organise an academic exercise for generating discourse on establishing social equality, a two-day national seminar was organized by Dr. Ambedkar Chair, Tezpur University on 2nd & 3rd November 2022. Financial collaboration and support for the conduct of this seminar came from ICSSR, New Delhi. The entire academic exercise was an attempt to develop a confluence of ideas on 'social equality with the core-context of north-east India' through erudite reflection by the invited resource persons selected largely from the north-east region of India or with a generalisation towards the same
- As part of the program Nasha Mukta Bharat Abhiyan on 4 August 2022, Dr Ambedkar Chair, Tezpur University, in collaboration with the Department of Social Work planned activities to spread awareness about the menace of drug abuse among the students and others residing in the university campus and mobilized the students, faculty and other staff members to become the part of the live program, organized by the ministry of social justice towards the effect
- The 73rd Constitution Day or Samvidhan Diwas was celebrated at Tezpur University with a series of events including constitutional awareness through public lecture and sensitization programs, the elocution and quiz for the university students and the students of Kendriya Vidyalaya jointly conducted by Dr Ambedkar Chair, Chandraprabha Saikiani Centre for Women Studies, Department of Law, and Department of Sociology of Tezpur University
- Celebrated 131st Birth Anniversary of Dr BR Ambedkar, 14 April 2022
- Celebrated 67th Mahaparinirvan Diwas of Dr BR Ambedkar, 06 December 2022

FACULTY MEMBERS

Chair Professor

Kedilezo Kikhi, PhD (NEHU Shillong)

Department of Sociology

Specialisation/Research Area: Sociology of Northeast India, Research methodology, tribal studies, ethnic movements, sociology of development, marginality and marginalisation

Email: kedi@tezu.ernet.in

Assistant Professor

Dharma R Gautam, PhD (NIEPA New Delhi)

Specialisation/ Research Area: Social exclusion in higher education, technical higher education, privatisation of higher education

Email: dgautam@tezu.ernet.in

School of Management Sciences

- Dean, School of Management Sciences
 - Dept of Business Administration
 - Dept of Commerce
 - Centre for Disaster Management
- Tezpur University Intellectual Property Rights Cell

Dean, School of Management Sciences

The School of Management Sciences comprises of the Department of Business Administration, Department of Commerce, Centre for Disaster Management, and Intellectual Property Rights Cell.

The Department of Business Administration offers three PG programmes and one Certificate Course. The Master of Business Administration (MBA) programme run by the Department is the flagship programme within the School of Management Sciences and most sought after in North East India. It is also reputed nationally as evidenced from enrollment of students in the programme from all over the country. A number of students from abroad also got admitted to the programme in recent years. The Department is in the process of signing an MoU with Sam Houston State University, USA for student and faculty exchange. In a recent event, a team of 1st semester MBA students bagged the first prize in Business Plan contest organized by Department of Inland Water Transportation, Govt. of Assam. The Department also takes pride in the Master of Tourism and Travel Management (MTTM) programme, in which students are trained professionally for the booming tourism industry in North East India. The students of MBA and MTTM programmes are provided with industrial tours including foreign tours. Apart from these two major programmes, the Department runs a PhD programme and a six-month certificate programme (NCCMP) in collaboration with National Stock Exchange where students are imparted the skill of dealing in the Stock Exchange.

The Department of Commerce offers Integrated MCom and MCom Programmes where the students are given a competitive edge by aligning the programme to professional courses like CA, CS, and CMA. Lateral entry and exit are permitted. Student engagement is visible through industrial visits, excursions, and creation of an e-magazine. During the last year the faculty members have published 14 journal papers and 2 book chapters.

The Centre for Disaster Management offers three CBCS courses to the undergraduate and post-graduate students of the University. Apart from this, the Centre conducts training on disaster management from time to time.

The IPR Cell is one of the prized cells of the University helping researchers to file for patent and also helping the society to obtain GI for local products. In the year 2022-2023, six awareness programmes were conducted that centred on Intellectual Property Rights for various stakeholders ranging from youth, women entrepreneurs, startups and farmers. Interdisciplinary courses were also offered to the PhD and PG students. IPR filings and technology transfer also continues with 11 applied patents, 5 granted patents, 1 applied Industrial Design and 6 technology transfer.

The School of Management Sciences began with one Department (Department of Business Administration) in January 1995 and has come a long way throughout the years. It has consistently maintained student quality which ensured suitable placement. Employability of the students has been a major concern and the faculties have focused on skill development along with imparting theoretical and practical knowledge. Activities and events are aimed at holistic development of the students and it is hoped that they will become contributing citizens of the nation.

Personnel of the Dean's Office

Dean of the School

Chandan Goswami, PhD

Professor, Department of Business Administration

Email: chand@tezu.ernet.in

Office Staff

Subhal Paul, MTTM

Email: subhamp@tezu.ernet.in

DEPARTMENT OF BUSINESS ADMINISTRATION

THE DEPARTMENT

The Department of Business Administration, under the School of Management Sciences started functioning from 18 January 1995 with its first batch of MBA students. The Department has produced 26 batches of full time and four batches of part time MBA Graduates, 14 batches of Post Graduate Diploma Holders in Tourism Management, and five batches of Master of Tourism and Travel Management.

For its flagship MBA programme, the Department offers dual specialization in the areas of Marketing Management, Human Resource Management, Financial Management, Operations Management and Systems Management. Faculty and students with interdisciplinary backgrounds are drawn from the premier institutes of the country. Of late, the Department is also witnessing the presence of international students.

Several major industry oriented research projects sponsored by IGIDR, AICTE, Planning Commission GoI, MHRD, NEDFI, MAKAIAS and ICSSR have been carried out by the faculty members in the recent past. The Department has been organizing Refresher Courses, Faculty Development Programme as well as Management Development Programmes for Executives of reputed organizations and offers consultancy services to organizations.

The Department has a well-equipped computer lab with latest softwares. Classrooms are ICT enabled. All students are encouraged to take up at least one foreign language course (French, German or Chinese) under Choice Based Credit System. It is ensured that the students not only get theoretical knowledge but also extensive practical exposure through field and industry visits. For students of Tourism, such trips to diverse destinations as well as outdoor activities are a part of their syllabus.

ACADEMIC PROGRAMMES AND STUDENT INTAKE

Academic Programme	Intake
Master of Business Administration	58
Master of Business Administration (Executive)	30
Master of Tourism and Travel management	21
Certificate Course in National Stock Exchange Certified Capital Market Professional (NCCMP)	35
PhD in Business Administration	Variable (12 in 2022-23)

THRUST AREAS

- ✓ Entrepreneurship, and Small Enterprise Management,
- ✓ Tourism Management,
- ✓ Project, and Operations Management
- ✓ Rural Development,
- ✓ Organizational Development,
- ✓ Tax Management,
- ✓ Micro Finance

MAJOR FACILITIES AND EQUIPMENT AVAILABLE

- ICT Enable Classroom- 05 Nos
- Boardroom- 01
- Seminar Hall/ Smart Classroom- 01
- MDP/ Case Study Room- 01
- Student Lounge - 01
- Girls Common Room, with Vending unit- 01
- Corporate Lounge- 01
- Interview Room- 01

PUBLICATIONS BY FACULTY AND STAFF MEMBERS

JOURNAL PUBLICATIONS

Hussain A, Barua P, Sarma TR. Supply chain mapping for supply chain visualization: Muga silk industry in Assam. *International Journal of Indian Culture and Business Management*, 28 (3):401 – 424, 2023.

Hussain A, Sarma TR, Barua P. The Indian Muga Silk Industry: An integrative review of its business ecosystem and a management perspective. *International Journal of Indian Culture and Business Management*, 2023. DOI: 10.1504/IJICBM.2023.10058055

Dutta S, Sarma TR. Socio-economic issues in disaster relief operations and incorporation of NGOs in relief supply chain. *Lakhimpur Commerce College Research Journal*, 4(1):1-10, 2022.

Mehdi MM, Sarma TR. Systematic review on performance and growth drivers of SMEs. *Global Business and Economics Review*, 27(3):324-351, 2022.

Chetia J, Baruah P. Workplace spirituality for enhancing sustainable work performance: A study in SMEs in Assam, *Mukt Shabd Journal*, 11(6), 2022.

Chetia J, Baruah P. Workplace spirituality as an adaptive strategy for business sustainability: A quantitative investigation from an Indian state. *Dogo Rangsang Research Journal*, 12 (6), 2022.

Bhatia R, Baruah P. Evaluating the attitude of employees from the practice of exclusive talent management: A study of hotel employees in Delhi. *South Asian Journal of Human Resource Management*, 2022. <https://doi.org/10.1177/23220937221118189>

Newar P, Bhuyan A. Role of Banks in Promoting Financial Literacy among Agripreneurs in Assam, India. *Journal of Agricultural Extension*, 26 (4):1-10, 2022.

Singh V, Bhuyan A. Recovery of tourism sector - A Scientometric analysis. *Prayukti Journal of Management Applications*, 2(2):98-112, 2022. <http://doi.org/10.52814/PJMA.2022.2204>

Ayengia T, Baruah P. A review of Generational Cohort Studies: A bibliometric assessment of publications from 1970-2022 using Vos viewer software. *Purakala*, 31(2), 2022.

Borah B, Sarma MK. A bibliometric analysis of soundscape in service marketing. *JIM QUEST Journal of Management and Technology*, 18 (1):1-9, 2022.

Das N. Geographical Indication (GI) as a means of craft tourism: a case of Muga Silk in Assam, India. *Brazilian Ecotourism Journal*, 15(04):802-808, 2022.

Sarma MK, Borah B. A bibliometric analysis of soundscape in service marketing. *JIM QUEST Journal of Management and Technology*, 18(1): 1-9, 2022.

Dutta D, Sarma MK. Adoption of Digital Innovations: A special reference to Routinised Incremental Innovations. *Review of Market Integration*, 1-25, 2022.
DOI:10.1177/09749292211073636

ACHIEVEMENTS OF FACULTY MEMBERS

TR Sarma (MM Mehdi and L Nafees), **Guest Editor**, Special issue theme: Digital Entrepreneurship in India. *Emerald Emerging Markets Case Studies*. Upcoming publication.

SEMINARS/CONFERENCES/WORKSHOPS/SYMPOSIA ATTENDED

Name of the faculty member	Title of the Event	Organized by	Date	Place
TR Sarma	National Seminar on Sustainable Agribusiness Opportunities & Management Practices Towards Developing the Rural Economy	USTM/ NABARD	May 2022	Baridua, Meghalaya
TR Sarma	A Study on the Value Addition of Micro-enterprises in the Blacksmith Knife Cluster, Jorhat.12th International Conference on Global Information And Business Strategies	Gitarattan International Business School	July 2022	Rohini, Delhi
MK Sarma	Presented a paper titled Traditional Food Promotion: Exploring Locals and Prospective Culinary Tourists at the Second Annual International Research Conference and Doctoral Workshop	IIM Lucknow	November 2022	IIM Lucknow

TALKS BY THE FACULTY MEMBERS ABROAD AND IN INDIA

Name of the faculty member	Event	Date	Place/institute/venue
MK Sarma	Acted as Resource Person and delivered a session on Win Win: Habit 4 of Highly Effective People	22 December 2022	Executive Training Programme, Powergrid Corporation
MK Sarma	Acted as an expert member for the study, Status of Investment by Private Sector in Respect of Tourism In Meghalaya	21 February 2023	NEDFi
MK Sarma	Acted as Resource Person and delivered a session on Online and Offline Classes: Balancing the Flip-Flops	19 August 2022	Teaching Learning Centre, Tezpur University
MK Sarma	Delivered the 53rd Foundation Day Lecture	15 July 2022	LOKD College, Dhekiajuli

MK Sarma	Chairperson of the Technical Session II of the National Seminar, Challenges and Opportunities in Educational Practices: Emerging Perspectives	11 June 2022	Jointly organized by Tezpur College and Govt. College of Teacher Education, Tezpur at Tezpur College
MK Sarma	Resource Person and delivered a session on Quantitative Research as a part of Refresher Course organized by the Department of Cultural Studies	25 May, 2022	Tezpur University in collaboration with ICSSR, New Delhi

SEMINAR/WORKSHOP/SYMPOSIA/INVITED LECTURES ORGANIZED

Title	Date
A programme on the Importance of Mental Health, conducted by a team from LGBRIMH, Tezpur	19 May 2022
Alumni Speaks: Smita Dey Tarafder, Co-Founder - Swakia Technologies (Alumni TU MBA 2004-06)	11 October 2022
Alumni Speaks: Santosh Rawat, Sr Manager (HR), Oil India Ltd (Alumni TU MBA 2018-20)	26 October 2022
A discourse on the power of concentration, Speaker: BK Prof E.V Gireesh, PGD Psycho- Neurobics	31 October 2022
Alumni Speaks: Zaveer Zaman, NEDFi, Guwahati (Alumni, TU MBA 2007-09)	26 April 2022
Talk on 'Corporate Culture, Corporate Ethics & Corporate Expectation about Freshers' Resource Person: Sunil Naik, Vice President-HR, DHL, and Dr Girisanekar, Psychologist & Consultant, DHL	26 December 2022
A three day workshop, Personality Enhancement Programme, by Dale Carnegie	13-15 December 2022
Design Thinking, A two day workshop by Tinkerlabs	28-29 January 2023

OTHER IMPORTANT ACTIVITIES OF THE DEPARTMENT

- Each One Teach One activity
- Mentor Mentee Meeting
- Flipped Classroom

NUMBER OF STUDENTS QUALIFIED NET-JRF/GATE/SLET:

Name of Qualifying Examination	Number of Qualified Students
NET	04
NET-JRF	01

NOTABLE PLACEMENTS

Name	Designation	Organization
Dipankar Nath	Personal Banker	HDFC Bank
Subham Sonar	Assistant Manager	Federal Bank
Dwipam Sarma	Assistant Manager	SBI Life
Prachurjya Sarmah	Territory Sales Executive	Tata Consumer products
Dhritismita Lahkar	Deputy Manager	ICICI Bank

Sudipta Chamuah	Executive Trainee	HDFC Bank
Sneha Saikia	Assistant Manager	SBI Life
Dikshita Mali	Business Operations Executive	My captain
Debashree Sarmah	Assistant Manager	SBI Life
Annanya Jaiswal	Management Trainee	Reliance Retail
Debarshi Bayan	Deputy Manager	ICICI Bank
Shilpisikha Nath	Jr. Assistant	Education Dept, Govt of Assam
Mrigankav Gayan	Trainee	JK Foods
Nayan Kamal Kalita	Personal Banker	HDFC Bank
Priyanka Roy	Management Trainee	DHL
Nishit Deka	Jr. Assistant	Education Dept, Govt. Of Assam
Barnasha Das	Management Trainee	DHL Global Forwarding
Morami Dutta	Relationship Manager	ICICI Bank
Samir Nath	Area Sales Executive	Reliance Consumer Brands
Hrishikesh Das	Assistant Manager	SBI Life
Sunil Kumar Sharma	Assistant Manager	SBI Life
Ankita Ghosh	Deputy Manager	ICICI Bank
Dibutpal Borah	Deputy Manager	ICICI Bank
Chandan Kumar Rai	Assistant Manager	SBI Life
Arindam Sarmah	Assistant Manager	SBI Life
Rimpi Borah	Officer in Junior Management	Federal Bank
Phulmoni Rabha	Deputy Manager	ICICI Bank
Sandeep Kumar Prajapati	Assistant Manager	IDBI Bank
Prakrity Saikia	Assistant Manager	IDBI Bank
Achyut Mitra	Assistant Manager	IDBI Bank
Monalisa Baruah	Assistant Manager	SBI Life
Anjali Jha	Visitor Facilitator	Ramoji Film City, Hyderabad

FACULTY MEMBERS

Professor

Mrinmoy K Sarma, PhD (Tezpur University)

Specialization/Areas of interest: Service marketing, Tourism Marketing, Research Methodology

E-mail: mrinmoy@tezu.ernet.in

Debabrata Das, PhD (Rajib Gandhi University Itanagar) (on Lien)

Specialization/Areas of interest: Insurance, Financial Inclusion

E-mail: ddas09@tezu.ernet.in

Papori Baruah, PhD (Tezpur University)

Specialization/Areas of interest: Human Resource Management, Organizational Behavior, Change Management, NGOs, Organizational Development

E-mail: papori@tezu.ernet.in

Chandan Goswami, PhD (Gauhati University)

Specialization/Areas of interest: Marketing, Advertising, Tourism

E-mail: chand@tezu.ernet.in

Subhrangshu S Sarkar, PhD (Tezpur University)

Specialization/Areas of interest: Accounting, Taxation, Social Development Issues

E-mail: subh@tezu.ernet.in

Associate Professor

Tridib R Sarma, PhD (Tezpur University)

Head of the Department

Specialization/Areas of interest: Optimization, Quality, Project and Operations Management

E-mail: tridib@tezu.ernet.in

Anjan Bhuyan, PhD (Tezpur University)

Specialization/Areas of interest: Entrepreneurship, International Trade, Economics of Tourism, Rural Development

E-mail: anjanb@tezu.ernet.in

Arup Roy, PhD (Tezpur University)

Specialization/Areas of interest: Derivatives, Financial Engineering, Microfinance

E-mail: anjanb@tezu.ernet.in

Assistant Professor

Heera Barpujary, PhD (Tezpur University)

Specialization/Areas of interest: Web Technology, Knowledge Management

E-mail: heera@tezu.ernet.in

Runumi Das, PhD (Gauhati University)

Specialization/Areas of interest: Rural Marketing, Human Resource, Services Marketing

E-mail: runumi@tezu.ernet.in

Mridul Dutta, PhD (Gauhati University)

Specialization/Areas of interest: Community Based Tourism, Intellectual Property Assets

E-mail: mridul@tezu.ernet.in

Kakali Mahanta, PhD (Dibrugarh University)

Specialization/Areas of interest: HRM, Ethics and Value

E-mail: kakali@tezu.ernet.in

Prayash Baruah, MBA (Symbiosis Pune)

Specialization/Areas of interest: Business analytics, Operations

E-mail: prayashb@tezu.ernet.in

Guest Faculty

N Das, PhD (NEHU Shillong)

Specialization/Areas of interest: Rural Tourism

E-mail: niranjan@tezu.ernet.in

A Mahanta, MBA (Amity University Delhi)

Specialization/Areas of interest: Marketing, Ethics

E-mail: anisham@tezu.ernet.in

STAFF MEMBERS

Senior Technical Assistant

Tarunjyoti Borah, MA (Tezpur University)

E-mail: taruntu@tezu.ernet.in

Technical Assistant

Kushal Roy, Dip ECE

E-mail: kushal@tezu.ernet.in

Office Assistant

Subham Paul, MTTM (Tezpur University)

E-mail: subhamp@tezu.ernet.in

MTS

Suren K Borah

DEPARTMENT OF COMMERCE

THE DEPARTMENT

The Department of Commerce under the School of Management Sciences was established in 2013. The Department has been unwavering in its commitment to delivering top-quality education and fostering a research-driven culture among its students. The academic programs offered by the Department have been designed to cater to the diverse needs of the students. The 5-year Integrated MCom program, started in 2014, provides a unique opportunity for lateral exit, awarding a BCom degree after six semesters of successful completion. Moreover, eligible students are granted lateral entry into the seventh semester to pursue the MCom degree, ensuring multiple academic pathways for their future endeavors. In line with its commitment to academic excellence, the Department introduced the Doctor of Philosophy (PhD) program in Commerce during the academic session 2020-2021. The research scholars undergo comprehensive coursework for two academic semesters, preparing them to make significant contributions to their respective fields of study and advancing the existing knowledge base. The Department of Commerce takes immense pride in fostering a research-oriented environment, empowering students to pursue their academic aspirations and make meaningful contributions. The vision is to produce scholars capable of making substantial advancements in existing knowledge, both through the PhD program and beyond. As an institution committed to holistic education, the Department ensures that its students are not only academically proficient but also well-prepared for various competitive examinations and future educational pursuits. The comprehensive educational approach equips the students with the necessary skills and knowledge for thriving careers in corporate sectors or pursuing research-driven paths.

ACADEMIC PROGRAMMES AND STUDENT INTAKE

Academic Programme	Intake
Integrated MCom	33
MCom	Variable (06 in 2022-23)
PhD in Commerce	Variable (02 in 2022-23)

THRUST AREAS

- Accounting
- Finance
- Economics

MAJOR FACILITIES/EQUIPMENT AVAILABLE

- Smart Classroom
- Computer Lab
- Interactive Pen Display
- Multimedia projectors
- Audio Podium with Microphone and Speaker
- Student Response system
- Digital Notice Board

MAJOR RESEARCH AND DEVELOPMENT FINDINGS

Faculty/ Researcher	Salient Research Findings
SG Maji	<ul style="list-style-type: none"> Indian firms are gradually disclosing more information on Climate-related risk and opportunities according to the TCFD framework. ESG investment is growing in India and ESG disclosure positively influences firm performance. Gender Diversity in the workplace has a vital role in enhancing firm performance, although gender diversity at the Board level is relatively less in India as compared to developed nations and some emerging nations. Human capital is the crux for achieving the performance of Indian Banks. Use of digital banking services helps Indian banks to improve stability. Following the GRI guidelines and ILO standards, Indian corporate firms are gradually disclosing more labor-related information in the published reports, which improves decent work performance. However, more attention is required related to the health and safety issues of the workers as well as standard guidelines for temporary workers.

PUBLICATIONS BY FACULTY AND STAFF MEMBERS

PUBLICATION IN JOURNALS

Tiwari RK, Debnath J. Forensic Accounting and Non-Audit Services: Indian Context, *Finance India*, 36(1): 281-295, 2022.

Maji SG, Lohia P. Environmental, social and governance (ESG) performance and firm performance in India, *Society and Business Review*, 18(1):175-194, 2023.

Goswami R, Maji SG, Hussain F. Annual Report Readability and Agency Cost: The Influence of Firm Size, *Business Perspectives and Research*, 2023, <https://doi.org/10.1177/22785337221148832>

Saha R, Maji SG. Impact of Board's Educational Diversity on Firm Performance: Evidence from Top Listed Indian Companies, *The IUP Journal of Corporate Governance*, 22(1): 23-38, 2023.

Maji SG, Disclosure Pattern of Labour Practices and Decent Work and Its Impact on Corporate Financial Performance: Evidence from Asia. *Global Business Review*, 23(4): 1054-1070, 2022.

Ghose B, Maji SG. Internet banking intensity and bank profitability: evidence from emerging Indian economy, *Managerial Finance*, 48(11): 1607-1626, 2022.

Saha R, Maji SG. Board human capital diversity and firm performance: evidence from top listed Indian firms, *Journal of Indian Business Research* 14(4): 382-402, 2022.

Maji SG, Kalita N. Climate Change Financial Disclosure and Firm Performance: Empirical Evidence from Indian Energy Sector based on TCFD Recommendations, *Society and Business Review*, 17(4): 594-612, 2023.

Maji SG, Goswami M. The association between human capital efficiency and credit risk of Indian banks: a change point analysis, *International Journal of Learning and Intellectual Capital*, 19(3): 194-216, 2022.

Saha R, Maji SG. Board Gender Diversity and Firm Performance: Evidence from Family-Owned Firms in India. *Indonesian Journal of Sustainability Accounting and Management*, 6(2): 291-301, 2022.

Ghose B, Baruah D, Gope K. Propensity to Propose and Pay Dividend: Does Firm Characteristics Matter? *Global Business Review*, 2022. <https://doi.org/10.1177/09721509221110314>

Ghose B, Kabra KC, Impact of dividend payment on firms' leverage: Moderating role of firm size, *The Journal of Business Perspective*, 2022. <https://doi.org/10.1177/09722629221131103>

Ghose B, Makan LT, Kabra KC, Impact of carbon productivity on firm performance: moderating role of industry type and firm size. *Managerial Finance*, 49 (5), 866-883, 2022.

Goswami, R.G., Maji, S.G. and Hussain, F., Annual Report Readability and Agency Cost: The Influence of Firm Size. *Business Perspectives and Research*, 2023. DOI:10.1177/22785337221148832

BOOK CHAPTERS

Maji SG, Priyadarshini L, Greenhouse Gas Emissions and Firm Performance: Empirical Evidence from Selected Indian Firms. (Eds: Giri S, Paul P, Mitra P, Singhal N), pp. 243-254, Bloomsbury Publisher, (2023). ISBN: 978-93-56404-13-7

Ghose B, Ghosh M, Roy P, Has North-East India done enough on Poverty, Hunger and Health? Perspective from Sustainable Development Goals. (Eds: Das BK, Lalropuii, Lalromawia L, Singh PK,) pp. 1-18, Mittal Publications, (2022). ISBN: 978-93-90692-15-6

CONFERENCE PROCEEDINGS

Roy P, Ghose B. Firm Performance vis-à-vis Working Capital Management: An empirical study of Indian Real Estate Sector, Sri Lanka, 2022: International Conference on Real Estate Management and Valuation. DOI: <https://doi.org/10.31357/icremv.v6.6235>

CONFERENCE/WORKSHOP/SYMPOSIUM/SEMINAR ETC. ATTENDED

Name of Faculty/Staff Member	Purpose of Attending	Title of Event	Date	Organizer and Venue (Online/Offline)
SG Maji	Paper Presentation	3rd International Conference On Sustainable Development: A Value Chain Perspective	03-04 February 2023	Management Development Institute, Murshidabad, India (Online)
SG Maji	Paper Presentation	TAKE 2022 Theory and Applications in the Knowledge Economy	06-08 July 2022	Universidade Portucalense Infante D. Henrique, Porto, Portugal along with IECPI and REMIT (Online)
B Ghose	Paper Presentation	International Conference on Real Estate Management and Valuation	18-19 October 2022	University of Sri Jayewardenepura, Sri Lanka
B Ghose	Paper Presentation	International Conference on Innovation and Management	29-30 September 2022	Kirloskar Institute of Management, Karnataka
B Ghose	Paper	National Seminar on	26-27 May	Department of

	Presentation	Local Governance & Management in Northeast India 2022	2022	Management, Mizoram University, Mizoram
RK Tiwari	Paper Presentation	National Seminar on Self reliant India: Issues and Challenges	22-23 September 2022	Department of Commerce and Department of Management, Bodoland University, Assam (Online)
RK Tiwari	Paper Presentation	3rd International Conference On Sustainable Development: A Value Chain Perspective	03-04 February 2023	Management Development Institute, Murshidabad, India (Online)
RK Tiwari	Paper Presentation	National Seminar on ICT and e-Governance Applications in RD	23-24 February 2023	NIRDPR-NERC, Guwahati (Online)
RK Tiwari	Paper Presentation	Bodoland International Knowledge Festival, 2023	27 February -2 March 2023	Bodoland Territorial Region (BTR) Government and Bodoland University, Kokrajhar, India
RK Tiwari	Paper Presentation	Second International Conference on Contemporary Issues in Business Innovation, Technology & Social Sciences	24-25 May 2022	School of Management, Gautam Buddha University (Hybrid mode), Greater Noida, India.
P Roy	Paper Presentation	International Conference on Innovation and Management : The way ahead	29-30 September 2022	Kirloskar Institute of Management, Harihar, Karnataka
P Roy	Paper Presentation	International Conference on Real Estate Management and Valuation	18-19 October 2022	University of Sri Jayewardenepura, Sri Lanka
P Roy	Paper Presentation	National Seminar on Local Governance & Management in North-East India	26-27 May 2022	Department of Management, Mizoram University

INVITED TALK

Name of Faculty Member	Title of the Talk	Title of the Event	Date	Organizer and Venue
SG Maji	Corporate	Refresher Course at	25	UGC-HRDC, North-

	Sustainability and Sustainable Development	UGC-HRDC, North-Eastern Hill University, Shillong	October 2022	Eastern Hill University, Shillong
SG Maji	Linear Regression	Short Term Course in Statistical Analysis	26 September 2022	UGC-HRDC, North-Eastern Hill University, Shillong
P Roy	Use of Secondary Data and Resources	Academic Writing and Publication	02 November 2022	Teaching Learning Centre (TLC), Tezpur University
P Roy	Introduction to Financial Markets	NSE Certified Capital Market Professional	01 March-19 April 2023	Dept. of Business Administration, Tezpur University (Online)

AWARDS/HONOURS/NOTABLE ACHIEVEMENTS

Name of Awardee	Designation of Awardee	Achievement	Event/Awarded by
SG Maji	Associate Professor	Best Paper Award	3rd International Conference On Sustainable Development: A Value Chain Perspective, at MDI, Murshidabad

OTHER SIGNIFICANT ACTIVITIES OF THE DEPARTMENT/CENTRE

- Industrial Trip to visit Industrial Growth center, Balipara on 20 May 2022
- Distribution of study materials to 50 needy school students from the adjacent villages on 15 August 2022 and Cleanliness Drive on 16 August 2022 in the different parts of Tezpur Town by the students of the Department
- Excursion to visit Darjeeling and Kalimpong during 14 - 18 December 2022
- Lecture on "Re- Booting for a Better World" on 11 April 2023 by CA Kalyan Kar, Co-Founder at Prediq Business Solutions Pvt. Ltd.
- Lecture on "Marketing Strategies, Brands and Changing Times" on 11 April 2023 by Prof Rajib Dasgupta, Calcutta University
- One week workshop on research methodology and report writing held during 20-24 February 2023
- Career Awareness Program, organized by The Institute of Company Secretaries of India (ICSI) in the Department of Commerce on 16 December 2022
- Ice breaking session on 07 December 2022 and 09 December 2022 for the newly admitted students in Autumn 2022

NUMBER OF STUDENTS QUALIFIED IN NET-JRF/SLET/GATE

Name of Qualifying Examination	Number of Qualified Students	Academic Programme
UGC NET	02	Integrated MCom

NOTABLE PLACEMENT OF STUDENTS

Name of Student	Academic Programme	Placement Designation	Company/ Organization	Type of Selection
Novonit Gogoi	Integrated MCom	Compliance Analyst	Ernst & Young (EY)	Off Campus
Deepjyoti Baruah	Integrated MCom	Phone Banking	ICICI Bank	Off Campus
Sagar Singha	Integrated MCom	Phone Banking	ICICI Bank	Off Campus
Koushik Chetia	Integrated MCom	Probationary Officer	FEDERAL BANK	On Campus
Rajdeep Nath	MCom	Probationary Officer	FEDERAL BANK	On Campus
Promila Chetri	Integrated MCom	Business Development Associate	Intellipaat Software Solutions	On Campus

ENROLLMENT OF STUDENTS IN OTHER INSTITUTES FOR HIGHER STUDIES

Name of Student	Academic Programme	Name of other Institute	Enrolled Academic Programme
Birinchi Arandhara	Integrated MCom	Dibrugarh University	PhD
Sneha Saha	Integrated MCom	Tezpur University	PhD
Hrittick Bhuyan	Integrated MCom	Institute of Technology and Management, Navi Mumbai	PGDM

FACULTY MEMBERS

Associate Professor

Santi G Maji, PhD (University of Burdwan)

Head of the Department

Specialization/Area of Interests: Intellectual Capital, Corporate Sustainability and Sustainable Development, Risk Management, Corporate Governance

Email: sgmaj@tezu.ernet.in

Assistant Professor

Reshma K Tiwari, PhD (Gauhati University)

Specialization/Area of Interests: Accounting, Auditing, Forensic Accounting

Email: reshma@tezu.ernet.in

Farah Hussain, PhD (Dibrugarh University)

Specialization/Area of Interests:

Email: farah@tezu.ernet.in

Biswajit Ghose, PhD (NEHU Shillong)

Specialization/Area of Interests: Corporate Finance, Corporate Governance, Microfinance

Email: bghose@tezu.ernet.in

Dhritabrata J Bharadwaz, MPhil (Dibrugarh University)

Specialization/Area of Interests: Accounting, Finance, Risk Management

Email: bharadj@tezu.ernet.in

Prasenjit Roy, PhD (Gauhati University)
Specialization/Area of Interests: Banking and Finance
Email: royp@tezu.ernet.in

Guest Faculty

Amitava Banerjee, ACS, LLB, MCom
Specialization/Area of Interests: Corporate Governance & Company Act.
Email: amitbanerjee1979@gmail.com

Atanu Hazarika, PhD (IIT Kharagpur)
Specialization/Area of Interests: Econometrics & Mathematical Economics
Email: atanu.hazarika86@gmail.com

Akankhya Bhuyan, MCom (Gauhati University)
Specialization/Area of Interests: Accounting & Finance
Email: akankhyabhuyan@gmail.com

Nivaj Gogoi, MCom (Christ University, Bangalore)
Specialization/Area of Interests: Accounting & Taxation
Email: nivajgo@gmail.com

STAFF MEMBERS

Assistant

Bijoy K Domai
Email: bdomai@tezu.ernet.in

MTS

Nipen Dutta
Email: nipend@tezu.ernet.in

CENTRE FOR DISASTER MANAGEMENT

The Centre

Centre for Disaster Management was established in 1997 under the Central Sector Scheme of NDM Division, Ministry of Agriculture and Cooperation, Government of India. The scheme has subsequently been transferred to the Ministry of Home Affairs, Government of India during 2002. The Centre is conducting

- Two open elective courses on disaster management for UG and PG programmes
- One skill enhancement course on Disaster Management for Integrated MSc programmes
- Diploma in Environment and Disaster Management under CDOE, Tezpur University, in association with the Department of Environmental Science
- Extension activities and awareness programmes

THRUST AREAS

Disaster Risk Assessment and Risk Reduction Planning

CONFERENCE/WORKSHOP/SYMPOSIUM/SEMINAR ATTENDED

Name of Faculty/Staff Member	Title	Date/Period , Year	Place/Institute/Venue
D Nath	Participation Brainstorming session of NESAC user interaction meet (NeUIM – 2022)	24 May 2022	NESAC, Shillong, Meghalaya (Online)
	Delivered an invited talk on Disaster Risk Mitigation with Special Reference to Tourism Sector in the Lecture series for the students of MTTM, TU	13 December 2022	Department of Business Administration, Tezpur University

PUBLICATIONS

JOURNAL PUBLICATIONS

Nath D, Nath R D. Scopes and barriers for effective management of biological hazard induced pandemic: Lessons from 1918 Spanish flu and 2020 COVID-19. *International Journal of Health Sciences*, 6(S2), 10840–10850, 2022.

FACULTY MEMBERS

Assistant Professor

Dipak Nath, PhD (Gauhati University)

Specialization/Area of Interest: Nuclear Physics & Cosmic Radiation /Disaster Risk Assessment

Email: dipak@tezu.ernet.in

TEZPUR UNIVERSITY INTELLECTUAL PROPERTY RIGHTS CELL

THE TUIPR CELL

Tezpur University Intellectual Property Rights (TUIPR) Cell was established in 2009 with a vision to develop human resource in the management of Intellectual Property Rights (IPR) as an integral part of the innovation process and the innovation value chain in the University. Several patents, copyrights and industrial design applications have been filed based on the innovations done in Tezpur University. The Cell is involved in IPR awareness and implementation programmes in the University and across the North East region as well. It is also gradually developing IPR consciousness not only within the institutions of the region but also among different strata of the society.

ACADEMIC PROGRAMMES AND STUDENT INTAKE

CBCT Courses	Intake
IP750: Intellectual Property Rights in Research and Beyond	15
IP250: Fundamentals of Intellectual Property Rights	30

THRUST RESEARCH AREAS OF THE CELL

- Geographical Indication

PUBLICATIONS BY FACULTY AND STAFF MEMBERS:

BOOK EDITED

Deb P. Entrepreneurship and IPRs, Ticol Style Track, Tezpur, 2023, ISBN: 978-81-947376-3-6.

PUBLICATION OF PATENTS

Inventor(s)	Patent Title	Application/ Patent Number	Published /Granted	Country
AJ Chutia	A Two-Way Ratchet	401265	Granted	India
PP Sahu	A portable optical fiber instrument for instant petrol purity detection	403352	Granted	India
P Deb, M Talukdar	Designed 2D graphitic sheet for viscous oil removal using magnet	404139	Granted	India
N Karak, VK Das, S Gogoi	Selective para-hydroxylation of substituted aromatic hydrocarbons using H ₂ O ₂ catalyzed by waterborne hyperbranched polyurethane/ carbon quantum dot nanocomposites	422972	Granted	India
C Bezbaruah, P Nath, RK Dutta	Removal of arsenic from ground water by capsule technique	426864	Granted	India
AK Mukherjee,	Anticoagulant actives and synergistic anticoagulant	427825	Granted	India

D Gogoi	composition and method of producing the same			
PP Sahu, J Das	An Oxygen generation equipment based on water splitting for chronic/acute respiratory syndrome patients	202131044011	Published	India
PP Sahu	System for real-time onsite tracing of water content present in aircraft or jet fuel	202131020238	Published	India
NM Kakoti, L Gohain	An Emg Based Multi Grasp Prosthetic Hand with an Android Interface	202131022730	Published	India
PP Sahu	A System and apparatus for measuring and monitoring transformer oil breakdown voltage using optical fiber sensor	201931020800	Published	India
P Nath, D Rabha	Methods and apparatus of multi-modal microscopic imaging on a smartphone and OLED display illumination	202231030989	Published	India

INVITED TALK

Name of Faculty Member	Title of the Talk	Title of the Event	Date	Organizer and Venue
P Deb	IPR and Copyright	Online Interdisciplinary refresher course on academic writing and research	16 May 2022	Teaching Learning Centre, Tezpur University
P Deb	Heads I win, Tails you lose-The IPR Toss	Intellectual property rights in contemporary world	03 July 2022	Jorhat Engineering College, Jorhat
P Deb	Intellectual Property Rights Structure and Scope	State level webinar on Intellectual property rights	21 July 2022	Guwahati College, Guwahati
P Deb	Protect your Creation with a Strategy	IPR Awareness programme	04 December 2022	Manipal University, Mangalore
P Deb	Protect your Creations with a Strategy	IPR Awareness programme	01 March 2023	Darrang College, Tezpur
P Deb	Intellectual Property Rights Structure and Scope	State level webinar on Intellectual property rights in contemporary world	14 March 2023	Kaziranga University, Jorhat
JB Saikia	Introduction on Geographical Indications (GI)			

OTHER ACTIVITIES OF THE CELL

Workshops

- World IPR Day celebrated on 26 April 2022.
- Five-day Certificate programme on Intellectual Property Rights for Enterprise Development at Tezpur University from 17-21 January 2023 in collaboration with Technology Enabling Centre, Tezpur University.

Extension/Outreach Activities

- One day workshop on the Role of IPR in Supporting and Empowering Women Innovators held on 12 September 2022 in collaboration with the Research, Innovation and Extension Committee of MDKG College under the aegis of IQAC, MDKG College.
- A Daylong Entrepreneurs' Meet on Considering GIs of Assam for better Agri -Business Opportunities in Horticulture was organized at Farmers Training Center, Directorate of Horticulture and Food Processing, Govt. of Assam on 04 March 2023.
- One day workshop on Importance of IPR for Startups, Research and Academia was organized at NEHU Shillong in association with the Design Innovation Centre, NEHU on 06 March 2023.

Webinars

- Week-long Online International Workshop on 'Intellectual Property Rights for the Promotion and Protection of Innovations' from May 16-21, 2022 in collaboration with Garhgaon College, Garhgaon and Intellectual Property Engagement Group, The City Law School, City, University of London

Other activities

- TUIPR Cell has extended support for getting the GI registration renewal of 'Joynagar Moa', a seasonal Bengali sweetmeat delicacy popularly produced in Joynagar, West Bengal.
- Juri B Saikia was nominated to represent Tezpur University for the IIC Regional Meet 2022 at Royal Global University, Guwahati on 04 August 2022.
- TUIPR Cell has supported Kaliabor College, Nagaon, in filing and maintenance of a patent application entitled 'Removal of arsenic from ground water by capsule technique'. The patent was granted by the Patent Office with grant no. 426864 on 27 March 2023.

FACULTY MEMBERS

Chair Professor

Pritam Deb, PhD (Jadavpur University)

Specialization/Area of Interest: Patent, PCT, GI and Trade Secret

Email: pdeb@tezu.ernet.in

STAFF MEMBERS

Research Assistant

Juri B Saikia, PhD (Tezpur University)

Email: juriipr@tezu.ernet.in

Kaushik Saikia, PhD (Tezpur University)

Email: koushik@tezu.ernet.in

ASSISTANT

Saurav Deka

Email: office-ipr@tezu.ernet.in

School of Sciences

- Dean School of Sciences
- Dept of Chemical Sciences
- Dept of Environmental Science
- Dept of Mathematical Sciences
- Dept of Molecular Biology and Biotechnology
 - Dept of Physics
- Centre for Petroleum Biotechnology
- Centre for Yoga and Sports Sciences

DEAN, SCHOOL OF SCIENCES

About the School

The School of Sciences comprises of five academic departments:

- Chemical Sciences
- Environmental Science
- Mathematical Sciences
- Molecular Biology and Biotechnology
- Physics

In addition, the Centre for Yoga and Sports Sciences is also currently attached to the School of Sciences. All the departments under the School of Sciences are DST-FIST and UGC-SAP supported. The departments under the School altogether offer a total of 12 academic programmes in the regular mode, apart from the PhD programmes. Each Department offers discipline specific UG, PG and PhD. programmes. The departments of Chemical Sciences, Mathematical Sciences, Molecular Biology and Biotechnology and Physics offer 05-Yr Integrated MSc programmes with an intake of 25 students each. The 04-Yr Integrated BSc BEd programme is offered by the departments of Chemical Sciences, Mathematical Sciences and Physics with support from the Department of Education under the School of Humanities and Social Sciences. Around 335 PhD students were on the roll under the School of Sciences during 2022-2023.

There are 75 members of faculty including 34 Professors, 08 Associate Professors and 33 Assistant Professors in the five departments of the School. There is also a few adjunct professors and DST-INSPIRE faculty members.

The faculty members of the School published close to 350 research papers in high quality peer-reviewed international and national journals and a few books during 2022-2023. Some of these are in very high impact factor journals such as Nature, ACS Chemical Reviews etc.

The faculty members of the School have been conducting research projects funded by various external agencies. Around 70 research projects were ongoing during 2022-2023. The departments have active research collaboration with several reputed national and international institutes and organizations. Dr Moon Moon Devi of the Department of Physics was conferred the prestigious 'Young Scientist / Innovator Award 2022' of the Assam Science, Technology and Environment Council. Prof Pabitra Nath of the same Department was awarded the prestigious JSPS fellowship for 2022-23. Prof RC Deka of the Department of Chemical Sciences joined as the Vice-Chancellor of the Cotton University, Assam in September, 2022.

Alumni of the school are well placed in various academic institutions and industries, mainly in India and this has continued in 2022-2023 as well. Many of them have joined higher studies in reputed institutes in India and abroad. The number of students that have qualified for NET, GATE and SLET, from the School of Sciences, continues to increase every year. Each Department regularly organizes conferences/workshops and outreach programmes.

Important Activities

- The Department of Physics celebrates the completion of 25th year of its establishment. The Silver Jubilee was celebrated through organizing lectures, workshops, Seminars and many other activities.
- InSCIgnis 2023, the tenth edition of the annual science festival was organized by the Students' Science Council under the aegis of the School of Sciences during 27 February-01 March, 2023 coinciding with the National Science Day. With the theme *Future through the vision of Science*, InSCIgnis 2023 was participated by several luminaries and resource persons as well as a large number of student participants. The inaugural function was graced by Dr Tapan Saikia, renowned oncologist and recipient of Assam's highest civilian award Assam Baibhab, 2023 and also by Dr Purnima Devi Barman noted wildlife biologist and winner of Whitley Award and Nari Shakti Puraskar of the Government of India. All the departments under the School of Sciences organized National Seminar/Symposium during the event. The ninth edition of Anunaad, the bi-lingual annual science magazine of the Students' Science Council was also released during the festival.

Personnel of the Dean's Office

Dean of the School

Debajit Hazarika, PhD

Professor, Department of Mathematical Sciences

Email: debajit@tezu.ernet.in

MTS

Mohendra Das

Email: mohen31@tezu.ernet.in

DEPARTMENT OF CHEMICAL SCIENCES

THE DEPARTMENT

The Department of Chemical Sciences aspires to be recognized as the one of the best departments in Chemical Science in India with acknowledged excellence in research, teaching, and outreach activities. The Department was established in 1997, with the prime objective of creating manpower in different areas of Chemical Sciences. Initially, the Department offered a MSc program in Polymer Science which was converted to MSc in Applied Chemistry in 2006 to 2009. The Department started a five-year Integrated MSc in Chemistry in 2009, MSc in Chemical Sciences in 2010 (renamed as MSc in Chemistry in 2013) and Integrated BSc BEd in Chemistry in 2011. The Department also offers PhD program in several important areas of research in Chemical Sciences including interdisciplinary pursuits.

The mission of the Department is to provide high quality academic environment and to perform cutting edge research in different areas of chemical sciences. An integral part of our mission is to make the knowledge publicly available through publications, scientific and public presentations, conferences in combination with high-quality teaching and training of graduate and postgraduate students.

ACADEMIC PROGRAMMES AND STUDENT INTAKE

Academic Programme	Intake
Integrated MSc in Chemistry	25
Integrated BSc BEd in Chemistry	13
MSc in Chemistry	30
PhD in Chemical Sciences	Variable (27 in 2022-23)

THRUST AREAS

- Materials for Energy and Environment
- Catalysis and Organometallic Chemistry
- Medicinal and Pharmaceutical Research
- Polymer Chemistry
- Computational Chemistry

MAJOR FACILITIES/EQUIPMENT AVAILABLE

- LC-MS, Agilent, (FIST Funded)
- Thermal Analyzer, Shimadzu, (FIST Funded)
- CHN Analyzer, Perkin Elmer (FIST Funded)
- FTIR spectrophotometer, PerkinElmer
- Chemisorption Analyzer, (FIST Funded)
- Micro Extruder, thermo Fisher (FIST Funded)
- Automated Compression Press, S5 Type, Santac
- Polarizing Microscope, Olympus
- UV-Visible Spectrophotometer, Shimadzu
- Universal Testing Machine, 10 KN Zwick
- Rheometer, Bohlin Instruments
- High performance computational facilities

- Digital Polarimeter
- Tabletop Magnetometer
- Single Screw Laboratory Extruder
- Cyclic Voltameter
- Cyclic Voltameter with Rotating Disk Electrode
- Atomic Absorption Spectroscopy
- Research Lab: 15
- Teaching Lab: 09
- Computation Facilities in Teaching Lab: 01
- Computation Facilities in Research Lab: 02

MAJOR RESEARCH AND DEVELOPMENT FINDINGS

Faculty/Researcher	Salient Research Findings
NS Islam	<ul style="list-style-type: none"> • Developed highly efficient, recyclable and sustainable transition metal based heterogeneous catalyst systems for organic oxidations such as (i) oxidation of biomass derived 5-Hydroxymethylfurfural (HMF) to afford selectively 5-hydroxymethyl-2-furancarboxylic acid (HMFA) (ii) for selective epoxidation of olefins (iii) Selective hydroxylation of phenol.
TK Maji	<ul style="list-style-type: none"> • A drug delivery system using Soy flour, MMT and MgO nanoparticles has been prepared, both with and without glutaraldehyde as crosslinker. Curcumin, an antidiabetic drug, was loaded on the said complex. The effect of variation of MgO nanoparticles, MMT and crosslinker on yield, drug loading, swelling and drug release has been studied in both acidic as well as basic pH. Characterization of the nanoparticles has been done by IR, XRD and SEM. Glucose uptake assay and MTT assay have been performed to test the efficacy and cytotoxicity of the nanoparticles respectively. • Composites were prepared from MAESO as resin, coconut fiber as reinforcing agent and using different crosslinkers in varying percentages. The effect of citric acid, itaconic acid and tannic acid as crosslinkers were studied in three varying percentages (5 wt%, 10 wt% and 15 wt%) each. The successful preparation of the resin was confirmed from NMR and FTIR techniques. The composites prepared were characterized by FTIR, TGA and DSC. The swelling behavior of the composites in acidic and basic media was analyzed. From the analysis of the composites, the system which showed highest enhancement was considered for further work. • Composites were prepared with Maleanated Acrylated Epoxidized Soybean Oil (MAESO) resin as matrix, betel nut husk fibers as the reinforcing agent and varying wt% of the crosslinker. The effect of crosslinker, tannic acid (TA) was studied. Composites were prepared using 3, 5 and 7 wt% of TA, resin MAESO and betel nut husk fiber in the compression mold at 160 °C. The resin was prepared successfully, used for preparation of composites and the composites prepared were characterized by FT-IR, TGA, chemical resistance test, water

	uptake studies, tensile strength, SEM, hardness (shore D). The composite prepared with 5 wt% TA showed overall improvement in properties.
AJ Thakur	<ul style="list-style-type: none"> Encapsulation of iron oxide (Fe_3O_4)-based nanoparticles (NPs) with Au NPs holds a promising scope for catalysis, which overcomes the hindrance of the inherent hydrophilic surface of iron species and facilitates the easy separation of colloidal Au NPs. As such, iron oxide-based NPs were encapsulated by Au NPs to form core-shell structures ($\text{Fe}_3\text{O}_4/\text{Au}$ NPs) followed by further immobilization on in situ synthesized reduced graphene oxide (rGO) to yield $\text{Fe}_3\text{O}_4/\text{Au}$ NPs-rGO for increased stability. $\text{Fe}_3\text{O}_4/\text{Au}$ NPs-rGO was evaluated for the oxidation of NH-free indoles to synthesize isatins, potential precursors of SARS-CoV-2 protease inhibitors. Furthermore, the application of isatin was explored with the $\text{Fe}_3\text{O}_4/\text{Au}$ NPs-rGO catalysed synthesis of uracil-based spirooxindoles (potential precursors of anti-cancer compounds) via mild reaction conditions and short reaction times with high yields. A simple, metal-free regioselective N2-arylation strategy for 5-substituted-1H-tetrazoles with diaryliodonium salts to access 2-aryl-5-substituted-tetrazoles has been developed. Diaryliodonium salts with a wide range of both electron-rich and previously challenged electron-deficient aryl groups are applicable in this method. Diversely functionalized tetrazoles are tolerable also. A one-pot system has also been developed to synthesize 2,5-diaryltetrazoles directly from nitriles. The synthetic utility of this method is further extended to late-stage arylation of two biologically active molecules. We have demonstrated the application of unsymmetrical iodonium salts towards S-arylation of heterocyclic thiols (especially tetrazole-5-thiols and pyridine-2-thiol) under metal-free conditions, affording a diverse range of di(hetero)aryl thioethers in moderate to good yields. A detailed study on the effects of counter-anions and the auxiliary of iodonium salts was conducted. Suitable auxiliary selection of the unsymmetrical iodonium salt offers flexibility for a wide range of aryl moieties and its incorporation into S-arylation. The DFT study supports the experimental observations of chemoselective arylation. 1,3-dimethylbarbituric acid-H_2O mediated liquid assisted mechanochemical route has been developed for the synthesis of a wide array of 5-aryl/spiro-1,2,4-triazolidine-3-thiones, via in situ generation of benzylidene/alkylidene barbiturates, followed by tandem, base-driven Michael addition reaction and rearrangement of the pyrimido[4,5-e][1,2,4]triazepine intermediate. The method is an application of mechanochemistry in organic synthesis. It is efficient, easy to follow and avoids the tedious steps of catalyst preparation and chromatographic separation. Moreover, the protocol is compared to "on-water", room temperature approach and the reaction mechanism has been revisited with the aid of experiments.
AK Phukan	<ul style="list-style-type: none"> Studied the potential of ylides in stabilizing monovalent group 13 carbenoids.
R Borah	<ul style="list-style-type: none"> Development of polyoxometalate-ionic liquid hybrid material for photodegradation of pesticides. Electrochemical study of Bronsted acidic ionic liquids of ammonium and imidazolium cations with varied anions in molecular solvents. Multicomponent synthesis of coumarin derivatives using Bronsted

	acidic ionic liquids.
P Puzari	<ul style="list-style-type: none"> • Nano Calcium Carbonate extracted from chicken eggshell and using it in combination with reduced graphene oxide and aniline a biosensor was prepared which can detect simultaneously the mixture of uric acid, dopamine and ascorbic acid in human blood serum and urine within the pathological range. • Using the palm oil fiber as enzyme immobilization matrix, an uricase base based biosensor for uric acid detection was prepared. • A novel electrochemical method for creatinine detection in urine using its reaction with 2-NBA has been developed.
KK Bania	<ul style="list-style-type: none"> • Successful dehydrogenation of ethanol over CuO-Mg-Y for cross-aldol condensation with aryl aldehydes. • Designing of an electrocatalyst by impregnating rhodium(0) sites through zeolite-Y templation in a hybrid Rh-Ni catalyst for alcohol-oxidation with low CO poisoning. • Study of dual matrix influence on Ni(II) rich hybrid catalyst for electrochemical methanol oxidation reactions • Synthesis of an efficient CuO-Fe(III)-Zeolite-Y for oxidative alcohol-amine coupling reactions. • Scheming and synthesis of single and multiple sites Cu(II) catalysts for benzyl alcohol and catechol oxidation reactions. • Designing of tubular nickel hydroxide electrocatalyst embedded in zeolitic cobalt oxide for methanol oxidation reaction. • Finding a low cost heterogenous iron catalyst for C (1)-H functionalization of 2-naphthols with primary aromatic alcohols.
SK Das	<ul style="list-style-type: none"> • We have developed a transition-metal-free protocol for a regio- and diastereoselective synthesis of hydroxyalkyl-group embedded <i>N</i>-arylbenzo[<i>b</i>][1,4]oxazines and <i>N</i>-arylindolines based on an epoxide-opening cyclization/double Smiles rearrangement cascade of <i>p</i>-nosylamide-tethered epoxides. • We have synthesized benzothiazoxazepine-1,1-dioxide-containing fused- and linked-biheterocycles by a base-mediated, exo-selective intramolecular epoxide-opening/intramolecular nucleophilic aromatic substitution cascade of epoxide-tethered ortho-fluorobenzenesulfonamides. • We have disclosed a base-mediated [4+2] annulation of indole-2-carboxamides with 2,3-epoxy tosylates to obtain 3-substituted pyrazino[1,2-<i>a</i>]indol-1-ones in high yields in diastereoselective fashion. • We have systematically studied trifluoroethanol-mediated intramolecular cyclization of <i>N</i>-Boc-<i>N</i>-(2-(oxiran-2-yl)ethyl)amines. We observed that irrespective of whether the distal epoxide substituent is alkyl or aryl, or the epoxide is <i>cis</i>- or <i>trans</i>-configured, <i>N</i>-Boc-<i>N</i>-(2-(oxiran-2-yl)ethyl)anilines underwent 6-exo-selective cyclization to furnish 1,3-oxazinan-2-ones in high yields.
N Gogoi	<ul style="list-style-type: none"> • A series of cyano bridged heterometallic architectures of different nuclearity as well as structural topology are developed and their switchable magnetic behavior are investigated.
P Bharali	<ul style="list-style-type: none"> • Design and development of non-precious electrocatalysts and their exploration toward oxygen reduction reaction and overall water splitting for green hydrogen. • The electrocatalysts exhibit excellent activity toward the above-mentioned reactions in a wide pH range.

MM Konai	<ul style="list-style-type: none"> Dr Konai's research work focuses on the development of different strategies to combat microbial infections and resistance. A rapid emergence of resistance to conventional antibiotics is one of the biggest challenges in the field of infectious diseases. The rapid emergence of drug-resistant microbes coupled with a dwindling rate of novel antibiotics entering the clinical pipeline has created an alarming situation worldwide. Biofilm formation has further complicated the treatment of infections with conventional antibiotics. In this direction, his research group has rationally designed and developed different classes of small molecular synthetic mimics of antimicrobial peptides (AMPs), which revealed potent antimicrobial activity. Currently, his group is involved in evaluation of these classes of newly developed compounds as modern antibacterial drugs.
U Bora	<ul style="list-style-type: none"> N,N'-Dimethylurea have been developed as an efficient ligand for the synthesis of pharma-relevant motifs through Chan-Lam cross-coupling strategy. Bio-carbon-layered CuO-catalyzed reaction strategy has been developed for decarboxylative alkenylation of cyclic ethers

RESEARCH PROJECTS (BOTH ONGOING AND NEW)

Project Title	Funding Agency	Amount (in INR)	Duration	Investigator(s)
Computational Investigations Towards Designing of Main Group and Transition Metal based Systems for Dinitrogen Activation	DST-SERB	40.96 lakhs	2020 - 2022	AK Phukan
Phosphorus-stabilized highly reactive boron species: synthesis, bonding and applications.	CEFIPRA	55.42 lakhs	2023 - 2025	AK Phukan
Water purification system at Mrinaljyoti Rehabilitation Centre (MRC), Duliajan.	Oil India Ltd	2.98 lakhs	2022 - 2023	RK Dutta
Design of Zeolite-Y Supported Heterogenous Catalyst for C-C Bond Coupling Reaction.	CSIR-HRD	25.6 lakhs	2020 - 2023	KK Bania
Development of Dearomatizing Cascade Reaction Towards 3,4-Fused Indolines.	DST-SERB	39.42 lakhs	2023 - 2026	SK Das
Development of a Cu(II) mediated strategy for the sensing of fluoride ion in aqueous medium.	CSIR	15 lakhs	2019 - 2023	SP Mahanta
pH responsive switchable cyanido bridged Co-Fe molecular aggregates.	CSIR	24.64 lakhs	2021 - 2024	N Gogoi
Switchable molecular magnetic materials.	DST-SERB	38.21 lakhs	2021 - 2024	N Gogoi
Green and sustainable catalyst based on zeolites for oxidative transformation reaction	DST	12 lakhs	2019 - 2022	U Bora

Design of organic nitrile surrogates for the synthesis of aliphatic/aromatic /heteroaromatic nitriles: A reliable gateway to Azaheterocycles	CSIR	23.5 lakhs	2021 - 2024	U Bora
Applied research and development for industrial realization of lignin recycling and conversion to value-added international market products	DST	48 lakhs	2021 - 2024	U Bora
Design and fabrication of pH universal non-precious electrocatalysts for green hydrogen	M/S SHELL Ltd.	41.05 lakhs	2023 - 2024	P Bharali and U Bora
Designing of Platinum and Ruthenium nanocluster supported catalysts for H ₂ production from Glycerol: A Computational Approach	CSIR	14.42 lakhs	2021 - 2024	RC Deka
Mechanochemical synthesis of pharmaceutical solid forms to avoid degradation of moisture sensitive active pharmaceutical ingredients using combined crystal engineering and computational approaches	DST-SERB	18.30 lakhs	2022 - 2025	RC Deka
Tuning metal oxide clusters for selective catalytic hydrogenation of CO ₂ to organic acids using quantum chemical methods	DST-SERB	29.48 lakhs	2021 - 2024	RC Deka
Bioinformatics and Computational Biology Centre for Microbial Biodiversity in Assam and Arunachal Pradesh	DBT	75 lakhs	2022 - 2025	RC Deka
Self-healing and Self-cleaning epoxy thermosetting nanocomposites	DRDO	28.85 Lakhs	2021 - 2024	N Karak SK Das
Crystallization of Drugs Templated by Mimetic Organogels & Functional Surfaces	DST-SERB	29.30 Lakhs	2020 - 2023	BC Sarma
Combination Drug Technology for Improved Healthcare	ASTEC	18 Lakhs	2022 - 2024	BC Sarma

PUBLICATIONS BY FACULTY AND STAFF MEMBERS

JOURNAL PUBLICATIONS

Ali AA, Dutta RK, Traditional science in pigments and recipe of painting woodcarving in medieval Assam, India, *Journal of Coating Technology and Research*, 1-15, 2023. <https://doi.org/10.1007/s11998-023-00765-8>

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BOOKS

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PUBLICATION OF ARTICLES IN OTHER FORMS (e.g., PERIODICAL, MAGAZINE, NEWSPAPER)

Ozah B, খাদ, গ্ল্যাউচেমিক সূচক আৰু স্বাস্থ্য. *আইনা জীবনৰ*, 8-11, 5(8) 2022, Pride East entertainments Pvt. Ltd., Guwahati, Assam.

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Ozah B, Obesity and Nutritional Management, *Anunad*, 13-16, 2023, Tezpur University, Assam.

PUBLICATION OF PATENTS

Inventor(s)	Patent Title	Application/ Patent Number	Published/ Granted	Country
RK Dutta, C Bezbaruah, P Nath	Removal of Arsenic from Ground Water by Capsule Technique	202031002271	27 March 2023	India

PEDAGOGY AND CONTENT DEVELOPMENT

Molecular Symmetry and Group Theory by N. Gogoi < https://www.youtube.com/playlist?list=PLxn-hFtWYzEyrVR_NB1WOaPO5LaYvn2LE>

Organometallic Chemistry by N. Gogoi < <https://www.youtube.com/playlist?list=PLxn-hFtWYzEwCaUYye5I7UzSGsZWheS34>>

Chemistry of Main Group Elements by N. Gogoi < <https://www.youtube.com/playlist?list=PLxn-hFtWYzEyCu8d1zgL2iTAIBMXUS-ON>>

CONFERENCE/WORKSHOP/SYMPOSIUM/SEMINAR ATTENDED

Name of Faculty/Staff Member	Purpose of Attending	Title of the Event	Date/Period	Organizer and Venue (Online/Offline)
Debang Bhusan Bora and R Borah	Presented a poster, <i>Micellization, Thermodynamic and Surface Property Studies of Anionic Surfactant in Aqueous Solution of Brønsted Acidic Ionic Liquids</i>	National Seminar on Research at the Interface of Chemical Biological and Material Sciences	10 March 2023	Department of Chemical Sciences, Tezpur University in collaboration with Students Science Council, Tezpur University
Sukanya Das and R Borah	Presented a poster, <i>One Pot Synthesis of Leaf-like Nickel Sulphide Nanosheets Employing Chloronickellate Ionic Liquids and Investigation of Their Photocatalytic Activity</i>	National Seminar on Research at the Interface of Chemical Biological and Material Sciences	10 March 2023	Department of Chemical Sciences, Tezpur University in collaboration with Students Science Council, Tezpur University
Sangeeta Kalita	Presented a poster, <i>Designing of Mn based Functionalized. Imidazolium Organic Salt and Its Application as a Dual Oxidant Catalyst for Controlled Oxidation of Benzyl Alcohols to Benzaldehydes</i>	National Seminar on Research at the Interface of Chemical Biological and Material Sciences	10 March 2023	Department of Chemical Sciences, Tezpur University in collaboration with Students Science Council, Tezpur University(offline)
Jurita Baishya,	Presented a poster,	International	01-03 March	Department of

Shekhar Jyoti Hazarika and TK Maji	Effect of Citric Acid as Crosslinker on the properties of coir fiber/modified epoxidized vegetable oil based composites	Conference On Recent Advances In Materials Chemistry And Catalysis – RAMCC 2023	2023	Chemistry, Dibrugarh University, Dibrugarh, Assam.
Nupur Borah and TK Maji	Presented a poster, Effect of Tannic Acid as crosslinker on waste betel nut husk fiber reinforced modified epoxidized soybean oil based composites	International Conference On Recent Advances In Materials Chemistry And Catalysis – RAMCC 2023	01-03 March 2023	Department of Chemistry, Dibrugarh University, Dibrugarh, Assam.
Shekhar Jyoti Hazarika and TK Maji	Presented a poster, Role of Natural waste fibers in improving various properties of synthetic polymers	International Conference On Recent Advances In Materials Chemistry And Catalysis	01-03 March 2023	Department of Chemistry, Dibrugarh University, Dibrugarh, Assam.
Jurita Baishya and TK Maji	Oral Presentation: Citric acid crosslinked green composites based on modified epoxidized linseed oil and coir fiber	Research at the Interface of Chemical, Biological and Material Sciences	10 March 2023	Department of Chemical Sciences, Tezpur University, Tezpur, Assam
RC Deka	Chaired a session	Recent Advances in Materials Chemistry and Catalysis	03 March 2023	Department of Chemistry, Dibrugarh University, Dibrugarh, Assam
U Bora	Bimetallic Pd-Ag nanoclusters supported micro-cellulose bio-system: A photocatalytic avenue towards Suzuki-Miyaura coupling of nitrogen heterocycles	International conference on Recent advances in Materials Chemistry and Catalysis	01-03 March 2023	Dibrugarh University
U Bora	In Search of Safer Cyanating Sources for the Synthesis of Aryl Nitriles	National conference on Contemporary Facets in Organic Synthesis	01-04 December 2022	IIT Roorkee
U Bora	A pivotal role of CAN in the synthesis of aryl nitriles	National Conference on Science for society, environment	24-26 November 2022	CSIR-NEIST Jorhat

		and sustainability		
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TALKS BY THE FACULTY ABROAD AND IN INDIA

Name of Faculty Member	Title of the Talk	Title of the Event	Date	Organizer and Venue
AJ Thakur	<i>STEM Facilities at Tezpur University</i>	ISTEM Conclave, IISc, Bangalore,	19-20 February 2023	ISTEM, IISc, Bangalore
NS Islam	<i>Macromolecular metal complexes as potent enzyme inhibitors and bio-inspired catalysts</i>	Chemical Education in Self Reliance: A Global Perspective in collaboration with the Royal Society of Chemistry (RSC)	23 June 2022	Royal Society of Chemistry in collaboration with NEIST, Jorhat Venue: Rajiv Gandhi University, Arunachal Pradesh
NS Islam	Keynote speech, <i>Organic-solvent free oxidations over eco-friendly Nb and Ta based catalysts: A sustainable approach</i>	National Conference on Science for Society Environment & Sustainability	24-26 November 2022	CSIR-NEIST, Jorhat, Assam
NS Islam	Keynote speech <i>Polymer immobilized metal complexes as potential catalytic and biochemical applications</i>	Modern Trends in Inorganic Chemistry	14-17 December 2022	Department of Chemistry, Institute of Science, Banaras Hindu University, Varanasi, India
NS Islam	Keynote speech <i>Empowering women and girls in Science, challenges and opportunities</i>	International Day of Women and Girls in Science	11 February 2023	Indian National Young Academy of Science (INYNAS) in collaboration with Tezpur University
NS Islam	<i>Innovation and technology for gender equality</i>	International Womens's Day, 2023	14 March 2023	Defence Research Laboratory, Tezpur, Assam
N Gogoi	<i>Protonation Induced Spin State Switching in Cyano Bridged Architectures</i>	International Conference on "Recent Advances in Materials Chemistry and Catalysis"	01 March 2023	Department of Chemistry, Dibrugarh University
N Gogoi	<i>Chemical Design of Stone with a Soul and Their Application in Devices</i>	National Science Day 2023	28 February 2023	Jagannath Boruah College Jorhat and Assam Science Society Jorhat Branch
N Gogoi	<i>Engineering Water Processable Cyanido Bridged Extended Structures</i>	2nd Asian Conference on Molecular Magnetism	07 December 2022	Department of Chemistry, IISER Bhopal

N Gogoi	<i>Molecular Magnets: Emerging Materials for Devices</i>	Hands -on Training Programme on Computation, Fabrication and Characterization of Devices and Systems	14 June 2022	Department of Electronics & Communications Engineering, Tezpur University
N Gogoi	<i>Role of Structural Distortions on Magnetic Anisotropy in Pentagonal Bipyramidal Ni(II) Complexes</i>	National Conference on Advances in Sustainable Chemistry and Material Science	29 April 2022	Department of Chemistry, Bodoland University
RK Dutta	<i>Challenges to sustainability of rural technology for purification of drinking water: Experiences with Arsiron Nilogon and Fluoride Nilogon</i>	World Water Day	22 March 2023	Institute of Engineers, Guwahati
RK Dutta	<i>Fluoride Nilogon: Potential Rural Technology for Removal of Fluoride from Drinking Water in Rajasthan</i>	Emerging Trends in Water Quantity & Quality Management-V	22-23 March 2023	Poornima University, Jaipur
RK Dutta	<i>Arsiron Nilogon and fluoride Nilogon: Empowering people to acquire safe drinking water</i>	Chemical Sciences for Sustainability	26 November 2022	Pragjyotish College, Guwahati
RK Dutta	<i>Arsiron Nilogon and fluoride Nilogon: Empowering people to acquire safe drinking water</i>	Water Treatment Management and artificial intelligence	19 November 2022	Rajakiya Engineering College, Ambedkar Nagar, UP
RC Deka	<i>Hybrid QM/MM Approach in Modelling Zeolite Catalysis</i>	Recent Advances in Materials Chemistry and Catalysis	03 March 2023	Dibrugarh University
BC Sarma	<i>Ethics in Research</i>	Week Long Faculty Development Program on Research Methodology	24-30 May 2023	IQAC and IIC, Kaliabor College, Nagaon, Assam
BC Sarma	<i>Single Crystal X-ray Diffraction</i>	7 Day Hands on Training on Analytical Approaches for Characterization Food and	24 February - 03 March 2023	DST in Collaboration with Department of FET, Tezpur University

		Biomaterials		
BC Sarma	<i>Powder X-ray Diffraction</i>	7 Day Hands on Training on Analytical Approaches for Characterization Food and Biomaterials	24 February - 03 March 2023	DST in Collaboration with Department of FET (under STUTI program), Tezpur University
BC Sarma	<i>X-ray Diffraction Methods</i>	7 Day STUTI Training Program	31 October - 07 November 2022	Department of Chemical Sciences and SAIC, Tezpur University in association with SAIF, Punjab University, Chandigarh
BC Sarma	<i>Biodiversity, Design a Science Project</i>	30 th National Children Science Congress	16-19 December 2022	NCSTC and DST, India supported by Science Technology and Climate Change Department, Assam

AWARDS/HONOURS/NOTABLE ACHIEVEMENTS

Name of Awardee	Designation of Awardee	Achievement
RC Deka	Professor	Appointed as VC of Cotton University, Guwahati, Assam

NUMBER OF STUDENTS QUALIFIED IN NET-JRF/SLET/GATE

Name of Qualifying Examination	Number of Qualified Students	Academic Programme
NET	8	MSc, PhD
GATE	11	MSc, PhD
SLET	1	MSc

NOTABLE PLACEMENT OF STUDENTS

Name of Student	Academic Programme	Placement Designation	Company/ Organization	Type of Selection (On-Campus/ Off-Campus)
Prashurya Pritam Mudoi	PhD	Assistant Professor	Dibrugarh University	Off-Campus
Chiranjita Goswami	PhD	Assistant Professor	Jagiroad College	Off-Campus
Kumar Kashyap Hazarika	PhD	Assistant Professor	University of Science and Technology Meghalaya (USTM)	Off-Campus
Debashish Sarma	PhD	Assistant Professor	Dakhin Kamrup College	Off-Campus
Mahendra Tahu	PhD	Assistant Professor	Bihali Science College, Biswanath	Off-Campus

Ambalika Phonglo	PhD	Assistant Professor	ADP College, Nagaon	Off-campus
Plaban Jyoti Sarma	PhD	Assistant Professor	Gargaon College, Sivsagar	Off-campus
Geeti Kaberi Dutta	PhD	Assistant Professor	Bahona College	Off-Campus
Rituparna Duarah	PhD	Scientist	CSIR-NEIST, Jorhat	Off-Campus

ENROLLMENT OF STUDENTS IN OTHER INSTITUTES FOR HIGHER STUDIES

Name of Student	Academic Programme (in TU)	Name of other Institute	Enrolled Academic Programme
Imon Jyoti Dutta	MSc	IISER Mohali	PhD

FACULTY MEMBERS

Professor

Nashreen S Islam, PhD (NEHU, Shillong)
Specialization/Area of Interest: Inorganic Chemistry
Email: nsi@tezu.ernet.in

Robin K Dutta, PhD (NEHU, Shillong)
Specialization/Area of Interest: Physical Chemistry
Email: robind@tezu.ernet.in

Tarun K Maji, PhD (Calcutta University)
Specialization/Area of Interest: Polymer Chemistry
Email: tkm@tezu.ernet.in

Niranjan Karak, PhD (IIT Kharagpur)
Specialization/Area of Interest: Polymer Science and Technology
Email: nkarak@tezu.ernet.in

Ramesh Ch Deka, PhD (NCL Pune)
Specialization/Area of Interest: Computational and Theoretical Chemistry
Email: ramesh@tezu.ernet.in

Ashim J Thakur, PhD (CSIR-NEIST Jorhat)
Specialization/Area of Interest: Organic Chemistry
Email: ashim@tezu.ernet.in

Ashwini K Phukan, PhD (Hyderabad University)
Specialization/Area of Interest: Computational Inorganic, Organometallic Chemistry
Email: ashwini@tezu.ernet.in

Ruli Borah, PhD (Gauhati University)
Specialization/Area of Interest: Organic Chemistry
Email: ruli@tezu.ernet.in

Panchanan Puzari, PhD (IIT Guwahati)

Head of the Department

Specialization/Area of Interest: Physical Chemistry
Email: pancha@tezu.ernet.in

Associate Professor

Utpal Bora, PhD (CSIR-NEIST Jorhat)
Specialization/Area of Interest: Organic Chemistry
Email: ubora@tezu.ernet.in

Kusum K Bania, PhD (Tezpur University)
Specialization/Area of Interest: Inorganic Chemistry, Catalysis
Email: kusum@tezu.ernet.in

Assistant Professor

Pankaj Bharali, PhD (CSIR-IICT Hyderabad)
Specialization/Area of Interest: Inorganic Chemistry
Email: pankajb@tezu.ernet.in

Nayanmoni Gogoi, PhD (IIT Bombay)
Specialization/Area of Interest: Inorganic Chemistry
Email: ngogoi@tezu.ernet.in

Bipul C Sarma, PhD (University of Hyderabad)
Specialization/Area of Interest: Organic Chemistry
Email: bcsarma@tezu.ernet.in

Sajal K Das, PhD (JNU New Delhi)
Specialization/Area of Interest: Organic Chemistry
Email: sajalkd@tezu.ernet.in

Sanjeev P Mahanta, PhD (University of Hyderabad)
Specialization/Area of Interest: Physical Chemistry
Email: spm@tezu.ernet.in

Mohini M Konai, PhD (JNCASR, Bangalore)
Specialization/Area of Interest: Organic Chemistry, Medicinal Chemistry
Email: mmkonai@tezu.ernet.in

Guest Faculty

Nand K Gour, PhD (Gorakhpur University)
Specialization/Area of Interest: Physical Chemistry
Email: nkgour1@tezu.ernet.in

Anup Choudhury, PhD (Tezpur University)
Specialization/Area of Interest: Inorganic Chemistry
Email: anupmm@tezu.ernet.in

Sumitra Bhattarai, PhD (NEHU Shillong)
Specialization/Area of Interest: Physical Chemistry
Email: sumitra@tezu.ernet.in

Munmi Sarma, PhD (Autonomous University of Barcelona, Spain)
Specialization/Area of Interest: Inorganic Chemistry
Email: munmi93@tezu.ernet.in

Adjunct Faculty

M Lakshmikantam, PhD (Kurukshetra University)
Specialization/Area of Interest: Inorganic Chemistry
Email: kantam@tezu.ernet.in

STAFF MEMBERS***Senior Technical Assistant***

Biraj J Borah, PhD (Tezpur University)
Email: biraj@tezu.ernet.in

Technical Assistant

Raju Borah, PhD (Tezpur University)
Email: raju@tezu.ernet.in

Nipu Dutta, PhD (Tezpur University)
Email: nipu@tezu.ernet.in

Sankur Phukan
Email: sankar@tezu.ernet.in

Laboratory Assistant

Manuranjan Sarma
Email: mranjan@tezu.ernet.in

Biplob Ozah
Email: bipozah@tezu.ernet.in

Assistant

Pranati Boro
Email: pranati@tezu.ernet.in

MTS

Khogen C Das
Email: khogen@tezu.ernet.in

DEPARTMENT OF ENVIRONMENTAL SCIENCE

THE DEPARTMENT

Initially established as a Centre for Environmental Science in 2003, the Centre was converted to the Department of Environmental Science in 2004, with the objective of imparting education on regional and global environmental issues. The curriculum for the MSc Programme focuses on all important aspects of Environmental Science covering contemporary problems of natural resource conservation and environmental quality. Areas of research includes, Atmospheric processes, Environmental pollution, Greenhouse gas emission, Riverine hazards, Hydrogeochemistry, Geomorphology, Vulnerability & adaption, Natural hazards, Climate change and its impacts on agroecosystem and forest ecosystem, Plant-insect interactions, Nanotechnology in environmental research, Waste management, Vermicomposting, Pollution remediation, Ecosystem dynamics, Biodiversity conservation and Atmospheric system modeling. The Department is a recipient of grant under UGC-SAP and DST-FIST.

ACADEMIC PROGRAMMES AND STUDENT INTAKE

Academic Programme	Intake
MSc in Environmental Science	38
PhD in Environmental Science	Variable (12 in 2022-23)

TRUST AREAS

- Environmental Assessment and Modelling
- Biodiversity and hydro-geomorphic studies
- Climate change dynamics, sustainable agriculture, and vulnerability assessment

MAJOR FACILITIES/EQUIPMENT AVAILABLE

- Inductively Coupled Plasma Mass Spectrophotometer (ICP-MS)
- Carbon Hydrogen Nitrogen and Sulphur Analyzer (CHNS)
- High-performance Liquid Chromatography (HPLC)
- Ion Chromatography (IC)
- High Performance Computing Systems (HPC)
- Gas Chromatography–Mass Spectrometry (GC-MS)

Department includes minor instruments like Laser Leaf Area Meter with Root Measurement Attachment, Portable Photosynthesis Systems, Gas Chromatograph, TOC Analyzer, ELISA Reader, Aquaculture facility, Continuous Air Pollution Monitoring Station, UV-Visible Spectrophotometer, Ion meter, Repairable dust sampler with gaseous sampling attachment, High Speed Refrigerated Centrifuge, Sartorius RO System, Sartorius Ultra-Pure Water Purification System, HOB0 Pro V2 Tea/RH data logger, Flame Photometer, Electrophoresis gel unit and Fluorescence Microscope with Camera & Software. Department also have GIS laboratory facilitate with Arc GIS Master Lab Kit and ERDAS Software, TNTmips and plant culture house.

RESEARCH PROJECTS (BOTH ONGOING AND NEW)

Project Title	Funding Agency	Amount (in INR)	Duration	Investigator(s)
Microplastic distributions in soils under different land use in Sonitpur district in the Brahmaputra Catchment	DST-SERB	28 Lakh	2023-2026	S Handique
Earthworm gut microbe mediated Carcinogenic polycyclic aromatic hydrocarbons (CPAHs) remediation in contaminated soil	Twinning DBT Project (NER BPMC)	56.39 Lakh	2018-2023	RR Hoque (PI) N Gogoi (Co-PI)
Soil plant atmosphere study in relation to net CO ₂ flux from terrestrial ecosystem of Assam	Ministry of Earth Science, Govt. of India	102.79 Lakh	2019-2022	N Gogoi
Climate Change Impacts and Adaptation for a Climate Resilient North East India	Department of Science and Technology (DST) sponsored Centre for Excellence (COE) under National Mission for Sustaining the Himalayan Ecosystem (NMSHE)	6.35 Crore 849,228.84 (USD)	2020-2025	A Devi
Harnessing Endophytes and Arbuscular Mycorrhizal Fungi from Citrus Microbiome for Plant and Soil Health Management in North East India	DBT	20.82 Lakh	2021-2024	N Gogoi
Climate Change Action Programme (CCAP) scheme Long Term Ecological Observation project (LTEO) - India	MoEF and CC	45 Lakh	2020-2025	A Devi (Co-PI)
Harnessing Endophytes and Arbuscular Mycorrhizal Fungi from Citrus microbiome for plant and soil health Management in North East	DBT	20.82 Lakh	2021-24	N Gogoi

India				
Rapid in-situ conversion of urban solid wastes to valuable manure by vermicompost derived microbial consortia: Insights on earthworm gut aided microbial detoxification mechanism of metals, pesticide, and pharmaceutical residues	DST-SERB	43 Lakh	2022-2025	SS Bhattacharya (PI) and N Gogoi (Co-PI)
Ecohygrological assessment of eutrophicated water bodies - monitoring algal blooms (algal toxins), water quality and developing techniques to reduce eutrophication	DST-SERB	26.21 Lakh	2019-2022	N Gogoi (PI)
Exploiting chemical ecology for IPM: Deciphering the phyto- semiochemicals involved in Insect-Plant interactions of major crop pests of North East Region-India	DBT	54.92 Lakh	2021-2024	S Kalita (Co-PI)
Study of shifting cultivation and associated problems in Meghalaya: physicochemical and geospatial approach	DST-SERB	35. 49 Lakh	2020-2023	P Deka

PUBLICATIONS BY FACULTY AND STAFF MEMBERS

JOURNAL PUBLICATIONS

Dutta W, Misra D, Chowdhury P, Galarza Prieto JC, Das S, Marimuthu K, Ray P. The mycobiota associated with the weed water hyacinth *Pontederia crassipes* in Kolkata, India, with emphasis on biological control of the macrophyte, *Biocontrol Science and Technology*, 1-22, 2023.

Kamaraj C, Vimal S, Ragavendran C, Priyadharsan A, Marimuthu, K, Malafaia G. Traditionally used medicinal plants mediate the biosynthesis of silver nanoparticles: Methodological, larvicidal, and ecotoxicological approach, *The Science of the Total Environment*, 162402-162402, 2023

Naveenkumar S, Kamaraj C, Ragavendran C, Vaithiyalingam M, Sugumar V, Marimuthu, K. *Gracilaria corticata* red seaweed mediate biosynthesis of silver nanoparticles: larvicidal, neurotoxicity, molecular docking analysis, and eco-friendly approach, *Biomass Conversion and Biorefinery*, 1-23. 2023

Rahman A, Mojumdar SM, Rahman AS, Ahmed T, Marimuthu K. Plastic pollutions in the ocean: their sources, causes, effects and control measures, *Journal of Biological Studies*, 6 (1): 37-52, 2023

Nath A, Baruah N, Nonglait ML, Deka P. Biological contaminants in indoor environments of educational institutions, *Aerobiologia*, 39(1): 1-20, 2023

Baruah N, Gogoi N. Contrasting impact of soil amendments on bioavailability, mobility and speciation of zinc in an acidic sandy loam soil, *South African Journal of Botany*, 154: 309–318, 2023

Bhuyan PM, Borah S, Bhuyan BK, Hazarika S, Gogoi N, Gogoi A, Gogoi P. Fe₃S₄/ biochar catalysed heterogeneous Fenton oxidation of organic contaminants: Hydrogen peroxide activation and biochar enhanced reduction of Fe (III) to Fe (II), *Separation and Purification Technology*, 312:123387, 2023

Borah P, Gogoi N, Asad SA, Rabha AJ, Farooq M. An insight into plant growth-promoting rhizobacteria-mediated mitigation of stresses in plant, *Journal of Plant Growth Regulation*, 42(5):3229–3256, 2023

Deka J, Sarma KP, Gupta N, Ahmed MS, Mazumder MJ, Hoque RR. Polycyclic aromatic hydrocarbons in groundwater of oil-rich regions of upper Brahmaputra Valley, India: linkages of colloidal transport, *Arabian Journal of Geosciences*, 16(1):66, 2023

Amir F, Muchlisin ZA, Nur FM, Fadli N, Siti-Azizah MN, Wilkes M, Marimuthu K. Effect of increasing water temperature on the physiology and gill histology of Barramundi, *Lates calcarifer* (Pisces, Perciformes) fingerlings, *International Aquatic Research*, 14(4):263-273, 2022

Asadujjaman M, Rahman Ma, Mojumdar S, Yeasmine S, Hasan Mb, and Marimuthu K. Present status, prospects and conservation of hilsa, *tenulosa ilisha* (clupeiformes: clupeidae) fishery in Bangladesh, *Uttar Pradesh journal of zoology*, 43(21):74-83, 2022

Ganesh AS, Patki MB, Hruaii V, Lalengkimi R, Zuali L, Marimuthu K, Tochhawng L, Zothanzama J, Senthil Kumar N, Zuala S. A study of rural domestic helpers' knowledge, attitude, and practice of COVID-19 in Mizoram, India, *Asian Journal of Medical Sciences*, 13(12), 2022

Khundrakpam N, Nonglait ML, Deka P. Community involvement and gender role in shifting cultivation of Northeast India, *ENVIS Centre on Himalayan Ecology*, 30: 73-75, 2022

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Hussain S, Hoque RR. Biomonitoring of metallic air pollutants in unique habitations of the Brahmaputra Valley using moss species—*Atrichum angustatum*: Spatiotemporal deposition patterns and sources, *Environmental Science and Pollution Research*, 29(7):10617-10634, 2022

Malunguja GK, Thakur B, Devi A. Relationship between forest biodiversity attributes and potential carbon stocks in dry tropical reserve forests of Assam, northeast India, *Environmental and Experimental Biology*, 19(4):231–243, 2022

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Sah RK, Kumar DN, Das AK. Avulsion distribution on rivers in the Himalayan foreland region, *Hydrological Sciences Journal*, 67(14): 2175-2190, 2022

RK Sah, Kumar DN, Das AK. Channel evolution of the Himalayan tributaries in northern Brahmaputra plain in recent centuries. *Acta Geophys*, 70:1317–1330, 2022 .

Saha A, Handique S. Variation of soil organic carbon in a university campus in temperate North-eastern India, *Environmental Challenges*, 7:100493, 2022.

Sarkar A, Gogoi N, Roy S. Bisphenol-A incite dose-dependent dissimilitude in the growth pattern, physiology, oxidative status, and metabolite profile of *Azolla filiculoides*, *Environmental Science and Pollution Research*, 29(60):91325–91344, 2022.

Sharma B, Jia S, Polana AJ, Ahmed MS, Haque RR, Singh S, Sarkar S. Seasonal variations in aerosol acidity and its driving factors in the eastern Indo-Gangetic Plain: A quantitative analysis, *Chemosphere*, 305:135490, 2022.

Verma S, Kim K-H, Kumar N, Bhattacharya SS, Naushad M, Dutta M. Amine-amide functionalized graphene oxide sheets as bifunctional adsorbent for the removal of polar organic pollutants, *Journal of Hazardous Materials*, 429:128308, 2022.

PUBLICATION OF BOOK CHAPTERS

Handique S, Saha A, Saikia, KK, Gogoi N. Agriculture Wastes. In: Agriculture Waste Management Bioresource (Eds. Singh S, Singh P, Sharma A, Choudhury M.), 2023, <https://doi.org/10.1002/9781119808428.ch4>

Baroowa B, Paul S, Gogoi N. Role of Phosphorus in Imparting Abiotic Stress Tolerance to Plants. In: Climate Change and Agriculture, (Eds. Benkeblia N.), 2022, <https://doi.org/10.1002/9781119789789.ch11>

Deka P, Gohain M, Bhuyan N, Gogoi N, Kataki R. Utilization of Biowastes in Green Chemistry. In Climate Change and Agriculture, (Eds. Benkeblia N), 2022, <https://doi.org/10.1002/9781119789789.ch16>

Hussain S, Hoque RR. Ecological and Natural-Based Solutions as Green Growth Strategies for Disaster and Emergency Management of Air Pollution Extremes. In: Extremes in Atmospheric Processes and Phenomenon: Assessment, Impacts and Mitigation (Eds. Saxena P, Shukla A, Gupta AK), Disaster Resilience and Green Growth. Springer, Singapore, 2022, https://doi.org/10.1007/978-981-16-7727-4_16

Hussain S, Bharali P, Koushik B, Hoque RR. Bioaccumulation of Metals in Lichens and Mosses Understanding Atmospheric Deposition, Metal-induced Modifications and their Suitability as Biomonitors and Bioremediators. In: Bioremediation of Toxic Metalloids, 57-80, CRC Press, 2022, e ISBN: 9781003229940.

Sarma B, Gogoi L, Gogoi N, Kataki R. Crop plants under metal stress and its remediation. In: Plant Stress: Challenges and Management in the new decades, Springer, 2022, DOI http://dx.doi.org/10.1007/978-3-030-95365-2_3.

Handique S. Microplastics in Freshwater Environments–With Special Focus on the Indian Scenario. In: Plastic and Microplastic in the Environment: Management and Health Risks, (Eds. Ahamad A, Singh P, Tiwary D), Wiley , 18-33, 2022, ISBN 9781119800897.

Nath A, Deka P. A Case Study on Practices and Acute Toxicity Symptoms Associated with Pesticide Use Among the Farmers of Mid Brahmaputra Valley of Assam. In: Environmental Degradation: Challenges and Strategies for Mitigation (Eds. Singh VP, Yadav S, Yadav KK, Yadava RN). Water Science and Technology Library, vol 104. Springer, Cham, 2022, https://doi.org/10.1007/978-3-030-95542-7_16

SEMINARS/CONFERENCES/WORKSHOPS/SYMPOSIA ATTENDED

Name of Faculty/Staff Member	Title of the paper	Organized by	Date/Period, year	Place
AK Das	Spatio-temporal variability of AOD 550 nm and its driving factors over Assam	National seminar on resource sustainability and rural development: problems and prospects with special reference to north-east	09-10 September 2022.	Darrang College, Tezpur

		India organized by Darrang College		
AK Das	Performance assessment of GWR and MIR model in estimating pm10 surface concentration over Guwahati city	International conference on aerosols, air quality and climate change over Himalayan region of Uttarakhand organized by Garhwal University	04-06 November 2022	Garhwal University, Srinagar, Uttarakhand
RR Hoque	Chaired a session	Department of Environmental Science, Tezpur University	01-16 December 2022	Department of Environmental Science, TU
A Devi	Chaired a session	Department of Environmental Science, Tezpur University	19-23 December 2022	Dept. of Environmental Science, TU
A Devi	Chaired a session	Department of Environmental Science, Tezpur University	21-27 November 2022	Dept. of Environmental Science, TU

TALKS BY THE FACULTY MEMBERS ABROAD AND IN INDIA

Name of Faculty Member	Event	Date	Place
AK Das	Speaker of plenary session on an International Earth Science Conference (2022) - Sustainable Development: Challenges & the way forward.	18-19 November 2022	USTM, Meghalaya
AK Das	Climate Change Basics, Earth day seminar	22 April 2022	Darrang College, Tezpur
AK Das	National seminar on resource sustainability and rural development: problems and prospects with special reference to north-east India. Spatio-temporal variability of AOD 550 nm and its driving factors over Assam.	9-10 September 2022.	Darrang College, Tezpur
AK Das	Performance assessment of GWR and MIR model in estimating pm10 surface concentration over Guwahati city. International conference on aerosols, air quality and climate change over Himalayan region of Uttarakhand	04 - 06 November 2022	Garhwal University, Srinagar, Uttarakhand
RR Hoque	Environmental Laws and policies in India. One month certificate course on Environmental Management	17 May 2022	Department of Earth Science, USTM, Meghalaya
RR Hoque	Environmental Impact Assessment. One month certificate course on Environmental Management	16 May 2022	Department of Earth Science, USTM,

			Meghalaya
A Devi	Resource person of the Workshop on 'Advancement of Science and Development of Technology' Transformation in Life'. Celebration of National Science Day	28 February 2022	Tezpur University INSCIGNIS 2022
A Devi	Resource person' of Biodiversity Conversation for Sustainable Environment. G-20 Awareness Online Lecture	12 May 2023	5 Assam Battalion NCC, Tezpur
P Deka	Resource person in two day national seminar on Environment and Climate Change in Northeast India organized by Sibsagar College	23 August 2023	Sibsagar College, Joysagar, Assam
K Marimuthu	Resource Person of the Special Winter School on "Environment & Disaster Management"	09 March 2023	UGC and HRDC, Mizoram University, Mizoram
K Marimuthu	Resource Person of the Faculty Development Programme on Significance of Statistical Tools in Research	17 November 2022	Internal Quality Assurance Cell, School of Social Science and School of Pharmaceutical Sciences Jaipur National University, Jaipur
K Marimuthu	Resource Person of the 2 Day National workshop on Research Methodology, Data Analysis, and Statistics Using SPSS	1-2 December 2022	Department of Social Work, University of Science and Technology Meghalaya
K Marimuthu	Served as a Chairperson at the two-day International Conference on Soil, Water, and Air Pollution	27-28 October 2022	School of Environmental Studies, Cochin University of Science and Technology, Kochi-682022
K Marimuthu	Resource Person of the Online Refresher Course in Zoology and delivered a lecture on Application of Statistics in Research	14 November 2022	UGC Human Resource Development Centre, Madurai Kamaraj University, Tamil Nadu
K Marimuthu	Served as resource person and conducted a 6-Day Biomedical Statistics Workshop	27 February - 04 March 2023	Technology Enabling Centre, Department of Science and Technology, New Delhi Co-sponsored &

			facilitated by DBT Advanced State Level Biotech Hub, Mizoram University
K Marimuthu	Served as a Resource Person at the Capacity Building Programme on “Tools and Techniques for Conservation of Biodiversity”	21-27 November 2022	DST’s Centre of Excellence Department of Environmental Science, Tezpur University
K Marimuthu	Served as resource person and delivered a talk and hands-on training programme on breeding and seed production of snakehead fishes	01 March 2023	Department of Zoology, Gauhati University, Guwahati

SEMINAR/WORKSHOP/SYMPOSIA/INVITED LECTURES ORGANISED

Title	Date
National seminar on Climate change: Science and Technology Innovation	01-16 December 2022
5-day Training programme, Climate Impact Modelling Techniques	19-23 December 2022
Capacity Building Programme, Tools and Techniques for Conservation of Biodiversity	21-27 November 2022
One Day National Seminar on Advances in Environmental Science	10 March 2023

AWARDS/HONOURS/NOTABLE ACHIEVEMENTS

Best Women Faculty Award of the academic year 2022-2023 to Prof A Devi, by Nature Science Foundation, Coimbatore, Tamil Nadu on 25 February 2023.

OTHER IMPORTANT ACTIVITIES OF THE DEPARTMENT

- The Department arranged to make vermicompost from biowastes and made it available to both the campus residents and the people in the neighborhood
- World Environment Day was organized by the Department on 05 June 2022
- The Department has organized Earth Day on 22 April 2022

NUMBER OF STUDENTS QUALIFIED NET-JRF/GATE/SLET

06 students have qualified NET

NOTABLE PLACEMENTS

Name	Designation	Organization
M. Sahbaz Ahmed	Research Analyst	CEEW New Delhi
Sharfaa Hussain	Sr. Research Fellow	WII, Dehradun
Dr. Nijara Baruah	Assistant Professor	Moridhal College, Dhemaji, Assam

FACULTY MEMBERS

Professor

Apurba K Das, PhD (JNU New Delhi)
Specialization/Areas of interest: Geomorphology, Regional Climate
Email: apurba@tezu.ernet.in

Raza R Hoque, PhD (JNU New Delhi)

Head of the Department

Specialization/Areas of interest: Atmospheric Chemistry, Pollution Monitoring and Assessment
Email: rrh@tezu.ernet.in

Kasi Marimuthu, PhD (Manonmaniam Sundaranar University Tamil Nadu)

Specialization/Areas of interest: Environmental Biotechnology/Aquatic toxicology
Email: kmmuthu@tezu.ernet.in

Ashalata Devi, PhD (NEHU Shillong)

Specialization/Areas of interest: Forest ecology and biodiversity conservation
Email: kh_asha@tezu.ernet.in

Associate Professor

Nirmali Gogoi, PhD (Dibrugarh University)

Specialization/Areas of interest: Environmental Physiology of Plants (Stress Physiology), Green House Gas Emission and Carbon Sequestration from Agro-Ecosystem and Forest Ecosystem
Email: nirmali@tezu.ernet.in

Assistant Professor

Satya S Bhattacharya, PhD (Visva-Bharati University)

Specialization/Areas of interest: Solid waste recycling; vermicomposting, soil health, organic agriculture, nanomaterials in environment
Email: satya72@tezu.ernet.in

Sumi Handique, PhD (Tezpur University)

Specialization/Areas of interest: Geochemistry
Email: sumihan@tezu.ernet.in

Amit Prakash, PhD (JNU New Delhi)

Specialization/Areas of interest: Environmental System Modelling, Machine learning applications in Environmental Systems, Non-stationary Stochastic Models, Neuro-fuzzy Systems
Email: ap@tezu.ernet.in

Nayanmoni Gogoi, PhD (IIT Guwahati)

Specialization/Areas of interest: Ecohydrology, Ecosystem Functions, Nanomaterials in Environmental Applications
Email: nayanmoni@tezu.ernet.in

Santa Kalita, PhD (Gauhati University)

Specialization/Areas of interest: Zoology (Entomology), Plant- Insect interface, Pollution Biology and Health
Email: santa@tezu.ernet.in

Pratibha Deka, PhD (Tezpur University)

Specialization/Areas of interest: Air pollution, Human-Environment interaction

Email: pratibha@tezu.ernet.in

Guest Faculty

Nazrin Ullah, PhD (NIT Silchar)

Specialization/Areas of interest: Flood modeling, Flood forecasting, ANFIS, ARIMA Modeling, Water Pollution

Email: nazrin@tezu.ac.in

Madhumita Ghosh Datta, PhD (Tezpur University)

Specialization/Areas of interest: Rice ecosystems, soil science, solid waste management and biodiversity

Email: mghosh@tezu.ernet.in

Adjunct Professor

B Kalyan Chakravarthy, IAS, PhD (Osmania University)

Principal Secretary to Government, Government of Assam, Labour and Skill Employment; Entrepreneurship Development and Cooperation Departments

Email: ballepukalyan@gmail.com

STAFF MEMBERS

Senior Technical Assistant

Pranjol Goswami, MCA (Dibrugarh University)

Email: pranjol@tezu.ernet.in

Technical Assistant

Jayanta Bora, PhD (Tezpur University)

Email: jborain@tezu.ernet.in

Assistant

Anup Dutta

Email: dutta12@tezu.ernet.in

MTS

Ranjit Bora

Email: ranjit2@tezu.ernet.in

DEPARTMENT OF MATHEMATICAL SCIENCES

THE DEPARTMENT

Established in 1994, the Department of Mathematical Sciences is one of the first three departments of the University. So far, 27 batches of students have completed their MSc in Mathematics, 09 batches of students have completed Integrated MSc in Mathematics and 3 batches of students have completed Integrated BSc BEd (Major in Mathematics) from the Department. Besides this, 63 scholars have done their PhD in Mathematics from the Department. Some of our alumni are pursuing PhD programs at institutions like the University of Manitoba (Canada), Tulane University (USA), and Auburn University (USA).

ACADEMIC PROGRAMMES AND STUDENT INTAKE

Academic Programme	Intake
Integrated BSc BEd in Mathematics	13
Integrated MSc in Mathematics	25
MSc in Mathematics	53
PhD in Mathematics	Variable (08 in 2022-2023)

THRUST AREAS

- Algebra
- Number Theory
- Numerical PDE
- Operator Theory

MAJOR FACILITIES/EQUIPMENT AVAILABLE

- ICT enabled Classrooms
- Smart Classroom
- Computer lab equipped with 02 server, 28 PC
- Conference Room
- Seminar Hall
- Separate Cabins for Research Scholars

RESEARCH PROJECTS (BOTH ONGOING AND NEW)

Project Title	Funding Agency	Amount (in INR)	Duration	Investigator(s)
Point and interval estimation of some functionals of the distribution function of identically distributed random variables and their sums with applications	SERB, MATRICS Research Grant, Govt of India	6.60 lakhs	2020-2023	S Dutta
Development and applications of compact higher order discretization of the Navier-Stokes and the Boussinesq equation in time varying domains	DST-SERB	23.06 lakhs	2023-2026	S Sen

PUBLICATIONS BY FACULTY AND STAFF MEMBERS

JOURNAL PUBLICATIONS

Kalita D, Sarma K, Unicyclic 3-colored digraphs with bicyclic inverses, *Electronic Journal of Linear Algebra*, 38, 519-530, 2022.

Goswami D, Damzio PD, Yuan JY, Bir B, Two-grid finite element Galerkin approximation of equations of motion arising in Oldroyd fluids of order one with non-smooth initial data, *Computational Mathematics and Mathematical Physics*, 63(4), 2023.

Arunkumar G, Cameron PJ, Nath RK, Selvaganesh L, Super graphs on groups I, *Graphs and Combinatorics*, 38(3):100, 2022.

Hazarika H, Basnet DK, Pair of primitive normal elements of rational form over finite fields of characteristic 2, *Indian Journal of Pure and Applied Mathematics*, Vol. 54(1), 66-75, 2023.

Hazarika H, Basnet DK, On existence of primitive normal elements of cubic form over finite fields, *Algebra Colloquium*, 29(1): 151-166, 2023.

Dutta J, Basnet DK, Nath RK, Characterizing some rings of finite order, *Tamkang Journal of Mathematics*, 53(2): 97-108, 2022.

Dutta J, Basnet DK, Nath RK, Characterizing Some Rings of Finite Order, *Tamkang Journal of Mathematics*, 53(2): 97-108, 2022.

Hazarika M, Marik S, Hyponormality of slant weighted Toeplitz operators on the torus, *Filomat*, 36(9): 3091-3103, 2022.

Hazarika M, Marik S, Minimal reducing subspaces of k^{th} order slant Toeplitz operators, *Ganita*, 72(1): 1-6, 2022.

Sharma M, Nath RK, Relative g -noncommuting graph of finite groups, *Electronic Journal of Graph Theory and Applications*, 10(1):113-130, 2022.

Das PK, Kumar S, Location of burst and repeated burst error in single and adjacent sub-blocks, *TWMS Journal of Applied and Engineering Mathematics*, 12(3): 996-1003, 2022.

Pokhrel NK, Das PK, Radonjic A, Integer codes capable of correcting burst asymmetric errors, *Journal of Applied Mathematics and Computing*, 69: 771-784, 2023.

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Baruah ND, Das H, On $3k$ -regular cubic partitions, *Journal of the Korean Mathematical Society*, 59:685-697, 2022.

Baruah ND, Das H, Matching Coefficients in the series expansions of certain q -products and their reciprocals, *The Ramanujan Journal*, 59:511-548, 2022.

Pokhrel NK, Das PK, Probability of erroneous decoding for integer codes correcting burst asymmetric/unidirectional/symmetric errors within a byte and up to double asymmetric errors between two bytes, *Kuwait Journal of Science*, 50(2): 75-82, 2023.

Pokhrel NK, Das PK, Radonjic A, Integer codes capable of correcting burst asymmetric errors, *Journal of Applied Mathematics and Computing*, 69:771–784, 2023.

Das PK, Location of solid burst within two adjacent sub-blocks, *Journal of Algebraic Systems*, 11(1): 137-147, 2023.

Bhowal P, Nongsang D, Nath RK, Non-solvable graphs of finite groups, *Bulletin of the Malaysian Mathematical Sciences Society*, 45 (3): 1255–1272, 2022.

Giri S, Sen S, An improved class of three stage low-dispersion low-dissipation diagonally implicit Runge-Kutta method, *Aerospace Science and Technology*, 133:108143, 2023.

Sen S, Sheu TWH, Fourth order compact scheme for the Navier-Stokes equations on time deformable domains, *Computers & Fluids*, 257: 1-25, 2023.

Giri S, Sen S, Phase error analysis of implicit Runge-Kutta methods: New classes of minimal dissipation low dispersion high order schemes, *Journal of Scientific Computing*, 96(9):1-44, 2023.

SEMINARS/CONFERENCES/WORKSHOPS/SYMPOSIA ATTENDED

Name of the faculty member	Title	Organized by	Date	Place/institute/venue
RK Nath	Interdisciplinary Refresher Course on Academic Writing and Research	Teaching Learning Centre, Tezpur University	16-30 May 2022	Tezpur University
RK Nath	Conference on Group Theory and Related Topics	School of Mathematical Sciences, National Institute of Science Education and Research Bhubaneswar	27 February - 04 March 2023	National Institute of Science Education and Research Bhubaneswar
ND Baruah	Some new modular equations for the Rogers-Ramanujan continued fraction Kombakonam	(International Conference on Number Theory) SASTRA University, Kombakonam	20-22 December 2023	Kombakona, Tamil Nadu
D Goswami	One-week FDP on Bharat-Kalpa: Diverse Aspects of Indian Knowledge System	Center for Indian Knowledge System (CIKS), Dibrugarh University Institute of Engineering and Technology (DUIET)	08-12 August 2022	Dibrugarh University, Assam

TALKS BY THE FACULTY MEMBERS ABROAD AND IN INDIA

Name of the faculty member	Event	Date	Place/ Institute/venue
RK Nath	Conference on Group Theory and Related Topics	03-04 March 2023	National Institute of Science Education and Research Bhubaneswar
RK Nath	National Mathematics Day celebration	22 December 2022	Wisdom Senior Secondary School, Tezpur
DK Basnet	MTTS Summer Camp 2022 (Level O, MTTS Trust Hyderabad)	13-25 June 2022	IISER Kolkata
DK Basnet	Initiation into Mathematics (MTTS Trust Hyderabad))	22-27 September 2022	Assam Don Bosco University, Guwahati
DK Basnet	International Day of Mathematics 2023	14 March 2023	Royal Global University, Guwahati
DK Basnet	Popular talk	24 March 2023	Nalbari College, Assam
DK Basnet	Students' interaction programme on Mathematics	25 March 2023	Dudhnoi College, Assam
PK Das	GANITA 2022	27 April 2022	Shyam Lal College, Delhi University
N Deka Baruah	Delivered a series of five lectures on "Number Theory," in a Winter School in Mathematics for PG students of North-East Universities organized by Indian Statistical Institute North-East Centre, Tezpur	16-19 January 2023	Indian Statistical Institute North-East Centre, Tezpur
N Deka Baruah	Delivered two lectures on "Number Theory," in a Refresher Course in Mathematics for College/University Teachers and Research Scholars organized by Gauhati University, Assam during February 20-March 06, 2023.	25 February 2023	Gauhati University
N Deka Baruah	Delivered an online talk on "Pi" in the Celebration of International Mathematics Day organized by the Departments of Mathematics, Central University of Karnataka, Kalaburagi	14 March 14 2023	Central University of Karnataka, Kalaburagi
D Goswami	Delivered an online invited talk titled An Interior Penalty Discontinuous Galerkin Method for the Kelvin-Voigt Viscoelastic Fluid Model at CoMFoS22: Mathematical Aspects of Continuum Mechanics	06-07 December 2022	Kanazawa University, Japan
	Presented a talk on	06-08	BML Munjal

	Discontinuous Galerkin finite element error analysis for Oldroyd model of order one at the International conference on computational partial differential equations and applications	September 2022	University, Gurgaon
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SEMINAR/WORKSHOP/SYMPOSIA/INVITED LECTURES ORGANISED

Title	Date
Two Days Mathematics Convention Celebrating National Science Day And International Mathematics Day 2023	13-14 March 2023
An introduction to the Henstock-Kurzweil Integral (delivered by Dr. Surinder Pal Singh Kainth, Assistant Professor, Department of Mathematics, Panjab University, Chandigarh)	25 November 2022

DISTINGUISHED VISITORS

- Jagmohan Tanti, Associate Professor, Department of Mathematics, Babasaheb Bhimrao Ambedkar University, Uttar Pradesh

AWARDS/HONOURS/NOTABLE ACHIEVEMENTS

Research Scholars/Students

- Subrat Panigrahi had qualified NBHM 2023 for PhD Scholarship

NUMBER OF STUDENTS QUALIFIED NET-JRF/GATE/SLET

- NET-JRF: 05
- GATE: 09
- SLET: 07

NOTABLE PLACEMENTS

Name	Designation	Organization
Neelam Saikia	Assistant Professor, Basic Sciences	IIT, Bhubaneswar
Ankur Sharmah	Assistant Professor, Department of Mathematics	Bhattadev University
Dharmaraj Deka	Assistant Professor, Department of Mathematics	Kamrup College
Duranta Chutia	Assistant Professor, Department of Mathematics	Dibru College
Pritam Dahal	Assistant Professor, Department of Mathematics	Sonapur College
Hirakjyoti Das	Assistant Professor, Department of Mathematics	Gauhati Commerce College

FACULTY MEMBERS

Professor

Nayandeep D Baruah, PhD (Tezpur University)
Specialization/Areas of Interest: Number Theory and Ramanujan's Mathematics
Email: nayan@tezu.ernet.in

Debajit Hazarika, PhD (Jamia Milia Islamia University)
Specialization/Areas of Interest: General Topology, Fuzzy sets & applications
Email: debajit@tezu.ernet.in

Munmun Hazarika, PhD (Tezpur University)
Specialization/Areas of Interest: Operator Theory, Functional Analysis
Email: munmun@tezu.ernet.in

Milan Nath, PhD (IIT Guwahati)

Head of the Department

Specialization/Areas of Interest: Ordinary Graph Spectra, Inverse eigenvalue problem
Email: milan@tezu.ernet.in

Santanu Dutta, PhD (Tezpur University)
Specialization/Areas of Interest: Nonparametric functional estimation and risk estimation
Email: sdutta@tezu.ernet.in

Shuvam Sen, PhD (IIT Guwahati)
Specialization/Areas of Interest: Computational Fluid Dynamics
Email: shuvam@tezu.ernet.in

Dhiren K Basnet, PhD (Dibrugarh University)
Specialization/Areas of Interest: Ring Theory; Finite Field Theory
Email: dbasnet@tezu.ernet.in

Associate Professor

Bhim P Sarmah, PhD (Gauhati University)
Specialization/Areas of Interest: Theoretical Physics
Email: bhim@tezu.ernet.in

Pankaj K Das, PhD (Delhi University)
Specialization/Areas of Interest: Coding Theory
Email: pankaj4@tezu.ernet.in

Assistant Professor

Rajat K Nath, PhD (NEHU, Shillong)
Specialization/Areas of Interest: Algebra and Graph Theory
Email: rknath@tezu.ernet.in

Jayanta Borah, PhD (IIT Guwahati)
Specialization/Areas of Interest: Abstract Fractional Differential Equations, Mathematical Control theory
Email: jba@tezu.ernet.in

Debajit Kalita, PhD (IIT Guwahati)
Specialization/Areas of Interest: Algebraic Graph Theory
Email: kdebajit@tezu.ernet.in

Bipul K Sarmah, PhD (Tezpur University)
Specialization/Areas of Interest: Theory of Partitions, Ramanujan Mathematics
Email: bipul@tezu.ernet.in

Deepjyoti Goswami, PhD (IIT Bombay)
Specialization/Areas of Interest: Finite Element Method
Email: deepjyoti@tezu.ernet.in

Biswajit Das, PhD (IIT Guwahati)
Specialization/Areas of Interest: Numerical Linear Algebra
Email: bdas@tezu.ernet.in

Technical staff

System Analyst

Anjan K Bhattacharyya
Email: anjan@tezu.ernet.in

Senior Technical Assistant

Krishna Das
Email: krishnadas@tezu.ernet.in

Assistant

Pankaj Roy
Email: roydkjm@tezu.ernet.in

MTS

Nur Ali
Email: nurali@tezu.ernet.in

DEPARTMENT OF MOLECULAR BIOLOGY AND BIOTECHNOLOGY

THE DEPARTMENT

The Department of Molecular Biology and Biotechnology (MBBT) is supported by UGC-SAP DRS II and DST-FIST. It was established on 24 July 1997. Department got recognition from the Department of Biotechnology (DBT) of the Ministry of Science and Technology, Government of India for its Post Graduate programme in 1998. The Department offers two-year M Sc degree in Molecular Biology and Biotechnology, five-year Integrated MSc in Bioscience and Bioinformatics/Life Sciences and PhD in Molecular Biology and Biotechnology. Faculty members of the Department are trained in modern areas of Molecular Biology and Biotechnology from various Internationally reputed Institutes and actively involved in research.

ACADEMIC PROGRAMMES AND STUDENT INTAKE

Academic Programme	Intake
Int MSc in Life Science	25
MSc in Molecular Biology & Biotechnology	30
PhD in Molecular Biology & Biotechnology	Variable (09 during 2022-2023)

THRUST RESEARCH AREAS OF THE DEPARTMENT/CENTRE

- Microbial, Plant, Animal and Environmental Biotechnology
- Disease Biology
- Bioinformatics and Computational Biology
- Omics in Biology

MAJOR FACILITIES/EQUIPMENT AVAILABLE

- Animal cell culture facility
- Plant tissue culture facility
- Microbiology lab
- Bioinformatics facility
- ONGC CPBT Centre For Petroleum Biotechnology
- Elix-3 Water Purification System
- Cold Room
- Flow Cytometer
- DNA sequencers (4 capillary)
- Bioanalyzer
- Quantitative PCR
- Fast protein Liquid Chromatography (FPLC)
- UHPLC systems
- Ultracentrifuge
- HPLC
- Fluorescence microscope

MAJOR RESEARCH AND DEVELOPMENT FINDINGS

Faculty/ Researcher	Salient Research Findings
R Doley	<p>Presented for the first genus-wide proteomics analysis of venom composition across <i>Naja</i> species (<i>N. naja</i>, <i>N. oxiana</i>, and <i>N. kaouthia</i>) found in mainland India. Venom proteomes were consistent between individuals from the same localities in terms of the toxin families present, but not in the relative abundance of those in the venom. There appears to be more compositional variation among <i>N. naja</i> from different locations than among <i>N. kaouthia</i>. Immunoblotting and in vitro neutralization assays indicated cross-reactivity with Indian polyvalent antivenom, in which antibodies raised against <i>N. naja</i> are present. However, we observed ineffective neutralization of PLA2 activities of <i>N. naja</i> venoms from locations distant from the source of immunizing venoms. Antivenom immunoprofiling by antivenomics revealed differential antigenicity of venoms from <i>N. kaouthia</i> and <i>N. oxiana</i>, and poor reactivity towards 3FTxs and PLA2s.</p> <p>We studied the venom compositional variation of <i>Bungarus fasciatus</i> from three different geographical locations in eastern and north-east India: two adjacent villages of Hooghly (West Bengal), Aizawl (Mizoram) and Guwahati (Assam) are reported. In vitro biochemical assays exhibit variation in phospholipase A2 activity, fibrinogenolytic activity, caseinolytic activity and anti-coagulation activity. The immunoreactivity of three Indian polyvalent antivenoms against the venoms revealed incomplete recognition.</p> <p>We have revealed the proteome composition of <i>Trimeresurus erythrurus</i> of north east India which will be helpful in designing antibodies as the polyvalent antivenom is not much effective in neutralization the toxic effect.</p>
R Mukhopadhyay	<p>In our continuous effort to establish the role of ribosomal protein L22 (RPL22) in progression of breast cancer cells, we have downregulated the protein and found higher proliferation of the cancer cells. We also found the RPL22-NFkB-PARP1 axis could play major role behind this observation.</p> <p>We established the role of high salt on the pathophysiology of breast cancer cells. We also studied the interaction of tumor associated macrophages (TAMs) and cancer cells to understand the effect of salts on cancer progression.</p> <p>Using computational methods, we screened 3 highly potential polyphenols against IL-6 induced inflammation. Anti-inflammatory activities of these polyphenols are established using cell culture model.</p> <p>Three plants of medicinal importance have been studied for their anti-cancer efficacy.</p>

SK Ray	<p>By collaboration with colleagues in the Department, an experimental technique has been developed called microliter spotting and microcolony observation for counting bacterial colony forming unit. The process is economical and time saving.</p> <p>Heat shock mediated transformation in several Gram negative bacteria other than <i>Escherichia coli</i> has been standardized.</p> <p><i>Ralstonia solanacearum</i> causes a lethal bacterial wilt disease in many plants. Using tomato and brinjal seedling as model hosts to study its pathogenicity we have isolated several exopolysaccharide (EPS) deficient but virulence proficient mutants. It indicates our knowledge regarding EP role of its pathogenicity is incomplete.</p> <p>We are studying several endophytes from tomato seedling having their antagonistic effect on <i>R. solanacearum</i> but positive impact on plant growth. The research is done in collaboration with colleagues in the Department.</p> <p>In collaboration with Computer Science and Engineering Department here, we have observed the impact of codon degeneracy and pretermination codons on transition to transversion ratio in coding sequences in bacteria.</p> <p>In another study, we have observed that intra-operon intergenic regions are less polymorphic than inter-operon intergenic regions.</p>
ND Namsa	<p>Identified a type-specific chimeric antigen (TSA) of <i>Orientia tsutsugamushi</i> as prototype antigen for development of ELISA-based detection of scrub typhus diseases.</p> <p>Successfully expressed and purified domain specific rotavirus VP6 antigen for screening of DNA aptamer for rapid detection of rotavirus infection in children.</p> <p>Designed a CRISPR-Cas9 based one-step molecular method for detection and diagnosis of rotavirus double-stranded RNA in stool samples of diarrheic children</p> <p>Designed an oligonucleotide to differentiate rotavirus vaccine and wild type strains</p>
S Dasgupta	<p>Research on underlying mechanism of insulin resistance and type 2 diabetes: Several studies have implicated obesity-induced macrophage-adipocyte cross-talk in adipose tissue dysfunction and insulin resistance. However, the molecular cues involved in the cross-talk of macrophage and adipocyte causing insulin resistance are currently unknown. We have found that a lipid-induced monokine cyclophilin-A (CyPA) significantly attenuates adipocyte functions and insulin sensitivity. Targeted inhibition of CyPA in diet-induced obese zebrafish notably reduced adipose tissue inflammation and restored adipocyte function resulting in improvement of insulin sensitivity. Silencing of macrophage CyPA or pharmacological inhibition of CyPA by TMN355 effectively restored adipocytes' functions and insulin sensitivity. Interestingly, CyPA incubation markedly increased adipocyte inflammation along with an impairment of adipogenesis, however, mutation of its cognate receptor CD147 at P309A and G310A significantly waived CyPA's effect on adipocyte inflammation and its differentiation. Moreover, inhibition of CyPA or its receptor CD147 notably restored palmitate or CyPA-induced adipose tissue</p>

	<p>dysfunctions and insulin sensitivity. All these results indicate that obesity-induced macrophage–adipocyte cross-talk involving CyPA–CD147 could be a novel target for the management of insulin resistance and type 2 diabetes. This finding was published in <i>Cellular and Molecular Life Sciences</i> 2022, 79: 282.</p> <p>Research on the discovery of small molecules targeting inflammation: Increasing evidence supports vanillin and its analogs as potent toll-like receptor signaling inhibitors that strongly attenuate inflammation, though, the underlying molecular mechanism remains elusive. Here, we report that vanillin inhibits lipopolysaccharide (LPS)-induced toll-like receptor 4 activation in macrophages by targeting the myeloid differentiation primary-response gene 88 (MyD88)-dependent pathway through direct interaction and suppression of interleukin-1 receptor-associated kinase 4 (IRAK4) activity. Moreover, incubation of vanillin in cells expressing constitutively active forms of different toll-like receptor 4 signaling molecules revealed that vanillin could only able to block the ligand-independent constitutively activated IRAK4/1 or its upstream molecules-associated NF-κB activation and NF-κB transactivation along with the expression of various proinflammatory cytokines. A significant inhibition of LPS-induced IRAK4/MyD88, IRAK4/IRAK1, and IRAK1/TRAF6 association was evinced in response to vanillin treatment. Furthermore, mutations at Tyr262 and Asp329 residues in IRAK4 or modifications of 3-Ome and 4-OH side groups in vanillin, significantly reduced IRAK4 activity and vanillin function, respectively. Mice pretreated with vanillin followed by LPS challenge markedly impaired LPS-induced IRAK4 activation and inflammation in peritoneal macrophages. Thus, the present study posits vanillin as a novel and potent IRAK4 inhibitor and thus providing an opportunity for its therapeutic application in managing various inflammatory diseases. This was published in <i>European Journal of Pharmacology</i> 2023, 944: 1755</p>
VSK Mattaparthi	<p>Two novel peptides K84s (FLVWGCLRGSAIGECVVHGGPPSRH) and K102s (FLKRWARSTRWGTASCGGS) have been reported to significantly inhibit αS oligomerization and aggregation. However, little is known about the interaction sites between these peptides and αS. We probed the interaction sites of K84s and K102s with αS using computational tools.</p> <p>Resveratrol (RSV), a polyphenolic compound, is reported to have anti-aggregation property against Amyloid-β peptides. It is therefore significant to understand the mechanism of inhibition of Aβ1-42 peptide aggregation by the RSV at the molecular level. We have used Molecular docking along with Molecular dynamics (MD) simulation techniques to address the role of RSV in the inhibition Aβ1-42 peptide aggregation. From the analysis of MD trajectories, we obtained salient structural features and determined the Binding Free Energy (BFE) and Per-residue Energy Decomposition Analysis (PRED) using MM-PBSA/GBSA method. The secondary structure and the conformational analysis obtained from MD trajectories show that the binding of RSV with Aβ1-42 peptide monomer causes an increase in the helical content in the structure of the Aβ1-42 peptide. The salt bridge interaction between these residues D23–K28 was found to be destabilized in the Aβ1-42 peptide</p>

	<p>when it is complexed with RSV.</p> <p>Studied physical, structural and binding characterization of SARS-CoV-2 variants (BA.2.75, BA.2.75.2, BA.4, BA.2.12.1, XBB.1.15), the overall stability and the increased affinity between S protein and ACE2 of most of the variants was found to be high which may result in higher virulence of those strains.</p> <p>Alternative or co-receptors of SARS-CoV-2 (CAT & L-SIGN). The binding affinity of CAT and L-SIGN to the Spike protein has found to be higher from the molecular dynamics simulation study.</p> <p>Study was performed to compare the efficacy of rasagiline and selegiline in inhibiting the aggregation of α-synuclein. Rasagiline was found to be more effective in binding to α-synuclein than selegiline, suggesting rasagiline to be a more potent inhibitor of α-synuclein aggregation.</p> <p>Studied the salient structural features of intrinsically disordered proteins and demonstrated a novel method that primarily uses dihedral angles to identify the interface between regions of varying degrees of order or disorderness in intrinsically disordered proteins.</p> <p>A30G α-Syn was shown to have a larger bending angle in the helix-N and helix-C regions in its free form than in its membrane-bound state. The helical bending was found to exhibit a minor influence on the way the A30G α-Syn protein interacts with the membrane bilayer. The key structural characteristics of A30G α-Syn addressed in this study may be helpful in understanding its function.</p> <p>Post translational modifications of pY39 α-Syn showed high degree of fluctuation in N-terminal region resulting in the disruption of helix-2 binding region during MD simulation analysis and thereby affecting the binding to the lipid bilayer.</p> <p>The nature and extent of aggregation are shown to be influenced by membrane curvature and the shape or orientation of the protein. In our case we have observed membrane curvature in H50Q α-Syn as compared to other (A53T, A53E, E46K, G51D) mutant in α-Synuclein.</p> <p>The C-terminal is the binding domain for the inhibitors (NPT100-18A and NPT200-11) and it is was found that the distance between N-terminal and C-terminal was the highest in case of NPT200-11, thereby preventing the misfolding of α-Syn. Therefore, inhibitor NPT200-11 has reduced the rate of aggregation by targeting the membrane interacting with the α-Syn protein.</p> <p>The structural conformational study of Stathmin protein such as compactness and helical shape are changed by phosphorylation at 16Ser, 25Ser, 38Ser, 63Ser, which also improves the stability of the complex and lessens structural fluctuations.</p>
JP Saikia	<p>Recently we develop a new activated charcoal based eri, muga and pat washing formulation for better cleaning of this silk without any damage to the silk textile using reductionism of an existing traditional washing formulation.</p> <p>Similarly, our research is also working on curcumin degradation, mustard oil galic macerate, Vigna radiata seed germination, Oroxylum indicum compound purification and tea liquor improvement with a aim to validate traditional</p>

	practices.
A Kumar	<p>The major research finding of the abstract is that the 21 analyzed transcription factors (TFs) in <i>Mycobacterium tuberculosis</i> (MTB), the causative agent of tuberculosis, exhibit preferential binding to specific DNA structural features and motifs. The researchers investigated the compositional and conformational preferences of these TFs at their DNA binding sites, both locally and globally, in order to understand their role in MTB pathogenicity.</p> <p>The results of the analysis indicate that most TFs show a preference for binding to genomic regions that possess distinct DNA structural signatures. These signatures include high electrostatic potential, narrow minor grooves, high propeller twist, helical twist, intrinsic curvature, and DNA rigidity, which are characteristic of the binding sites compared to the surrounding DNA sequences. The study also observed a preference for specific trinucleotide motifs, as well as periodic signals of tetranucleotide motifs in the vicinity of the TF-DNA interactions.</p> <p>In summary, this research provides insights into the nuanced DNA shape and structural preferences of the 21 analyzed TFs in MTB. Understanding these preferences is crucial for unravelling the pathogenicity of MTB and can potentially aid in the development of novel strategies to combat tuberculosis.</p>
P Barah	Systems Biology, Big data analytics, OMICs, Bioinformatics, Cancer Biology, Plant stress biology

RESEARCH PROJECTS (BOTH ONGOING AND COMPLETE)

Project Title	Funding Agency	Amount (in INR)	Duration	Investigator(s)
Design of aptamers against venom protein of <i>Trimeresurus erythrurus</i> and its validation: An alternative approach for anti-snake venom	DST-EMEQ	44.84 Lakhs	2023-26	R Doley
Integrated WGS and metabolic pathway analysis for SNPs related to drug resistance for targeted drug development	ICMR, Govt. of India	23 Lakhs	2022-24	AN Jha
Strategic Systems Biology and Metabolic Pathways approach to develop nanocarriers for targeted drug delivery	DST-SERB	26 Lakhs	2021-24	AN Jha
Exploiting chemical ecology for IPM: Deciphering the phytosemiochemicals involved in insect-plant interactions of major crop pests on North east region- India	DBT	56.11 Lakhs	2021-24	SK Ray

Rotavirus NSP1 degrades interferon receptors (IFNRs) through a PKR-dependent pathway	DST-SERB	50 Lakhs	2021-24	ND Namsa
Identification of lipid-induced monokine(s) and its role on adipocyte dysfunction and insulin resistance	ICMR	52 Lakhs	2023-2026	S Dasgupta (PI) A Kumar (Co-PI)
Investigating the role of ribosomal protein L22 in human breast cancer progression	DST-SERB	54.18 Lakhs	2022-2025	R Mukhopadhyay
Development of novel rationally designed ferrocene, glucose and folic acid conjugated lanthanide (III), iron (III) and cobalt (III) complexes as antibacterial and theranostic anticancer agents	DBT	20 Lakhs	2019-2023	VSK Mattaparthi
Enhanced production of anticancer flavones-Baicalein, Chrysin and Oroxylin A, from <i>Oroxylum indicum</i> tissue culture and studies on its chemopreventive activities	DBT	26 Lakhs	2019-23	JP Saikia
Characterization of DNA structural features and non B DNA structures in regulatory regions in prokaryotes: an in-silico approach	DBT	44 Lakhs	2019-22	A Kumar
Elucidating the mechanism of action of PehR, a transcriptional regulator in pathogenicity of <i>Ralstonia solanacearum</i> F1C1 (local isolate)	DST-SERB	64 Lakhs	2021-24	A Kumar

PUBLICATIONS BY FACULTY AND STAFF MEMBERS

JOURNAL PUBLICATIONS

Kakati H, Giri S, Patra A, Taye SJ, Agarwalla D, Baruah Choudhary G, Kalita B, Mukherjee AK. A retrospective analysis of epidemiology, clinical features of envenomation, and in-patient management of snakebites in a model secondary hospital of Assam, North-east India. *Toxicon* 230, 107175, 2023.

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BOOKS

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CONFERENCE PROCEEDINGS

Borah P, Mattaparthi VSK. An In-silico study of the role of Resveratrol on A β 1-42 peptide aggregation. In National Seminar on Excitements in Biological Research held at Department of MBBT, Tezpur University, 2023.

Borah P, Mattaparthi VSK, Computational Investigation on the effect of Polyethylene Glycol as crowding agent on the conformational dynamics of α -Synuclein. In National Seminar on Research at the Interface of Chemical, Biological and Material Sciences, held at Department of Chemical Sciences, Tezpur University, 2023.

Borah P, Mattaparthi VSK, An in-silico investigation on the role of oleuropein aglycone on the aggregation propensity of α -synuclein. In the India-12th India-Japan Science and Technology Conclave: International Conference on Frontier Areas of Science and Technology (ICFAST-2022) held at the University of Hyderabad, 2022.

Das C, Mattaparthi VSK, Effect of Double Mutation (L452R and E484Q) in RBD of Spike Protein on its Interaction with ACE2 Receptor Protein. National Seminar on Advances in Basic and Translational Research in Biology (ABTRiB). Department of Molecular Biology and Biotechnology, Tezpur University, 2022.

Das C, Mattaparthi VSK, Effect of Mutations on the RBD of Spike Protein on its Interaction with ACE2 Receptor of human host. 12th India-Japan Science and Technology Conclave: International Conference on Frontier Areas of Science and Technology (ICFAST-2022). University of Hyderabad, 2022.

Das C, Mattaparthi VSK, Efficacy of alternative receptors (CAT and L-SIGN) for SARS-CoV-2 entry: An in-silico study. National seminar on Research at the Interface of Chemical, Biological and Material Sciences, Dept. of Chemical sciences in collaboration with Students Science Council, 2023.

Das D, Mattaparthi VSK, Effect of pY39 Post-translational modification on the interactions between α -Synuclein and Lipid Membrane. In International conference "12th India-Japan Science and Technology Conclave: International Conference on Frontier Areas of Science and Technology (ICFAST-2022)" University of Hyderabad, Hyderabad, 2022.

Das D, Mattaparthi VSK, Computational investigation on conformational ensembles of A30G α -Synuclein in its membrane bound state and in free solution that causes familial PD. In National seminar "Excitements in Biological Research", Tezpur University, Tezpur, 2023.

Das D, Mattaparthi VSK, Impact of phosphorylation at Ser87 on the α -Synuclein aggregation and synuclein-membrane interactions: an in silico study. In National seminar "Research at the Interface of Chemical, Biological and Material Sciences", Tezpur University, Tezpur, 2023.

Basumatary M, Mukhopadhyay R, Doley R, Cytotoxicity of monocellate cobra Naja kaouthia venom (North-east India origin): Exploration of anti-cancer potential. In 27th ISCB International Conference (ISCBC-2022), BIT Mesra, Ranchi, 2022.

SEMINARS/CONFERENCES/WORKSHOPS/SYMPOSIA ATTENDED

Name of Faculty	Purpose of Attending (Paper presentation / Participation /Session Chairing /Chief Guest, etc)	Title of Event	Date	Organizer and Venue
ND Namsa	S20 delegates	S20 Inception Meeting Theme: Disruptive Science for Innovative and Sustainable Development	30-31 January 2023	Puducherry
	Coordinator of the Guinness World Records In MANIT, Bhopal, 1,484 school students created a GWR by crafting an Argro Robot in 50 minutes breaking the earlier record for most people programming a robot was held by Hong Kong.	India International Science Festival Theme: Most people assembling robots simultaneously	21-24 January 2023	MANIT Bhopal
JP Saikia	Interdisciplinary Refresher Course on Curriculum and Pedagogy	Teaching Learning Centre (TLC), Tezpur University	07-20 June 2023	Tezpur University

TALKS BY THE FACULTY MEMBERS ABROAD AND IN INDIA

Name of Faculty Member	Title of the Talk	Title of the Event	Date	Organizer and Venue
R Doley	North East Indian Snake venoms: Antivenomics and alternative	Annual Conference of the Indian Society for Toxinology and Snakebite Mitigation	26 May 2022	Department of Emergency Medicine and Public Health.

	approaches	(ISTSM)		AIMS, Kochi
R Doley	Snake Venom: Evolutionary Adaptation in Prey Predator Race	Refresher Course in Zoology	21 November – 05 December 2022	UGC-HRDC, NEHU Shillong
R Doley	Understanding the venomics of North-East Indian Snakes for better management of snakebite victims	One-day National Symposium on Snake and Scorpion Envenomation and Therapy: National and International Perspectives	16 July 2022	Institute of Advanced Study in Science and Technology (IASST), Guwahati
R Mukhopadhyay	Non-canonical Function of Ribosomal Protein L22 in Inflammation and Cancer	91st Annual Meeting of Society of Biological Chemists (India)	10 December 2022	Society of Biological Chemists (India), Biswa Bangla Convention Center, Kolkata, India
ND Namsa	Immunoinformatics mapping of epitopes in the 56-kDa type-specific protein of Orientia tsutsugamushi and development of chimeric antigens for rapid diagnosis of scrub typhus	Second International Conference (iSOVECON2023)	13-16 March 2023	ICMR-VCRC, Puducherry, India
S Dasgupta	A small molecule potent IRAK4 inhibitor attenuates LPS-induced inflammation in macrophage	International Conference on Biomaterials and Health Care, BioHeal-2023	13-16 April 2023	Sindurda Vivekananda Inspiration Center in association with AIIMS Rishikesh
S Dasgupta	A small molecule potent IRAK4 inhibitor attenuates LPS-induced TLR4 signaling and inflammation in-vitro and in-vivo	International Conference on Biotechnology for Sustainable Bioresources and Bioeconomy	07-11 December 2022	Organized by the IIT Guwahati and Biotech Research Society, India (BRSI) at IIT Guwahati
S Dasgupta	Type 2 Diabetes: An Immune-Metabolic Disorder	Celebration of World Diabetes Day 2022 at IASST, Guwahati	14 November 2022	Organized by the Institute of Advanced Study in Science and

				Technology Guwahati,
P Barah	Wellbeing: The Indian Perspective	G20-Y20 pre summit on Health and Wellbeing: The Indian Perspective	26-28 April 2023	G20-Y20, Ministry of Youth Affairs and Sports, Ladakh
P Barah	Systems Medicine in NE India context	2nd National Seminar on Novel Innovations in Biomedical Sciences	14-15 February 2023	Nemcare Group of Institutes, Guwahati
P Barah	Big data approach for personalized oncology	National-level mentoring symposium, Gurukul in emerging areas in modern biology	02 March 2023	INIAS with Department of Molecular Biology and Biotechnology, Tezpur University
P Barah	North Eastern Regional Level Science Exhibition	Conducted North Eastern Regional Level Science Exhibition	27 February 2023	INIAS and Tezpur University's Students Science Council
P Barah	Women and Girls in Science	Organized International Day of Women and Girls in Science	11 February 2023	INIAS and Tezpur University
P Barah	Indo-German collaborative fellowships	Indo-German Science & Technology Centre outreach event	30 January 2023	IIT Guwahati and IGSTC
P Barah	Participated as an invited delegate in the National Brainstorming sessions	Empowering Young Scientists (EYS) of India at IIT (BHU), Varanasi	24 January 2023	Office of the Principal Scientific Adviser to the Government of India.
P Barah	Conducted hands on session	International Seminar and Workshop on CRISPR/Cas based plant functional genomics and computational modeling (ISWCPC-2023)	18-21 January 2023	CSIR-NEIST Jorhat.
P Barah	Conducted two-day long hands on workshop	Plant immune system and integrating OMICS tools in imparting disease resistance	22 December 2022	NAHEP and Dept. of Plant Pathology, AAU Jorhat.
P Barah	Innovative Skills for Modern day Plant Breeding	Delivered an invited talk at the NAHEP training programme	22 December 2022	NAHEP and Department of PBG, AAU Jorhat

P Barah	Delivered a technical talk during	Advanced Bioinformatics Workshop for Researchers working in Life Sciences	20 December 2022	DBT-APSCS&T Arunachal Pradesh
V S K Mattaparthi	The methods of constructing phylogenetic trees from molecular data: algorithms and applications	Hands-on training and workshop on computational biology and bio-medical informatics	28 July 2022	National Institute of Technology, Silchar

AWARDS & HONOURS/ NOTABLE ACHIEVEMENTS

Name of Awardee	Achievement	Event/Awarded by
P Barah	Selected as national core committee member of the Indian National Young Academy of Sciences	Indian National Young Academy of Sciences
AK Mukherjee	Elected fellow	Indian Academy of Sciences, Bangalore
AK Mukherjee	SFE-ZANDU Award	Society for Ethnopharmacology, Kolkata, India

OTHER IMPORTANT ACTIVITIES OF THE DEPARTMENT

Organized a Research Facility Training Program for the Research Scholars on Gene Expression Analysis as a part of Scientific Social Responsibility (SSR) of DST-SERB funded project of Dr. R. Mukhopadhyay on 4 March 2023 at the Department of MBBT, Tezpur University

Organized a Visit and Training Program for the college students on Techniques of Gene Expression as a part of Scientific Social Responsibility (SSR) of DST-SERB funded project of Dr. R. Mukhopadhyay on 10-11 March 2023 at the Department of MBBT, Tezpur University

NUMBER OF STUDENTS QUALIFIED IN NET-JRF/GATE/SLET

Name of Qualifying Examination	Number of Qualified Students	Academic Programme
NET-JRF	01	MSc
CSIR-JRF	01	MSc
NET-LS	01	MSc
GATE	15	MSc
DBT-JRF	03	MSc

NOTABLE PLACEMENTS

Name of Student	Academic Programme	Placement Designation	Company/ Organization	Type of Selection (On-Campus/ Off-Campus)
Antarleena Choudhury	MSc	Biology-Teacher	Akash BYJU'S	Off-Campus
Rajeev Barala	MSc	Biology-	Akash BYJU'S	Off-Campus

		Teacher		
Sourav Khan	MSc	Biology-Teacher	Akash BYJU'S	Off-Campus
Anjali Tiwari	MSc	Biology-Teacher	Akash BYJU'S	Off-Campus
Sauranil Guha	MSc	Biology-Teacher	Akash BYJU'S	Off-Campus

ENROLLMENT OF STUDENTS IN OTHER INSTITUTES FOR HIGHER STUDIES

Name of Student	Academic Programme (in TU)	Name of other Institute	Enrolled Academic Programme
Shreya Bhattacharya	MSc	IIT-Delhi	MTech in Biomolecular and Bioprocess Engineering
Rachayita Bharadwaj	MSc	IIT-Delhi	MTech in Biomedical Engineering
Bahni Shikha Roy	Int MSc	IIT-Mandi	Research in Biotechnology

FACULTY MEMBERS

Professor

Bolin K Konwar, PhD (Imperial College of Science, London)
Specialization/Area of interest: Metagenomics, Plant Biotechnology
Email: bkkon@tezu.ernet.in

Ashis K Mukherjee, PhD (University of Burdwan) (on Lien)
Specialization/Area of interest: Biochemical and proteomic analysis of venoms; Quality assessment and novel method of antivenom production; Drug discovery from natural resources; Molecular diagnostics
Email: akm@tezu.ernet.in

Suvendra K Ray, PhD (CCMB Hyderabad)
Specialization/Area of interest: Molecular genetics, Plant pathogenic bacteria, Molecular evolution
Email: suven@tezu.ernet.in

Anand Ramteke, PhD (JNU)
Specialization/Area of interest: Cancer Biology
Email: anand@tezu.ernet.in

Manabendra Mandal, PhD (Delhi University)
Specialization/Area of interest: Microbial Biotechnology, Food microbiology, Plant product for control of microbes
Email: mandal@tezu.ernet.in

Robin Doley, PhD (Tezpur University)

Head of the Department

Specialization/Area of interest: Snake venom biochemistry, Structure-function relation of venom protein
Email: doley@tezu.ernet.in

Associate Professor

Rupak Mukhopadhyay, PhD (IACS Kolkata)
Specialization/Area of interest: Inflammation biology, Cancer biology

Email: mrupak@tezu.ernet.in

Thiyam R Singh, PhD (CDRI Lucknow)

Specialization/Area of interest: Genomic instability and cancer biology

Email: rthiyam@tezu.ernet.in

Assistant Professor

Surya P G Ponnamp, PhD (University of Hyderabad)

Specialization/Area of interest: Human genetics

Email: surya_p @tezu.ernet.in

Anupam N Jha, PhD (IISc Bangalore)

Specialization/Area of interest: Computational biophysics, Systems Biology, Structural bioinformatics

Email: anjha@tezu.ernet.in

Nima D Namsa, PhD (IISc Bangalore)

Specialization/Area of interest: Molecular Virology

Email: namsa@tezu.ernet.in

Suman Dasgupta, PhD (Visva-Bharati University)

Specialization/Area of interest: Metabolic Disease Biology

Email: suman@tezu.ernet.in

Venkata SK Mattaparthi, PhD (IIT Guwahati)

Specialization/Area of interest: Computational Biotechnology and Bioinformatics

Email: venkata@tezu.ernet.in

Jyoti P Saikia, PhD (Tezpur University)

Specialization/Area of interest: Plant Biotechnology, Plant Secondary Metabolites

Email: jyoti06@tezu.ernet.in

Aditya Kumar, PhD (IISc Bangalore)

Specialization/Area of interest: Genomics

Email: aditya@tezu.ernet.in

Pankaj Borah, PhD (NTNU Norway)

Specialization/Area of interest: Systems Biology, Big data analytics, OMICs, Bioinformatics, Cancer Biology, Plant stress biology

Email: barah@tezu.ernet.in

Guest Faculty

N Baruah, PhD

Specialization/Area of interest: Virology

Email: namratab@tezu.ernet.in

SM Barbora, PhD

Specialization/Area of interest: Biochemistry

Email: @tezu.ernet.in

Adjunct Faculty

Sanjay Bhutani, PhD (University of Nantes France)

Specialization/Area of interest: Chemistry

Email: head_inbig@ongc.co.in

STAFF MEMBERS

Technical Officer

Kalyan K Hazarika, PhD

Email: kalyan@tezu.ernet.in

Sr. Technical Assistant

Naba Bordoloi, PhD

Email: nabakb@tezu.ernet.in

Laboratory Assistant

Pranab Mudoi, MSc

Email: pmudoi@tezu.ernet.in

Assistant

Bijoy K Mech

Email: bijoy@tezu.ernet.in

MTS

Guna Das

Email: gunadas@tezu.ernet.in

CENTRE FOR PETROLEUM BIOTECHNOLOGY

The ONGC-Center for Petroleum Biotechnology (ONGC-CPBT) at the Department of Molecular Biology and Biotechnology (MBBT) was established in 1999 with financial support from the Oil and Natural Gas Corporation (ONGC) through a MOU, which eventually became a permanent Centre on 30 April 2010 with a goal to conduct research in the field of petroleum biotechnology and develop skilled human resources. Since then, the Centre has been facilitating a number of research projects and imparting training to ONGC staffs and UG/PG students and research scholars on various Petroleum Biotechnology related techniques. The centre also provides the infrastructural facilities to students, faculty members and technical staff of the University.

Thrust areas of the Centre

- Conduct research in the field of Petroleum Biotechnology
- Impart training in Petroleum Biotechnology related aspects
- Encourage and nurture Industry-Academia interaction
- Undertake academic, manpower development, training and research programmes as may be necessary to achieve the objectives of the Centre
- Transfer of technology to ONGC

MAJOR RESEARCH AND DEVELOPMENT FINDINGS

Faculty/Researcher	Salient Research Findings
R Doley	While extracting crude oil from the earth's crust the oil spill leads to contamination of land and water and imbalance of soil microflora. The combination of crude oil degrading microbes and selected plant provided an efficient solution towards land reclamation. Till date more than 10 different crude oil degrading microbial strains have been isolated and characterised for preparation of microbial consortia for the phytoremediation process.
M Mandal (PI) NK Bordoloi (co-PI)	The petroleum hydrocarbon degrading microbes are evolved for oil degradation since they utilize petroleum hydrocarbons for their metabolic requirements. The centre has isolated several microaerophilic bacteria from oil-contaminated water and soil samples of Assam. The isolated bacteria have the potential to degrade crude oil and other oil derivatives in both aerophilic and microaerophilic conditions. The bacteria were found to degrade crude oil, engine oil, diesel, wax, grease, etc. in the microaerophilic/anaerobic conditions. Additionally, these isolates were found to produce biosurfactants- an emulsifying agent which is important for enhancing the bioavailability of hydrocarbons to the microorganisms. Biosurfactants enhance surface area of the substrate and their pseudo-solubility, assist microbial oil uptake, and emulsify them for pronounced degradation. Therefore, the strains are novel and could be developed as bioremediating agents even in microaerophilic conditions at which most of the bacteria fail to grow and help in degradation.

RESEARCH PROJECTS (BOTH ONGOING AND NEW)

Project Title	Funding Agency	Investigator(s)
Development of phytoremediation protocol for bioremediation of crude oil contamination	ONGC-CPBT	R Doley
Bioremediation and reclamation of petroleum oil hydrocarbon contaminated soil/water by microaerophilic/ anaerobic bacterial consortium	ONGC-CPBT	M Mandal (PI) NK Bordoloi (co-PI)

PUBLICATIONS BY FACULTY AND STAFF MEMBERS

JOURNAL PUBLICATIONS

Deka J, Sarma KP, Gupta N, Ahmed MS, Mazumder MJ, Hoque RR. (2023). Polycyclic aromatic hydrocarbons in groundwater of oil-rich regions of upper Brahmaputra Valley, India: linkages of colloidal transport. *Arabian Journal of Geosciences*, 16(1), 66.

Personnel of the Centre

Chairman

Shambhu Nath Singh, PhD

Vice Chancellor

Email: vc@tezu.ernet.in

Head, ONGC-CPBT

Manabendra Mandal, PhD

Professor, Department of Molecular Biology and Biotechnology

Email: mandal@tezu.ernet.in

DEPARTMENT OF PHYSICS

THE DEPARTMENT

The Department of Physics has stridden out not only in its postgraduate teaching but also in new frontiers of research since its inception in January 1998. The Department offers a two-year MSc program in Physics alongside the Integrated MSc and the Integrated BSc BEd programs. It offers dual specialization for post-graduation which may be selected from Condensed Matter Physics, Nanoscience & Technology, High Energy Physics, Electronics, Photonics, Plasma physics, and Astrophysics. The Department inculcates research in the pursuit of excellence. The thrust areas are Nanomaterials, Solid State Ionics, Theoretical High Energy Physics, Plasma Physics, Optoelectronics, Microwaves, Astronomy and Astrophysics, Soft matter physics, Material science and Nonlinear dynamics.

ACADEMIC PROGRAMMES AND STUDENT INTAKE

Academic Programme	Intake
MSc in Physics	38
Integrated MSc in Physics	25
Integrated BSc BEd in Physics	13
PhD in Physics	Variable (25 in 2022-23)

TRUST AREAS

- Condensed Matter Physics
- Electronics and communications
- High Energy and Astro-particle Physics

MAJOR FACILITIES/EQUIPMENT AVAILABLE

- TEM
- SEM
- TRPL

MAJOR RESEARCH AND DEVELOPMENT FINDINGS

Faculty/ Researcher	Salient Research Findings
N Das, Hirakjyoti Sarma and R Sarmah	Phase transition of three-dimensional finite-sized charged dust clusters in a plasma environment” – It is shown that harmonically trapped charged dust particles organize themselves into nested spherical shells and the particles start rotating in a coherent order as the magnetic field reaches a critical value corresponding to the coupling parameter of the system of dust particles, exhibiting a first order transition from disordered to ordered state.
Seung-Yong Lee, Sita Chettri, R Sarmah, Chikako Takushima, Jun-ichi	Serrated flow accompanied with dynamic type transition of the Portevin-Le Chatelier effect in austenite stainless steel” – This is the first study where we show that during plastic deformation of austenite stainless steel subjected to a constant deformation rate at high temperature undergoes a

Hamada, Nobuo Nakada	dynamic type transition from type A to type C bands continuously owing to increase in global plastic strain rate developed in the sample. The experimental finding is also demonstrated with the theoretical model.
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RESEARCH PROJECTS (BOTH ONGOING AND NEW)

Investigator	Project Title	Funding Agency	Amount (in INR)	Duration
P Deb	Spin Dynamics investigation and structural correlation of the two-dimensional primary nanosystem	UGC-DAE-CSR, Govt. of India.	6.84 lakhs	2022 - 2024
P Deb	Realizing proximity effect in superconductor/semiconductor-ferromagnet van der Waals heterostructure	DST-SERB, Govt. of India.	32.52 lakhs	2021 - 2023
N Das	A study on laser-driven ion acceleration from plasma target and generation of large-scale magnetic field in relativistic laser-plasma interaction	DST-SERB	25.56 lakhs	2020 - 2023
D Mohanta	Iridescent color and transparent (super) hydrophobicity in natural systems within a class	SERB-DST	58.67 lakhs	2022 - 2025
D Mohanta	Irradiation-led modified optoelectronic and thermoelectric response of nanoscale, 2D monochalcogenides	IUAC, New Delhi	10.11 lakhs	2023 - 2026
SK Das	Unravelling the trivalent ion electrochemistry of niobium and bismuth-based chalcogenides	UGC DAE	2.28 lakhs	2023 - 2026
R Biswas	Development of multimodal optofluidic technique for detection of heavy metal ions	DBT-BIG	49.25 lakhs	2022 - 2023

PUBLICATIONS BY FACULTY AND STAFF MEMBERS

JOURNAL PUBLICATIONS

Das U, Biswas R, Unravelling optical properties and morphology of plasmonic gold nanoparticles synthesized via a novel green route. *Chemical Papers*, 77(6):3485-3493, 2023.

Sharma V, Biswas R, Probabilistic earthquake hazard parameterization for Indo-Burma region using extreme value approach. *Natural Hazards Research*, 2(4):279-286, 2022.

Biswas R, Barman C, Neog A, Biswas S, Mazumder N, Label-free heavy metal ion sensing via smartphone-based app. *Chemosphere*, 322:138231, 2023.

Das U, Banik S, Nadumane SS, Chakrabarti S, Gopal D, Kabekkodu SP, Srisungsitthisunti P, Mazumder N, Biswas R, Isolation, Detection and Analysis of Circulating Tumour Cells: A Nanotechnological Bioscope. *Pharmaceutics*, 15(1):280, 2023.

Sharma V, Biswas R, Spatio-temporal variation in b-value prior to the 26 November 2021 Mizoram earthquake of northeast India. *Geological Journal*, 57(12):5361-5373, 2022.

Sharma V, Biswas R, Revisiting b-value for extended Kopili region of Northeast India and probabilistic estimation of seismic hazard attributes thereof. *Journal of Applied Geophysics*, 207:104842, 2022.

Sharma V, Bora DK, Biswas R, Spatio-temporal analysis of b-value prior to 28 April 2021 Assam Earthquake and implications thereof. *ANNALS OF GEOPHYSICS*, 65(5), 2022.

Neog A, Biswas R, Evidence of Laser-Induced Amplification of Random Noise in WS2 Nanosheets Based Resistive System. *physica status solidi (RRL)–Rapid Research Letters*, 16(8):2200142, 2022.

Das U, Biswas R, Mazumder N, Elucidating thermal effects in plasmonic metal nanostructures: a tutorial review. *The European Physical Journal Plus*, 137(11):1-18, 2022.

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BOOKS

Biswas R, *Recent Developments in Using Seismic Waves as a Probe for Subsurface Investigations*. CRC Press, San Diego, 1st edition, 2022.

Biswas R, Mazumder N, *Recent Advancements in plasmonic probes*. Springer, Heidelberg, Germany, 1st edition, 2022.

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BOOK CHAPTERS

Shetty MG, Melanthota SK, Daimari NK, Biswas R, Mazumder N, Babitha KS, Synthesis, Conjugation, and Applications of Chiral Nanoparticles as Plasmonic Probes. In *Recent Advances in Plasmonic Probes: Theory and Practice*, pages 365-387, 2022. Cham: Springer International Publishing.

Biswas R, Sarma V, Borah N, HVSr as a versatile tool for subsurface investigation. In *Recent Developments in Using Seismic Waves as a Probe for Subsurface Investigations*, pages 133-148, 2022. CRC Press.

Gogoi T, Chettri S, Borgohain P, Sarmah R, Theory of Plasmonic Probes, In *Recent Advances in Plasmonic Probes: Theory and Practice*, pages 15-40, 2022. Cham: Springer International Publishing.

Das U, Mazumder N, Biswas R, An Appraisal on Plasmonic Heating of Nanostructures. In *Recent Advances in Plasmonic Probes: Theory and Practice*, pages 341-354, 2022. Cham: Springer International Publishing.

Talukdar M, Deb P, Exploring smart graphitic carbon nitride material toward flexible energy storage supercapacitors. In *Nanostructured Carbon Nitrides for Sustainable Energy and Environmental Applications*, pages 21-37, 2022. Elsevier.

CONFERENCE PROCEEDINGS

Nath KK, Biswas R, A proposal for treating Silver Nanoparticles doped PVA/Nanofiber with DBD plasma for detecting Insecticides using SERS. In *Advances in Physics and its Applications*, pages 54-57, 2022, Assam, India.

Sharma V, Bora DK, Biswas R, Exploring dependence of seismic b-value on depth and focal mechanism solution prior to 28th April Assam earthquake. In *Advances in Physics and its Applications*, pages 124-135, 2022, Assam, India.

Das U, Biswas R, Lab-on-paper chip sensor to detect melamine in adulterated milk by use of green noble metal nanoparticles. In *Advances in Physics and its Applications*, pages 100-104, 2022, Assam, India.

Medhi A, Giri M, Mohanta D, Non-enzymatic electrochemical detection of H₂O₂ using Ni (OH)₂ nanoparticles. In *International Conference on Emerging trend in nanomaterials Science and technology (ICETNMST-2022)*, volume 68 (2), pages 262-267, 2022, NIT Nagaland.

Dubey MC, Mohanta D, Low voltage electrowetting microlens of two immiscible liquids. In *Condensed Matter Days 2021 (CMDAYS-21)*, Volume 66, Pages 3412-3415, Central University of Jharkhand.

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Das P, Das MK, Khan N, Leptogenesis in a Multi-Higgs doublet model. In *Springer Proc. Phys*, volume 277, pages 599–604, 2022, 24th DAE-BRNS High Energy Symposium, Jatni, India.

PUBLICATION OF PATENTS

Inventor(s)	Patent Title	Application/ Patent Number	Published/ Granted	Country
R Biswas, N Mazumder, P Deb, S Banik	Development of Multimodal Optofluidic System for Sensing Heavy Metal Ions	202121041315	Applied	India
P Deb	Biodegradable heat shrinking film for cylinder gas cap and bottle lid sealing	202231042538	Applied	India

P Deb	Designed 2d graphitic sheet for viscous oil removal using magnet	404139	Granted	India
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PEDAGOGY AND CONTENT DEVELOPMENT

- IP201 Intellectual Property rights (for UG students)
- IP701 Internalising Intellectual Property rights (for PhD students)
- IP750 Intellectual Property Rights in Research and Beyond
- PH563 Physics of Nano Devices
- PH716 Surface Science

CONFERENCE/WORKSHOP/SYMPOSIUM/SEMINAR ATTENDED

Name of Faculty/Staff Member	Purpose of Attending	Title of Event	Date/Period	Organizer and Venue (Online/Offline)
D Thongjaomayum	Session Chair	National Conference of Physics Academy of Northeast	08-10 November 2022	Department of Physics, Manipur University (online)
D Mohanta	Session Chair	30 th National conference on Condensed Matter Physics	14 June 2022	NIT Nagaland, Dimapur
D Mohanta	Session Chair	National Conference on Emerging trends in Material Science	17 May 2022	Department. of Physics, Tezpur University
R Biswas	Session Chair	National Conference on Emerging trends in Material Science	17 May 2022	Department of Physics, Tezpur University
MK Das	Session Chair	National Conference of Physics Academy of Northeast	08-10 November 2022	Department of Physics, Manipur University

INVITED TALK

Name of Faculty Member	Title of the Talk	Title of the Event	Date	Organizer and Venue
P Deb	<i>Protect Your Creations with A Strategy</i>	Workshop on Week-Long Online International Workshop on	16 May 2022	Teaching Learning Centre, Tezpur University, Tezpur

		“Intellectual Property Rights for The Promotion and Protection of Innovations”		
P Deb	<i>2d Materials: Synthesis, Performance and Application</i>	National Conference on Emerging Trends in Materials Science 2022	17 May 2022	Department of Physics, Tezpur
P Deb	<i>Heads I Win, Tails You Lose-The IPR Toss Event</i>	Intellectual Property rights in contemporary world	03 June 2022	Jorhat Engineering College, Jorhat
P Deb	<i>Intellectual Property Rights Structure and Scope</i>	State level webinar on Intellectual Property rights	21 June 2022	Guwahati College, Guwahti
P Deb	<i>Two Dimensional Heterostructure Based Composite for Food Packaging</i>	Technology Enabling Centre Summer Internship Programme	05 July 2022	Tezpur University, Tezpur
P Deb	<i>Selection Committee for Scientific and Technical Assistant</i>	External Expert at IASST	02 September 2022	IASST, Guwahati
P Deb	<i>The Role of IPR In Supporting and Empowering Woman Innovators</i>	Workshop for Empowering Women Innovators	12 September 2022	Manohari Devi Kanoi girls’ college, Dibrugarh
P Deb	<i>10th National Conference on Condensed Matter Physics and Application</i>	MIT, Manipal	02 December 2022	MIT, Manipal
P Deb	<i>Innovation and Intellectual Property</i>	Manipal School of Life Science, Mahe, Manipal	04 December 2022	Manipal University, Mangalore
P Deb	<i>Condensed Matter Day</i>	NIT, Nagaland	14 December 2022	NIT, Nagaland
P Deb	<i>Condensed Matter Physics Seminar</i>	School of Physical and Mathematical Science, Nanyang Technology University, Executive Class room 2 (MAS-EC2)	13 February 2023	Singapore
P Deb	<i>Protect Your</i>	National Science Day,	01 March	Darrang College, Tezpur

	<i>Creations with A Strategy</i>	Darrang College	2023	
D Mohanta	<i>Time resolved photoluminescence spectroscopy</i>	Hands on training programme on analytical equipment	02 November 2022	STUTI programme of DST-SERB, New Delhi. Organized by SAIC-TU and Panjab University
D Mohanta	<i>Visualization through electron microscopy</i>	Analytical Approaches for Characterization of Food and Biomaterials	03 March 2023	STUTI programme of DST-SERB, New Delhi. Organized by Department of FET, TU
D Mohanta	<i>A talk on emerging 2D materials</i>	Invited talk	09 August 2022	Department of Physics, NIT Silchar
R Biswas	<i>Qualitative estimation of heavy metal ions via inexpensive routes</i>	National Conference on Emerging Trends in Physical Sciences	17 May 2022	Manipur University and DHSK College, Assam (Online)

AWARDS/HONOURS/NOTABLE ACHIEVEMENTS

Name of Awardee	Designation of Awardee	Achievement	Event/Awarded by
Upama Das, Nikhil Kumar Daimari, Ashamoni Neog, Pohar Borah	Research Scholar	4 th Prize	Technology Enabling Centre Tezpur University
Upama Das, Nikhil Kumar Daimari, Pohar Borah	Research Scholar	1 st Prize	AIU Student Research Convention: ANVESHAN (Zonal Level)
Upama Das, Nikhil Kumar Daimari, Pohar Borah	Research Scholar	2 nd Prize	AIU Student Research Convention: ANVESHAN (National Level)
Bhupali Deka	DST Inspire JRF	DST Inspire fellowship	DST, New Delhi

OTHER SIGNIFICANT ACTIVITIES OF THE DEPARTMENT

One day workshop on “Plasma Physics: from Laboratory to Space” sponsored by DST-SERB and organized by plasma Physics Laboratory, Department of Physics, Tezpur University for college students on 12 January 2023.

One day “National Conference on Emerging trends in Material Science, (In memory of Late Prof. A. Kumar)”, Department of Physics, Tezpur University on 17 May 2022.

NUMBER OF STUDENTS QUALIFIED IN NET-JRF/SLET/GATE

Name of Qualifying Examination	Number of Qualified Students	Academic Programme
NET	02	MSc

GATE	02	MSc
JEM	01	MSc

NOTABLE PLACEMENT OF STUDENTS

Name of Student	Academic Programme	Placement Designation	Company/ Organization	Type of Selection (On-Campus/ Off-Campus)
Dr Nabadweep Chamuah	PhD	Asstt. Prof.	Digboi College, Digboi	Off-Campus
Mr Digen Das	MSc	Asstt. Prof.	Sadiya College, Tinsukia	Off-Campus
Ms Sayanti Dasgupta	PhD	Asstt. Prof.	Sadiya College, Tinsukia	Off-Campus
Mr Liyenda Gogoi	PhD	Asstt. Prof.	Dindayal Upadhyay College, Behali	Off-Campus
Ms Kashmiri Baruah	PhD	Asstt. Prof.	Titabor College, Titabor	Off-Campus
Ms Papor Das	PhD	Asstt. Prof.	Moridhal College, Dhemaji	Off-Campus
Ms Pranamika Dutta	PhD	Asstt. Prof.	Moridhal College, Dhemaji	Off-Campus
Mr Rupam Bharat Saikia	PhD	Asstt. Prof.	Guwahati College, Guwahati	Off-Campus

ENROLLMENT OF STUDENTS IN OTHER INSTITUTES FOR HIGHER STUDIES

Name of Student	Academic Programme (in TU)	Name of other Institute	Enrolled Academic Programme
Pal Bhuyan	Lateral exit at 6th sem. Int.	Sorbonne University, France	MSc
Pragyan Jyoti Dutta	Lateral exit at 6th sem. Int.	University of Liverpool	MSc
Aryaman Gogoi Baruah	Lateral exit at 6th sem. Int.	IIT, Delhi	MSc
Bhargab Gogoi	Lateral exit at 6th sem. Int.	Pondicherry University	MSc
Dikshita Hazarika	Lateral exit at 6th sem. Int.	JNU, New Delhi	MSc
Minam Modi	Lateral exit at 6th sem. Int.	Pondicherry University	MSc
Md Sahid Ahmed	Lateral exit at 6th sem. Int.	IIT, Indore	MSc
Vishrut Bezbarua	Lateral exit at 6th sem. Int.	Sorbonne University, France	MSc

Prakritish Gogoi	Lateral exit at 6th sem. Int.	Sorbonne University, France	MSc
Anupam Sharma	Lateral exit at 6th sem. Int.	Sorbonne University, France	MSc
Maharshi Sarma	Lateral exit at 6th sem. Int.	Sorbonne University, France	MSc

FACULTY MEMBERS

Professor

Jayanta K Sarma, PhD (Gauhati University)

Specialization/Area of Interest: Particle Physics

Email: jks@tezu.ernet.in

Nidhi S Bhattacharya, PhD (Delhi University)

Specialization/Area of Interest: Microwave Engineering

Email: nidhi@tezu.ernet.in

Nilakshi Das, PhD (Gauhati University)

Specialization/Area of Interest: Plasma Physics

Email: ndas@tezu.ernet.in

Dambarudhar Mohanta, PhD (Tezpur University)

Specialization/Area of Interest: Soft Condensed Matter Physics

Email: best@tezu.ernet.in

Gazi A Ahmad, PhD (Gauhati University)

Specialization/Area of Interest: Optoelectronics

Email: gazi@tezu.ernet.in

Mrinal K Das, PhD (Gauhati University)

Head of the Department

Specialization/Area of Interest: Neutrino Physics

Email: mkdas@tezu.ernet.in

Pabitra Nath, PhD (Gauhati University)

Specialization/Area of Interest: Photonics

Email: pnath@tezu.ernet.in

Pralay K Karmakar, PhD (Gauhati University)

Specialization/Area of Interest: Astroplasma

Email: pkk@tezu.ernet.in

Associate Professor

Ng. K Francis, PhD (Gauhati University)

Specialization/Area of Interest: High Energy Physics

Email: ngk@tezu.ernet.in

Rajib Biswas, PhD (Diburugarh University)

Specialization/Area of Interest: Geophysics, Optoelectronics
Email: rajib@tezu.ernet.in

Assistant Professor

Rupjyoti Gogoi, PhD (Gauhati University)
Specialization/Area of Interest: Astrophysics
Email: rgogoi@tezu.ernet.in

Shyamal K Das, PhD (IISc, Bangalore)
Specialization/Area of Interest: Material Science
Email: skdas@tezu.ernet.in

Ritupan Sarmah, PhD (IISc, Bangalore)
Specialization/Area of Interest: Theoretical Materials Science, Nonlinear Dynamics
Email: ritupan@tezu.ernet.in

Moon Moon Devi, PhD (TIFR, Mumbai)
Specialization/Area of Interest: Experimental High Energy Physics
Email: devimm@tezu.ernet.in

Jugal Lahkar, PhD (Gauhati University)
Specialization/Area of Interest: High Energy Physics
Email: sriyan@tezu.ernet.in

Diana Thongjaomayum (North Eastern Hill University)
Specialization/Area of Interest: Computational Condensed Matter Physics
Email: dianat@tezu.ernet.in

Inspire Faculty

Sorkaibam N. Singh, PhD (TIFR, Mumbai)
Specialization/ Area of Interest: String Theory, Quantum Chaotic Systems
Email: phy_sns@tezu.ernet.in

Guest Faculty

Sayan Kr. Paul, PhD (Saha Institute of Nuclear Physics)
Specialization/ Area of Interest: High Energy Physics
Email: paul.sayan@gmail.com

STAFF MEMBERS

Technical Officer

Kishore K Baruah, PhD (Gauhati University)
Email: kiba@tezu.ernet.in

Technical Assistant

Mrinmoy Gohain
Email: mgohain@tezu.ernet.in

Laboratory Assistant

Palash Dutta

Email: duttapk@tezu.ernet.in

Biju Boro

Email: bbiju@tezu.ernet.in

Dhruba Deka

Email: ddeka@tezu.ernet.in

Assistant

Umesh Patir

Email: patir@tezu.ernet.in

MTS

Narayan Sarma

Email: narayan2@tezu.ernet.in

CENTRE FOR YOGA AND SPORTS SCIENCES

Considering the academic value of Yoga and Sports, Tezpur University established in the year 2022-23, the Centre for Yoga and Sports Sciences. The Centre is placed under School of Sciences and is envisioned to offer courses and programmes related to Yoga and Sports Sciences. During 2022-23, the Centre has offered one add on course and one Open Elective course on Yoga. One Value added course each in Yoga and Sports and another Open Elective course in Sports are also ready to be offered by the Centre. The Centre observed with great fanfare Tezpur University Yoga Mahatsav, a 02 month count down fest to mark the 8th International Day of Yoga and nation's 75 years of independence. The Centre collaborated with NSS, Tezpur University unit and Indian Army in the mega event. Faculty, staff and students across the various departments of the University came together to organize it with great enthusiasm reflecting the team spirit and vigour of Tezpur University. People and children from the nearby community also participated in different activities. The events included two Yoga camps of 15 days duration- one for adults and one for children, Yoga outreach programme (in villages), Street play in various locations, Yogathon, online talks by experts, 01 week online session on Pranayama and meditation, online session on aura meditation and healing, Yoga protocol training, Yoga Competition for students etc. Every day two practice sessions of Yoga are held apart from routine health counseling and therapy. The sessions are open to all and morning session are held in blended mode. The Centre has one Yoga Coach, one Guest Faculty, a Centre Head and is actively supported by Assistant Director Physical Education and Sports Officer of the University. The Centre also extended Yoga training for students of Engineering and Business Administration departments.

Personnel of the Centre

Coordinator

Papori Baruah, PhD

Professor, Department of Business Administration

Email: papori@tezu.ernet.in

Yoga Coach

Partha P Das

Email: ommyoga@tezu.ac.in

Guest Faculty

Nagendra K Jain

Email: nagendra@tezu.ac.in

CENTRE FOR DISTANCE AND ONLINE EDUCATION

THE CENTRE

The Centre for Distance and Online Education (CDOE) was established in the year 2011 as the Centre for Open and Distance Learning (CODL). The Centre was rechristened to its present name as per the guidelines contained in the *UGC (Open and Distance Learning Programmes and Online Programmes) Regulations, 2020*. Established to disseminate and impart education through open and distance learning modes in chosen areas, the Centre offers various post-graduate degrees and diploma and certificate programmes in emerging areas of humanities & and social sciences, science & and technology, and management sciences with a flexible system to cater to the needs of the learners who are not in a position to access higher education in the conventional mode. Following a student-centric system of teaching-learning, the Centre facilitates its learners to pursue higher education with the help of modern technology guided by qualified and experienced faculty.

Currently, the Centre offers the following post-graduate programmes: MA in Mass Communication and Journalism, MA in English, and MA in Sociology. Post-graduate Diploma programmes offered in the current thrust areas include Human Resource Management, Environmental and Disaster Management, and Child Rights and Governance.

The Centre has the plan to offer more skill-based and traditional academic programmes with a vision to connect itself to a wider range of learners.

ACADEMIC PROGRAMMES AND STUDENT INTAKE

Academic Programme	Intake
MA in Mass Communication and Journalism	21
MA in English	47
MA in Sociology	86
Diploma in Human Resource Management	33
Diploma in Child Rights and Governance	13
Diploma in Environmental and Disaster Management	18

THRUST AREAS

Mass Communication and Journalism, English, Sociology, Environment and Disaster Management, Human Resource Management, and Child Rights and Governance.

MAJOR FACILITIES / EQUIPMENT AVAILABLE

- A dedicated library of study materials and other reference books
- Dedicated faculty rooms with facilities for online teaching
- Conference Hall with multi-media projection system

PUBLICATIONS

JOURNAL PUBLICATION

Boruah M. Sad that public space is now an intolerant battleground. *VIDURA, A Journal of the Press Institute of India*, 14(1), 2022.

OTHER PUBLICATIONS

Boruah M. Ageism in Indian Media Narrative. *Countercurrent.org*, 18 August 2022.

Boruah M. Call for a Media Literacy Movement. *Eastern Chronicle*, Editorial Page, 14 October 2022.

CONFERENCE/WORKSHOP/SYMPOSIUM ATTENDED

Name of Faculty/Staff Member	Event	Date/Period, Year	Organizer and Venue (Online/Offline)
Kalpadroom Almanyia	Participated in a Workshop on-Creation of Academic Bank of Credits	24 November 2022	University Grants Commission-Distance Education Bureau; (Online)
M Boruah	Participated in a Workshop on-Creation of Academic Bank of Credits	24 November 2022	University Grants Commission-Distance Education Bureau; (Online)
P P Kalita	Participated in a Workshop on-Creation of Academic Bank of Credits	24 November 2022	University Grants Commission-Distance Education Bureau; (Online)
R K Doley	Participated in Workshop on -Nasha Se Azadi	04 August 2022	Ministry of Social Justice & Empowerment, Govt. of India; (Online)
	Participated in a Workshop on-Creation of Academic Bank of Credits	24 November 2022	University Grants Commission-Distance Education Bureau; (Online)
	Participated in National Workshop on-Janjatiya Anusandhan: Asmita, Astitya Evam Vikas	27-28 November 2022	National Commission for Scheduled Tribes; Vigyan Bhawan, IIT Delhi and Rashtrapati Bhawan, New Delhi
S Goswami	Resourcing sessions in Interdisciplinary National Faculty Development Programme on- Intellectual Property Rights (IPR)	21 June 2022	TU and Guwahati College (Online)
	Resourcing sessions in Two-Day Impact Lecture Series on- Intellectual Property Rights	16 July 2022	TU and Kendriya Mahavidyalaya, Jorhat (Online)
	Participated in a Workshop on-	24 November	University Grants

	Creation of Academic Bank of Credits	2022	Commission-Distance Education Bureau; (Online)
SA Pathan	Presented paper, <i>Social Equality and Muslims in India: An Appraisal on Assam</i> in ICSSSR sponsored National Seminar	2-3 November 2022	Dr. Ambedkar Chair, Tezpur University
	Participated in a Workshop on- Creation of Academic Bank of Credits	24 November 2022	University Grants Commission-Distance Education Bureau; (Online)

TALKS BY THE FACULTY ABROAD AND IN INDIA

Name of Faculty Member	Event	Date	Place
RK Doley	Communication Skills: The Key to Office Management, a Training Programme for Group A Officers	24 February 2023	Indian Institute of Technology Guwahati

SEMINAR/WORKSHOP/SYMPOSIUM/LECTURES ORGANIZED

Title	Date
Two-Day Impact Lecture Series on Intellectual Property Rights organized in collaboration with Kendriya Mahavidyalaya, Jorhat	16 -17 July 2022
Workshop on Audio-Video production, Tezpur University	02-04 January 2023
Understanding media literacy and its importance in the present time, in collaboration with JB College, Jorhat, Assam	08 March 2023
Interdisciplinary National Faculty Development Programme on Intellectual Property Rights (IPR) organized in collaboration with Guwahati College, Guwahati	20 - 24 June 2022

DISTINGUISHED VISITORS

- Debabrata Das, Vice Chancellor, Assam Rajiv Gandhi University of Management, Sivsagar, Assam
- KS Arul Selvan, Director, School of Journalism and New Media Studies, IGNOU, New Delhi

DIRECTOR OF THE CENTRE

Rajeev K Doley, PhD (IIT Guwahati)

Specialization/Area of Interest: Sociolinguistics

Email: rkdooley@tezu.ernet.in

FACULTY MEMBERS

Assistant Professor (Guest Faculty)

Suchibrata Goswami, PhD (Dibrugarh University)

Specialization/Area of Interest: English/IPR

Email: suchitu@tezu.ernet.in

Madhusmita Boruah, PhD (Tezpur University)
Specialization/Area of Interest: Mass Com. & Journalism
Email: madhu@tezu.ernet.in

Shofiul A Pathan, MPhil (JNU)
Specialization/Area of Interest: Sociology
Email: shofiul@tezu.ernet.in

STAFF MEMBERS

Assistant Registrar

Partha P Kalita
Email: parthp@tezu.ernet.in

Computer Operator

Kalpadroom Almanyia
Email: kalpa01@tezu.ernet.in

Assistant

Anita Ghosh
Email: anitag_ta@tezu.ernet.in

MTS

Abdul Jalil

CENTRE FOR MULTIDISCIPLINARY RESEARCH

THE CENTRE

Tezpur University instituted the Centre for Multidisciplinary Research (CMDR) formally in 2020 to widen up and validate multidisciplinary education. Multidisciplinary, a unique feature of educational programmes has been strengthened with the introduction of open electives/CBCS (Choice Based Credit System) in the academic curriculum and collaborative research.

In view of the collaborative and multidisciplinary research works including externally funded projects among various departments and centres within the University and outside leading to award of Degrees and Diplomas and research publications, CMDR has designed and promoted a few discipline-specific programmes integrating the courses of several disciplines covering Science, Technology, Engineering, Management, Humanities, and Social Sciences.

The vision of CMDR is to contribute to the development of human resource catalyzing multidisciplinary research and education providing an integrated and holistic platform.

MISSION

- To promote multidisciplinary research and education through meaningful integration of Arts, Languages, Humanities and Social Sciences, Management Sciences, Sciences, Engineering and Vocational fields
- To have a grip over the 21st-century issues and challenges, with a focus on regional context, and
- To facilitate multidisciplinary activities covering key thematic areas, namely, ethics of social engagement, sustainability, and soft skills for learners engaged in specialized chosen fields.

PhD research is carried out by a team on the following thematic areas and issues of national importance dealt in regional context.

- Climate change, livelihood, natural calamities
- Net zero target: technologies and issues
- Technology disruption: prospect, issues, and impact of new technologies (viz., robotics, IoT, big data etc.) in the contexts of society, environment and economy
- Sustainable development and developmental disparity
- Indian Knowledge System towards holistic approaches for well-being and sustainability
- Mental Health and well-being - innovative technology driven approaches of investigation
- Intellectual Property Rights: policy, issues, and impact
- Modern Energy Storage System: Applications (e.g., e-vehicles, drones, biomedical applications) and contemporary issues
- Communication for health, culture, social issues, and development

ACADEMIC PROGRAMMES AND STUDENTS INTAKE

Programme	Intake
PhD in Multidisciplinary Research	Variable (21 in 2022-2023)

MAJOR FACILITIES /EQUIPMENT AVAILABLE

Besides utilizing facilities and equipment available in different laboratories of the University, CMDR also possesses some computational hardware (DT Dell OptiPlex 2080 computers) and software (Gaussian 16 Windows 64 Bit).

RESEARCH PROJECTS (BOTH COMPLETED AND ONGOING)

Project Title	Funding Agency	Amount (in INR)	Duration	Investigator(s)
Exploring Knowledge on Medieval Assam: Multidisciplinary IKS Centre at Tezpur University	IKS Division of MoE, AICTE, New Delhi	32.00 lakhs	2023-2025	R Goswami (PI) B Deka, D C Baruah, (Co-PI) J G Konwar, N D Namsa, N Gogoi, M Dutta, P Kakoty, P Mishra, T Ghosh S K Ray

PUBLICATIONS

Articles

Choudhury S, Chaliha A. NEP2020's Contribution towards Women's Progressive Growth in Society. *Women's Well-Being: Inclusive & Sustainable Growth*, Gargaon College, Assam, 2023.

Doley N. Arunachal Pradesh Tibbetia Mular Monpa Janagusthir Sangskritik Oitisa, *Basanta Utsav Rangali-2023*, Ministry of Cultural Affairs, Government of Assam, 2023.

SEMINARS/CONFERENCES/WORKSHOPS/SYMPOSIA PRESENTED/ATTENDED

Name of the faculty member/ research scholar	Title of the Event	Date	Place
Anwasha Chaliha	Presented a paper, <i>Water Quality for Especially Abled - A Case Study of Mrinaljyoti Rehabilitation Centre, Duliajan, Assam, India</i> at a workshop cum outreach programme, Multidisciplinary Research for Sustainable	14 March 2023	Centre for Multidisciplinary Research (CMDR), Tezpur University, Assam

	Society		
Bishnu Shankar Satapathy	Presented a paper, <i>Continuous Integration and Continuous Deployment (CI/CD) Pipeline for the SaaS Documentation</i> in an International Conference, Information Technology InCITE 2023 Decision intelligence: Transform your World	02-03 March 2023	Amity school of Engineering & technology Department of Information Technology, New Delhi
Dharitri Sarmah	Presenting a paper, <i>Human Relation and Conscious Behaviour</i> in a National Seminar, Excitement in Biology	6 March 2023	Department of MBBT Tezpur University, Assam
	Participated in a workshop, Quality Education for Sustainable Development	25 March 2023	Department of Education Tezpur University, Assam
	Participated in a workshop, Bibliometric, Literature Review and statistical Analysis	24-29 March 2023	Human Behavtics Private Limited, Gomti Nagar Extension, Sector-1, Lucknow-10, Uttar Pradesh
Elda Mery Khyllait	Participated in a Capacity building programme on Tools and Techniques for Conservation of Biodiversity	21-27 November 2022	DST's Centre of Excellence, Department of Environment Science, Tezpur University, Assam
	Presented a paper, <i>Women, Environment and Conservation</i> at a workshop cum outreach programme, Multidisciplinary Research for Sustainable Society	14 March 2023	Centre for Multidisciplinary Research (CMDR), Tezpur University, Assam
	Participated in the workshop, Climate Action and SDGs (CAS-2023)	21 March 2023	Department of Environmental Science, Tezpur University, Assam
	Participated in a workshop, Bibliometric, Literature Review and Statistical Analysis	24-29 March 2023	Human Behavtics Private Limited, Gomti Nagar Extension, Sector-1, Lucknow-10, Uttar Pradesh
	Participated in a workshop, Quality Education for Sustainable Development	25 March 2023	Department of Education, Tezpur University, Assam
Mintu M Sarma	Presented a paper, <i>MITA (Mental Illness Treatment Alliance) A humble initiative from the ant: All</i>	28 October 2022	TISS, Guwahati, Assam

	<i>for the Mental and Planetary Health</i> in a National Seminar, North East CSR Forum (NECSRF)		
	Presented a paper, <i>Unifying spirituality in mental health care practices: the perspective of the Indian knowledge system</i> in an International Conference, Science and Philosophy in the Indian Knowledge System	17-18 December 2022	Institute of Science and Spirituality Trust collaborated by AICTE & IKS division, Govt. of India, Noida International University, New Delhi
	Attended a workshop on Spirituality	27-31 December 2022	Maharshi Adhyatma Vishwavidyalay, Goa
	Delivered a speech, <i>Mental Illness Treatment Alliance: Health Systems Novel Network on Bodoland</i> , in the Bodoland Knowledge Festival	27 February -02 March 2023	Bodoland University, Kokrajhar, Assam
	Participated in an International Conference, Positive Psychology: Contemporary Developments	03-04 March 2023	National Positive Psychology Association, IIT Delhi (Online)
	Delivered a speech, <i>The equity informs recovery paradigm in structurally vulnerable clinical population</i> , in a National Conference of the World Association of Psychosocial Rehabilitation Indian Chapter on Promoting Rights and Recovery in Mental Health	17-18 March 2023	LGBRIMH Tezpur & World Association of Psychosocial Rehabilitation Indian Chapter (WAPR-IC), LGBRIMH Tezpur Mental Hospital, Assam
	Presented a paper, <i>An Interpretative Phenomenological Analysis of Spirituality in Remission of Mental Illness: Conversation Beyond</i> , in a workshop cum outreach programme, Medicine Multidisciplinary Research for Sustainable Society	14 March 2023	Centre for Multidisciplinary Research (CMDR), Tezpur University, Assam
Najima Ahmed	Presented a paper, <i>Banana Plant: A key to sustainable Society</i> , at a workshop cum outreach	14 March 2022	Centre for Multidisciplinary Research (CMDR), Tezpur University, Assam

	programme, Multidisciplinary Research for Sustainable Society		
Priyanka Chakravarty	Participated in a Three-day capacity building programme	06-08 July 2022	Teaching Learning Centre, Tezpur University, Assam
	Participated in an International Conference, Sustainable Approaches in Food Engineering and Technology (SAFETy)	19-20 October 2022	Food Engineering and Technology, Tezpur University, Assam
	Participated in a workshop on Data Science and its Applications	02-03 March 2023	Department of CSE, Tezpur University, Assam
	Participated in a workshop on Translation	22 March 2023	Department of English, Tezpur University, Assam
Snigdha Choudhury	Presented a paper, <i>Emergence of script in Kamarupa: A preliminary study of some rock and copper inscriptions of Ancient Assam</i> , in a workshop cum outreach programme, Multidisciplinary Research for Sustainable Society	14 March 2023	Centre for Multidisciplinary Research (CMDR), Tezpur University, Assam
	Presented a paper, <i>Emergence of Kamarupi Script: A Preliminary study of some rock and copper inscriptions of Ancient Assam</i> , in a National Conference on Language and Linguistics	18 March 2023	Department of Linguistics and Language Technology, Tezpur University, Assam
	Participation in a workshop, Taking forward the UGC mandate for pursuing quality research	23 March 2023	UGC CARE, Tezpur University, Assam
Anurag Jayswal, Priyank Bhutani, Raghvendra Patil, Mintu M Sarma, Dharitri Sarma, Anand P Singh, B Deka, RC Deka, SK Ray	Presented a paper, <i>Traditions to nurture body consciousness</i> , in a workshop cum outreach programme, Multidisciplinary Research for Sustainable Society	14 March 2023	Centre for Multidisciplinary Research (CMDR), Tezpur University, Assam

TALKS BY THE FACULTY ABROAD AND IN INDIA

Name of the Faculty Member	Event	Date	Place/institute/venue
DC Baruah	Invited Talk at Bodoland International Knowledge Festival	27 February- 02 March 2023	Bodoland University, Kokrajhar, Assam
SK Ray	Invited Talk at National Seminar on yoga for Human Excellence, Peace and Holistic well being	22-23 June 2022	Tezpur University, Tezpur, Assam

SEMINAR/WORKSHOP/SYMPOSIA/INVITED LECTURES ORGANISED

Title	Date
Organized a workshop on Tradition and Health accompanied by the Outreach Program on the same. It emphasized the significance of traditional practices in maintaining well-being, fostering empathy for diverse healthcare approaches, and raising awareness of food as a powerful form of medicine.	22-23 June 2022
Organized a day long workshop on Multidisciplinary Research for Sustainable Society followed by student outreach programme.	14 March 2023

OTHER IMPORTANT ACTIVITIES

- Outreach Programme on Speech and Hearing held during 18-19 June 2022
- Outreach Programme on Yoga and Health held during 20-21 June 2022

DISTINGUISHED VISITORS

- NC Talukdar, Professor and Vice-Chancellor, Assam Down Town University, Guwahati, Assam
- GS Murthy, Professor, Department of Biosciences and Biomedical Engineering, IIT Indore, Madhya Pradesh (online)
- US Dixit, Professor, Department of Mechanical Engineer and Head, Centre for Indian Knowledge System, IIT Guwahati, Assam
- RC Deka, Professor and Vice-Chancellor, Cotton University, Guwahati, Assam

AWARDS & HONOURS/ NOTABLE ACHIEVEMENTS

- Mintu Moni Sharma, a Research Scholar of the Centre, was awarded the Case Study Special Mention at the North-East CSR Forum (NECSRF) 2022, at TISS, Guwahati held on 28 October 2022
- Mintu Moni Sharma, a Research Scholar of the Centre, was awarded the first prize in the Poster Competition at the outreach activity of Centre for Multidisciplinary Research (CMDR), Tezpur University held on 14 March 2023

- Anwesha Chaliha, a Research Scholar of the Centre was awarded second position in the Poster Competition at the outreach activity of Centre for Multidisciplinary Research (CMDR), Tezpur University held on 14 March 2023
- Snigdha Choudhury, a Research Scholar of the Centre was awarded Savitribai Jyotirao Phule Single Girl Child Fellowship for the period of 2022-2027

FACULTY MEMBERS AND STAFF

DIRECTOR OF THE CENTRE

Debendra C Baruah, PhD (Punjab Agricultural University Ludhiana)

Professor, Department of Energy

Specialization/Areas of interest: Advanced Bioenergy, GIS for Supply Chain management, IoT for Entrepreneurship, Waste to Energy for Circularity, Practices and Technology for Net Zero and Sustainability

Email: baruahd@tezu.ernet.in

Supervisor

Robin K Dutta, PhD (NEHU, Shillong)

Professor, Department of Chemical Sciences

Specialization/Areas of interest: Surfactants / Water Treatment, Sancipat Manuscript and Hengul-Haital Painting Traditions of Early and Medieval Assam, Scripts of India.

Email: robind@tezu.ernet.in

Ramesh C Deka, PhD (National Chemical Laboratory Pune)

Professor, Department of Chemical Sciences

Specialization/Areas of interest: Molecular Modelling, Quantum Chemistry, Hybrid Quantum Mechanics/Molecular Mechanics (QM/MM) methods; Density Functional based Reactivity Descriptors; Catalysis, zeolite, theoretical heterogeneous and homogeneous catalysis; Theoretical studies of nanoclusters to design nanocatalysts; Quantitative Structure Activity Relationship (QSAR) of drug molecules; Synthesis, Characterization and Application of Based Catalysts, Supported Metal Complexes, Metal Oxide Nanoparticles; Theoretical studies of carbon nanotubes

Email: ramesh@tezu.ernet.in

Suvendra K Ray, PhD (CCMB Hyderabad)

Professor, Department of Molecular Biology and Biotechnology

Specialization/Areas of interest: Plant-microbe interaction, Molecular Evolution, Holistic approaches and well-being

Email: suven@tezu.ernet.in

Manuj K Hazarika, PhD (IIT Kharagpur)

Professor, Department of Food Engineering and Technology

Specialization/Areas of interest: Engineering of foods, processes and processing systems, Food product innovation and quality by design, Competency based education and skilling, Entrepreneurship in food sector, AI/ML for agro-food systems

Email: mkhazarika@tezu.ernet.in

Robin Deka, PhD (NEHU Shillong)

Professor, Department of Sociology

Specialization/Areas of interest: Social Movements, Social Exclusion, Agrarian Studies, Sociology of Northeast India

Email: rdeka@tezu.ernet.in

Bhabesh Deka, PhD (IIT Guwahati)

Professor, Department of Electronics & Communication Engineering

Specialization/Areas of interest: Digital Image Processing, Biomedical Signal Processing, Machine and Computer Vision; Machine Learning and Deep Learning for Biomedical Signal/ Image Processing and Analysis; Deep Learning for Precision Agriculture; Microwave and Millimeter-wave Biosensors for Smart Healthcare; Embedded Machine Learning on FPGA for system-on-chip (SoC) Applications

Email: bdeka@tezu.ernet.in

Siddhartha S Satapathy, PhD (Tezpur University)

Associate Professor, Department of Computer Science and Engineering

Specialization/Areas of interest: Computational biology and bioinformatics

Email: ssankar@tezu.ernet.in

S Ibotombi Singh, PhD (Tezpur University)

Assistant Professor, Department of Computer Science and Engineering

Specialization/Areas of interest: Trust and Reputation Systems, Web Services, Data Mining, Spatial Database

Email: sis@tezu.ernet.in

Mridul Dutta, PhD (Gauhati University)

Assistant Professor, Department of Business Administration

Specialization/Areas of interest: Community Based Tourism, Intellectual Property Assets

Email: mridul@tezu.ernet.in

Pankaj Barah, PhD (NTNU Norway)

Assistant Professor, Department of Molecular Biology and Biotechnology

Specialization/Areas of interest: Systems Biology, Bioinformatics, Big data analytics, OMICs

Email: barah@tezu.ernet.in

Nima D Namsa, PhD (Indian Institute of Science Bangalore)

Assistant Professor, Department of Molecular Biology and Biotechnology

Specialization/Areas of interest: Rotavirus, scrub typhus, molecular evolution of RNA viruses

Email: namsa@tezu.ernet.in

Moushumi Kandali, PhD (MS University Baroda)

Assistant Professor, Department of Cultural Studies

Specialization/Areas of interest: Visual Art and Culture, Gender Studies, Indian Literary Cultures, Aesthetic and Cultural theories

Email: moushumi@tezu.ernet.in

Rupam Goswami, PhD (NIT Silchar)

Assistant Professor, Department of Electronics & Communication Engineering

Specialization/Areas of interest: Simulation and Modeling of Semiconductor Devices

Email: rupam21@tezu.ernet.in

STAFF MEMBERS

Assistant

Nihal Sarmah

Email: niha1@tezu.ernet.in

Central Facilities

- Alumni Cell
- Central Library
- Centre for Inclusive Development
- Centre for Innovation, Incubation and Entrepreneurship
 - Centre for Public Policy and Governance
 - Centre for University-Industry Interface
 - Computer Centre
 - Engineering Cell
 - Health Centre
 - Horticulture Section
- International Students Office
- Internal Complaints Committee
- Internal Quality Assurance Cell
- Sophisticated Analytical Instrumentation Centre
 - Teaching Learning Centre
 - Technology Enabling Centre

ALUMNI CELL

THE CELL

The Alumni Cell, Tezpur University is an administrative body under the aegis of the Vice Chancellor. The cell was set up in the year 2018 with an aim to foster strong bonds between its alumni and the University community. Tezpur University (TU) believes that its Alumni are its goodwill ambassadors. They serve as effective interlocutors, provide advice and support to the University, suggest frontline research areas, offer career advice, enable technical collaboration in research and projects, etc. The Cell facilitates to streamline all these activities and strives to bridge the gap between the University and its esteemed alumni community.

ACTIVITIES

The Alumni Cell continuously endeavours to strengthen the relations between the Alumni and the University. It is going to be instrumental in organizing Annual Alumni Meets, forming Geographic Alumni Chapters and conducting meetings, organizing regular Alumni Lectures by distinguished alumni in the campus, and organizing such events/activities that may benefit the University and its Alumni. The Alumni Cell appeals to all Alumni of TU to support in promoting the Student-Alumni Mentorship Programme and “My Signature” programme which is “Giving Back to Alma Mater” (Alumni Contribution) in any form.

- Conducted an Alumni Faculty Coordinators Meeting at VC’s Board Room on 7th April 2022.
- Organised Alumni Talk on “Corporate Communication Skills” by Ms Smita Dey Tarafder, Co-founder, Swakia Technologies and Alumna of Dept. of Business Administration (MBA 2004-06 batch) for the MBA students on 10 October 2022 and 111 students participated.
- Organised Alumni Talk on “Importance of Internship” by Ms Smita Dey Tarafder, Co-founder, Swakia Technologies and Alumna of the Dept. of Business Administration (MBA 2004-06 batch) for the MBA students on 10 October 2022 and 52 students participated.
- Organised Alumni Talk on “Creating a powerful first Impression- Resume” by Mr Tanmoy Patgiri, Advisor – Dell Technologies, Alumnus of the Dept. of Business Administration (MBA 2012-14 batch) on 22 October 2022 and 61 students participated.

THE PERSONNEL OF THE CELL

Chief Patron

Shambhu Nath Singh, PhD
Vice Chancellor
Email: vc@tezu.ernet.in

Advisor

Tapan K Gogoi
Working President, TU Alumni Association and Professor, Dept. of Mechanical Engineering
Email: tapan_g@tezu.ernet.in

Rajeev K Doley, PhD
Director, Centre for Inclusive Development
Email: rkdooley@tezu.ernet.in

Alumni Coordinator

Bipul K Sarmah, PhD
Assistant Professor, Dept. of Mathematical Sciences

Email: bipul@tezu.ernet.in

Shobhanjana Kalita, PhD

Assistant Professor, Dept. of Computer Science and Engineering

Email: kalitas@tezu.ernet.in

Alumni Officer cum Convenor

Deena Davy

Training and Placement Officer

Email: deena@tezu.ernet.in

CENTRAL LIBRARY

THE CENTRAL LIBRARY

The Central Library, Tezpur University was established in 1994 along with the establishment of the University. The library holds its goal to achieve the height of an ideal University library in the region as well as in the country. Central Library has a diverse collection of more than one lakh books, journals, and other research documents both in print and electronic form. The Library is fully modernized with a Radio Frequency Identifier (RFID) system, automated with the KOHA open-source software, which is an integrated multi-user library management system that supports all its In-house operations. The library maintains the research publications in the Knowledge Repository (Institutional Repository) and Theses & Dissertations in Electronic form in the ETD server.

Collections in the library cover the latest information resources on all areas of Engineering, Science, Management, Social Science, and Humanities. The library is providing access to its e-resources and databases in a remote access facility through INFED Shibboleth. The Central Library is a member of INFLIBNET Centres and DeLCon, through these Consortia libraries have access to a good number of e-resources and databases. The library is also a member of DELNET and utilizes its services.

Library users can access book databases, theses, journal databases, e-journals, and other e-resources from any computer within the University campus. The Central Library is an invaluable resource for students, researchers, and faculties of the University. The library delivers innovative information products, services, and programs of the highest quality that are integrated with teaching, learning, and research activities. The library occupies a unique place in the academic and research activities of the university. The mission of the Central Library is to support and supplement learning, teaching, and research programs.

The Central Library is housed at the center of the University campus in an aesthetically built three-storied building occupying an area of 4734 sq. meters.

OPENING HOURS

The Central Library is open from 9.00 am to 3.00 am midnight throughout the year.

CENTRAL LIBRARY COLLECTIONS

Total Collection	145843
Books	116014
Books added during 2022-23	3035
Print Journals	92
E-Books	361
E-Journals	9309+
Back Volumes of Journals	10844
Online databases	14
Thesis	899
Dissertations	1993
Braille Collection	212

CDs	2995
VHS Cassettes	36
Newspaper/Magazines	7
Manuscripts	32

CENTRAL LIBRARY SERVICES

The Central Library provides the following services:

- Self-issue/return of books with RFID system
- Remote access of Library e-Resources
- Book Bank Facility for EWS
- Reference Services
- OPAC/WebOPAC
- E-Books (intranet/Internet)
- Current Awareness Service (Monday Morning, InfoJ, InfoGranth)
- New Arrival of Books
- Training cum Demo on Electronic Resources
- Online Renewal and Reservation of Books
- Photocopy Services
- Children Library Corner
- Library & Information Services to Outsiders on Request
- Research Support Services
- Plagiarism Check (Urkund/Turnitin)
- Document Delivery Services (DELNET, JCCC)
- Special services to differently able person
- News Paper Clipping
- Online membership Registration and Smart Card
- NDLI Club Membership
- 18 hours reading facilities
- TU IRNIS-faculty Profile
- Digital Resource Centre (DRC)

LIBRARY USERS' STATISTICS

Visitor category	Student	Research Scholar	Faculty member	Staff	Outsider	Total
Average Daily Visitor (Physical)	329	47	11	07	18	412
Average Virtual Visitors	-	-	-	-	-	357

CIRCULATION (APRIL 2022 TO MARCH 2023)

Issue	Return	Renewal	ILL Issue
43048	60143	42317	09

DISTINGUISHED VISITORS

1. Smoit Joshi, RTC SSB, Salonibari visited on 26 May 2022
2. Jiten Singh Hijam, Commandant RTC, SSB, Salonibari visited on 26 May 2022
3. Pradip C Deka, Professor & former VC, Tezpur University visited on 26 November 2022

EVENTS ORGANIZED

- A Training session on “How to add Item in Knowledge Repository @ TU” was organized by Central Library, Tezpur University on 12 May 2022
- Awareness Programme on J-Gate on 19 May 2022
- User Orientation Programme on “OXFORD ONLINE RESOURCES” on 2 June 2022
- Walk to the Library Programme on 17 November 2022

PERSONNEL OF THE LIBRARY

Librarian

Mukesh Saikia, PhD (NEHU Shillong)
Email: mukesh@tezu.ernet.in

Deputy Librarian

Gautam K Sarma, PhD (Gauhati University)
Email: gautam@tezu.ernet.in

Assistant Librarian

Jitu M Das, MLISc (Gauhati University)
Email: jmdas@tezu.ernet.in

Information Scientist

Anuj K Singh, MLISc (IGNOU New Delhi)
Email: anujsingh@tezu.ernet.in

Professional Assistant

Dipak Sarma, MLISc (Gauhati University)
Email: dsarma@tezu.ernet.in

Anjan Gohain, MLISc (Gauhati University)
Email: anjang@tezu.ernet.in

Semi Professional Assistant

Dipak K Gogoi, MLISc (IGNOU New Delhi)
Email: dkgogoi@tezu.ernet.in

Monmi Choudhury, MLISc (IGNOU New Delhi)
Email: monmi@tezu.ernet.in

Library Assistant

Rajesh K Sharma, BA, DLISc
Email: rajesh@tezu.ernet.in

Ijaz Ahmed, MLISc (IGNOU New Delhi)
Email: ijazah@tezu.ernet.in

Saurav K Mahanta, MLISc (Central University of Haryana)
Email: souravk@tezu.ernet.in

Upper Divisional Clerk

Pinchu Basumatary, BLISc

Email: pinchu7@tezu.ernet.in

Library Attendant

Mahendra K Nath, BA

Email: mknath@tezu.ernet.in

Manjit Tamuli

Email: mtamuli@tezu.ernet.in

MTS

Derajuddin Ahmed

Email: deraj@tezu.ernet.in

Ahmed Ali

Email: ahmed@tezu.ernet.in

Kanaka Das

Email: kanaka@tezu.ernet.in

CENTRE FOR INCLUSIVE DEVELOPMENT

THE CENTRE

As a part of Tezpur University's efforts to meet its objectives enshrined in the *Tezpur University Act 1993*, the Centre for Inclusive Development was established in 2013 as a training and development Centre. The Centre plays a catalytic role in uplifting the underprivileged students of the University through education, training, engagement and counselling. The Centre makes efforts to identify the areas requiring intervention and takes appropriate measures to address the issues. The Centre also offers a two-semester academic programme named Postgraduate Diploma in Child Rights and Governance, started in 2016 in partnership with UNICEF, in the Open and Distance Learning mode. Additionally, the Centre reaches out to the community outside the University's periphery and extends support to needy people, particularly children and youth, through resource sharing, intellectual support and counselling. The Centre envisions to engage itself in various activities required for the development of the underprivileged people, particularly in north-east India in future.

Following a Memorandum of Understanding between Tezpur University and the Dr. Ambedkar Foundation, Ministry of Social Justice & Empowerment, Government of India, signed on April 22, 2022, a year-long coaching programme for civil services examination of the Union Public Service Commission/State Public Service Commissions with an intake capacity of 100 under the Dr Ambedkar Centre of Excellence scheme of the Ministry, was started at the Centre. Under the programme, 48 students belonging to the Scheduled Caste (SC) category enrolled for the coaching programme for the batch 2022– 2023. Necessary infrastructure and manpower were put in place for carrying out the programme and the classes began on October 17, 2022.

ACADEMIC PROGRAMME AND STUDENT INTAKE

Academic Programme	Intake
Postgraduate Diploma in Child Rights and Governance (ODL Mode)	100

THRUST AREAS

Training for Civil Services (especially for marginalized sections), Child Rights and Governance.

MAJOR FACILITIES / EQUIPMENT AVAILABLE

- Computer Laboratory with 13 Desktop Computers
- Seminar Hall (80-seater)
- Multi-media projection system

PUBLICATIONS BY FACULTY AND STAFF MEMBERS

BOOK CHAPTERS

Bora K. Inclusive Education and State's Response: An analysis with reference to the New Education Policy (NEP), 2020. In: National Education Policy 2020: A Paradigm Shift in Indian

Education System. (Eds. Handique Konwar IR, Sarmah Boruah A), EBH Publishers (India), Guwahati, pp. 77-85, 2022, ISBN No: 978-93-92038-42-6.

Bora K. Localising Sustainable Development Goals in India: An analysis with reference to the role of Panchayati Raj Institutions. In: Politics in India, (Eds. Laskar NH, Jabin N, Mandal AK), Authors Press, New Delhi, pp. 265-274, 2022, ISBN No: 978-93-5529-369-5.

Bora K. Conflict Resolution Initiatives in North-East India: An Analysis. In: Synthesis. (Eds. Das M, Goswami L), North Kamrup College, Bajali, pp. 103-110, 2022, ISBN No: 978-93-91338-93-0.

Bora K. Women Empowerment through Gender-Responsive Livelihood Strategies: A study with reference to the Deendayal Antyodaya Yojana – National Rural Livelihood Mission (DAY-NRLM). In: Prayash: Women Empowerment, Environment, Guwahati. (Ed. Sarma Asha), Women Cell, Pandu College, pp. 76-83, 2023, ISBN No: 978-81-922432-7-6.

Bora K. Gender Justice and Alternative Dispute Resolution (ADR) Platforms: An analysis with reference to Nari Adalats in India. In: Women and Human Rights (Part – I). (Eds. Das C, Foyes A, Malik M), Sarvabhasha Prakashan, New Delhi, pp. 256-264, 2023, ISBN No: 978-93-95291-95-8.

CONFERENCE/WORKSHOP/SYMPOSIUM ATTENDED

Name of Faculty/Staff Member	Event and Title of the Paper	Date	Organizer and Venue (Online/Offline)
K Bordoloi	Participated as a Resource Person on the Capacity Building Programme	17, 20, 26 & 29 October 2022	District Child Protection Unit, Sonitpur
K Bora	Presented a paper, <i>Identity Assertion, Political Mobilization and Militancy: A Study on the Baloch Nationalist Movement of Pakistan</i> in the National Seminar on Identity Assertions and the Context of Conflicts in Southeast Asia	13-14 June 2022	Department of English, M.C College, Barpeta
	Presented a paper, <i>Gender and Disability: Understanding the Intersectionality in the context of Reproductive Health Rights in India</i> in the National Seminar on Contemporary Gender Issues: Prospects and Challenges	24 July 2022	Department of Political Science and Department of English, Ledo College in collaboration with Internal Quality Assurance Cell (IQAC) Ledo College

	Presented a paper, <i>Crafting Popular Mandate: Analyzing the rise of Political Consulting Firms in India</i> in the Indian Council of Social Science Research (ICSSR) sponsored National Seminar on Entrepreneurship Development in North East India on Start-up and Innovation	02-03 September 2022	Department of Economics, Dispur College in collaboration with Internal Quality Assurance Cell (IQAC), Dispur College
	Presented a paper, <i>Philosophy of Atmanirbhar Bharat: Understanding its historical context and theoretical foundation</i> in Indian Council of Social Science Research (ICSSR) sponsored National Seminar on- Atmanirbhar Bharat: Opportunities and Challenges in North East India and Way Forward	23-24 September 2022	Department of Economics, Nowgong College in collaboration with Internal Quality Assurance Cell (IQAC), Nowgong College
N Sultana	Panel Member of the Workshop on-Raising Social Awareness amongst Students	13 September 2022	Department of Mass Com. & Journalism, Tezpur University in collaboration with the Buddha Institute; Tezpur University
	Participated in Sensitization-cum-Workshop coinciding with International Day of the Girl Child	11 October 2022	CS Centre for Women Studies, Tezpur University
	Presented a paper, <i>Social and Institutional barriers of women in STEM</i> , in the XLVI Indian Social Science Congress	27-31 January 2023	Bharathidasan University, Tamil Nadu
	Participated in Online Workshop on -Nasha Se Azadi	04 August 2022	Ministry of Social Justice & Empowerment, Govt. of India; (Online)

RK Doley	Participated in the Workshop on Creation of Academic Bank of Credits	24 November 2022	University Grants Commission-Distance Education Bureau; (Online)
	Participated in National Workshop on Janjatiya Anusandhan: Asmita, Astitya evam Vikas	27-28 November 2022	National Commission for Scheduled Tribes; Vigyan Bhawan, IIT Delhi and Rashtrapati Bhawan, New Delhi

TALKS BY THE FACULTY ABROAD AND IN INDIA

Name of Faculty Member	Title of the Talk	Title of the Event	Date	Place/institute/venue
RK Doley	Communication Skills: The Key to Office Management.	Training Programme for Group A Officers	24 February 2023	Indian Institute of Technology Guwahati

EVENTS ORGANIZED

- Organized an Orientation-cum-Inauguration programme for the students enrolled into a year-long coaching programme under the Dr. Ambedkar Centre of Excellence (under Centre for Inclusive Development), Tezpur University, on 17 October 2022, under a special scheme of the Ministry of Social Justice & Empowerment, Govt. of India.
- As proposed by the National Commission for Scheduled Tribes, New Delhi, the Centre for Inclusive Development on behalf of Tezpur University observed a day-long programme on the theme -The role of tribal leaders in India's Freedom Struggle on 29 September 2022, as a part of Azadi Ka Amrit Mahotsav of Government of India at Tezpur University.
- Observed Janjatiya Gaurav Divas on 15 November 2022. On the occasion, an open speech competition was held on the topic -The Role of Janjatiya leaders in India's freedom struggle at Tezpur University.

OTHER SIGNIFICANT ACTIVITIES

GATE Coaching for Engineering Students: The Centre conducted a coaching programme for Graduate Aptitude Test in Engineering (GATE) during November 2022 – January 2023. A committee with the Director, CID, as Chairperson; Departmental Coordinators as members and Education Officer, CID, as the Convenor, was constituted to facilitate the coaching programme effectively. Three Departments of the School of Engineering participated in the coaching programme as given below:

Name of Dept.	Name of Coordinator	No. Students Participated	No. of Students who cleared GATE 2023
Computer Science & Engineering	Nabajyoti Medhi	Male: 20 Female: 06 (SC-02; ST-01; OBC-NCL-06; EWS-04;	Male: 10 Female: 02 (SC-00; ST-01; OBC-NCL-02; EWS-

		UR-13) Total = 26	01; UR-08) Total = 12
Mechanical Engineering	Manoj Bardalai	Male: 25 Female: 05 (SC-03; ST-04; OBC-NCL-10; EWS-05; UR-08) Total = 30	Male: 03 Female: 02 (SC-01; ST-01; OBC-NCL-03; EWS-00; UR-00) Total = 05
Electrical Engineering	Soumya Samanta	Male: 41 Female: 06 (SC-06; ST-03; OBC-NCL-16; EWS-06; UR-16) Total = 47	Male: 01 Female: 00 (SC-00; ST-00; OBC-NCL-01; EWS-00; UR-00) Total = 01

DIRECTOR OF THE CENTRE

Rajeev K Doley PhD (IIT Guwahati)

Specialization/Research area of Interest: Sociolinguistics

Email: rkdooley@tezu.ernet.in

FACULTY MEMBERS

Assistant Professor

Nigar Sultana, MA (Tezpur University)

Email: nigaar1@tezu.ernet.in

Kasmita Bora, MA (Delhi University)

Email: kbora12@tezu.ernet.in

Visiting Fellow

Krishna Bordoloi, LLM (Gauhati University)

Email: krishnabordoloi123@gmail.com

STAFF MEMBERS

Assistant Education Officer

Bhanu P Gogoi, PhD (Dibrugarh University)

Specialization/Research Area: Social and Cultural Anthropology

Email: bhanubj@tezu.ernet.in

MTS

Abdul Jalil

CENTRE FOR INNOVATION INCUBATION AND ENTREPRENEURSHIP

THE CENTRE

The Centre for Innovation, Incubation and Entrepreneurship was established in September 2013 which was merged with the Entrepreneurship Development Cell (EDC) initially funded by AICTE. The objectives of the cell are to:

- Create awareness among the students of the University and the educated unemployed youths of North east India regarding entrepreneurship as a career option.
- Conduct training programmes in the field of entrepreneurial skill development
- Develop entrepreneurship related course curriculum to incorporate in management and engineering programmes
- Provide guidance and facilities to first time entrepreneurs during gestation.
- Explore the possibility of commercialization of some of the potential technologies developed by the faculty members and students of TU
- Form a Technology Development group in Tezpur University comprising enthusiastic former students of the university and thereby motivating towards self-employment

MAJOR FACILITIES AND EQUIPMENT AVAILABLE

Facility	Number
TUNOVATION (A display room for developed research items)	01

ACTIVITIES AND PARTICIPATION

28-30 April 2022	03 Day training Program for local youths on "Skill Development and Employment Opportunities, including Self-employment for the benefits of Youth and Students of North-East region, in Food Processing"	The three-day programme was organized by the Centre in collaboration with the Departments of Food Engineering and Technology, and Vocational Studies and Skill Development, with support from the Rajiv Gandhi National Institute of Youth Development, Sriperumbudur.
5 May 2022	Sensitization Workshop on "Innovation, Entrepreneurship vis-à-vis DSIR-PRISM Scheme", Joint program of Tezpur University and IIT Guwahati	Expert talk by <ul style="list-style-type: none">• Prof P Mahanta, Director NIT Itanagar• Dr Ramanuj Banerjee, Scientist "F" and Member Secretary, DSIR-PRISM
31 August 2022	Awareness Program on North East Entrepreneurship Development Program (NEEDP), in collaboration with Assam Start-up	Expert talk on <ul style="list-style-type: none">• Entrepreneurship as a career option• Awareness talks on provisions of start-up support by NEEDP

01 September 2022 -28 February 2023	06 Month Entrepreneurship Development Training, Skill Development and Employment Opportunities, including Self-employment for the benefits of Youth and Students of North-East region, in Food Processing	The three-day programme was organized by The Centre for Innovation Incubation and Entrepreneurship, in collaboration with the Department of Food Engineering and Technology, and the Department of Vocational Studies and Skill development, in Collaboration with Arunachal Pradesh State Council of Science and Technology, Kimin Arunachal Pradesh
24 March 2023	One day Seminar cum Brainstorming Session on "Skill Development and Entrepreneurship in Higher Education and SDG-8"	The programme was organized by the Centre in collaboration with the Department of Vocational Studies and Skill Development.

THE PERSONNEL OF THE CENTRE

HEAD OF THE CENTRE

Manuj K Hazarika

Professor, Department of Food Engineering and Technology

Email: headciie@tezu.ernet.in

Office Staff

Uttam Roy

UDC (till 30 November 2022)

Anjan Borah, PhD (August-October 2022)

Satya P Saikia

STA, as Caretaker for Tunovation

Centre for Public Policy and Governance

The Centre for Public Policy and Governance (CPPG) envisions to be an interdisciplinary think tank that promotes evidence based public policy and effective governance. The centre encourages research, capacity building, events, and high-level dialogues for academia and other policy stakeholders like the government, non-governmental bodies, and international organizations in order to facilitate positive social impact and better policies.

Aims and objectives of the Centre

- To build a hub of research and knowledge generation in public policy and good governance.
- To use the evidence based research to influence government policies and civil society action for the betterment of the communities in North East India and beyond.
- To work on the evidence based research and partner with various agencies to deliver change on the ground that alleviates poverty and strengthens society.
- Work with the government and international organizations on major flagship programs and the felt needs of the state to create a social impact.
- Bringing in an inter-disciplinary approach within the University to address various social issues.
- Collaboration and partnership with various national and international universities and organizations with a similar mandate.
- To bring out publications (online and offline) in terms of working paper series, occasional paper series, journals and books.

Knowledge hub for policy and governance: The Centre aims to build capacity and disseminate knowledge on policy and governance through interdisciplinary dialogues, seminars, and workshops that bring together students, scholars, policymakers, and other stakeholders.

Policy Dialogue: The Centre engages with the university departments, governments, civil society, private players, and other policy influencers through research, dialogues, trainings, workshops, events and conferences.

Focus on North East India: The North East region of India is undergoing rapid development and the Centre aims to play a crucial in meeting the policy and governance needs of the region.

Personnel of the Centre

Chairperson

Shambu N Singh, PhD
Vice Chancellor
Email: vc@tezu.ernet.in

Director

Prasanta K Das, PhD
Professor, Department of English
Email: prsntdas@tezu.ernet.in

Coordinator

Amiya K Das, PhD

Associate Professor, Department of Sociology
Email: amiyadas@tezu.ernet.in

Adjunct Professor

Biswajit Das, PhD

Professor & Founding Director of Centre for Culture, Media & Governance
Jamia Millia Islamia, New Delhi

Sung K Cho, PhD

Professor, Department of Communication,
Chungnam National University, South Korea

Amit Prakash

Professor, Centre for the Study of Law and Governance
Jawaharlal Nehru University, New Delhi

CENTRE FOR UNIVERSITY-INDUSTRY INTERFACE

THE CENTRE

The Centre for University-Industry Interface (CUII), Tezpur University was set up in the year 2017 and hosted by the Centre for Innovation, Incubation and Entrepreneurship (CIIE), Tezpur University. The centre intends to act as a bridge providing a connection between the Industry and the University. This connection is expected to harness and accelerate interactions between the Industry and the University in order to contribute towards delivering quality education and R&D outputs.

Vision

To become a pioneering hub promoting cutting-edge industrial research and development.

Mission

- To act as a bridge between Tezpur University and the Industry for mutually beneficial collaborations,
- To facilitate Tezpur University in the evolution of its curricula as per contemporary as well as futuristic needs of the industry and the society at large,
- To take lead for collaborations between the University and the Industry in the areas of Research & Development and internships,
- To promote entrepreneurship among the students of the University.

Activities and Participation

- Interaction with representatives of Indian Oil Corporation on 23 February 2022
- Organized the University-Industry Interaction on “Economic and Sustainable Development: Role of innovation to bridge local-global perspective” with the active participation of students, research scholars, and faculty members on 13 May 2022
- Organized an interactive workshop by technical experts from COMSOL Multiphysics Pvt. Limited for those who are already using or planning to use some software package for numerical simulation of problems involving heat and fluid flow, mass transfer, radiation, electric or magnetic effects, etc. on 25 August 2022
- Organized Engineer’s Day Celebration on 15 September 2023

THE PERSONNEL OF THE CENTRE

CHAIRPERSON

Vijay K Nath

Professor, Department of Electronics & Communication Engineering

Email: vk Nath@tezu.ernet.in

MEMBER COORDINATOR

Sanjib K Deka

Associate Professor, Department of Electronics & Communication Engineering

Email: sdeka@tezu.ernet.in

Members

Dean, School of Engineering

Dean, School of Humanities & Social Sciences

Dean, School of Management Sciences

Dean, School of Sciences

Dean, Academic Affairs

Dean, Students Welfare

Dean, Research & Development

Director, Internal Quality Assurance Cell

COMPUTER CENTRE

THE CENTRE

The Computer Centre (CC) serves as the primary ICT support system of the University. There is a constant endeavor to envisage better services under its umbrella. The Centre is well-equipped with enough Desktop Personal Computers spread over two units of laboratories supported by high-end servers and software packages. The resources of the Centre are used mostly for computational and laboratory purposes. These are also used for skill tests, online interviews, workshops, etc. The Centre serves as the ICT resource centre for the entire University. The campus-wide Local Area Network (LAN) is equipped with 10 Gigabit backbone and high-speed Switching Network Devices with centralized management. All Departments, Offices, Hostels, facilities, residential apartments, etc. have been extended with Wi-Fi facilities. The Internet services like Email, WWW, Proxy, Software applications are fully hosted in-house with dedicated servers and storage devices. Several applications are developed in-house by the Centre's technical Staff and are used extensively in automation of Administration and Academic Department. Computer Centre also hosts numerous virtualized applications over HPC cloud-based infrastructure. The Centre is also equipped with a video conference codec with a 70-seater state-of-the-art room which can host virtual classroom sessions as well as Online Meetings, Interviews, conferences, etc. It also has a recording studio facility for recording and preparing high quality learning materials.

ACADEMIC PROGRAMMES AND STUDENT INTAKE

Programme	Student Intake
DOEACC 'O' Level Course	30
DOEACC 'A' Level Diploma	20

THRUST AREAS OF THE CENTRE

The primary goal of the Centre is to provide quality ICT services including computational and internet facilities to the University community. In addition to maintenance of computational infrastructure, the following services are also supported by the Centre:

- Email & Internet Services
- Credit/audit practical courses of different Departments
- Organizing practical sessions for various workshops and refresher courses of various Academic Departments.
- Organizing training programmes for the University employees
- Assist Administration in selection and procurement of computing resources
- Providing maintenance services for computers/peripherals to the Faculty/Staff/Departments
- Maintaining and monitoring the Campus LAN.
- Maintaining and monitoring various Internet Links.
- System Administration, Network Administration, and monitoring of various servers - Email, Web, Application, Database, Proxy, Firewall, etc.
- Maintaining University Website and intranet portal.
- Develop, procure, and maintain software for administration and other sections of the University.

- Software maintenance Services.
- Providing presentation assistance in the auditorium and conference halls.
- EPABX system administration and maintenance.
- IP CCTV Surveillance Management.

MAJOR FACILITIES/EQUIPMENT AVAILABLE

Sl No.	Particulars	Hardware (Make/Model)	Qty
1	Video Conferencing System	Polycom 8000 Series	1
2	VoIP Telephony System in collaboration with BSNL and Clixo Broadbands Pvt. Ltd.	Clixo series Server and Media Gateway	1set
3	Core Switch with 6410G Ports	CiscoC6807-XL	1
4	Distribution Switch with 32 10GPorts	CiscoWS-C3850-24XS	16
5	Access Switches	CiscoWS-C2960X-24TD-L	80
		ExtremeX35048T	56
		ExtremeX35024T	19
		AlliedTelesis AT-x510L-28GT	11
		AlliedTelesis AT-x510L-52GT	3
		HP 2520G	9
10	Firewall	HuaweiEudemon200E-X7	1
11	Router(NKN)	CiscoASR1000	1

SERVERS

Sl No.	Server Particulars	Hardware (Make/Model)	Operating System and Application Platform
1	Secondary Storage Server	HPStoreEasy1650	Windows Storage Server2012
2	Email cum DNS Server	Dell Power Edge R730xd	CentOS6.4/Sendmail, Bind
3	Proxy/NAT/Firewall Server	Dell PowerEdgeR730xd	CentOS6.4/Squid Proxy 4.0
4	Email Storage Server	DellNX3230	Windows Storage Server 2012R2
5	ProxyStorageServer	DellNX3230	Windows Storage Server 2012R2
6	Application Server	DellPowerEdge 540	Windows 2019 Server/xampp
7	Database Server	Dell PowerEdgeR740xd	Windows 2019 Server/MySQL
8	Oracle10gDatabase	IBM/X3560	Windows 2008 R2 Server/Oracle10gDB
12	Video Streaming ServerwithStorage	IBM/X3650 +IBM/DS3524	Windows 2008 R2 Server/AdobeMedia Server 5
13	WebServer	IBM/X3560	RHEL6/Apache
14	Local Cloud Cluster	LENOVO /VX SERIES	VMware EXSI

COMPUTER TERMINALS & PERIPHERALS AVAILABLE

Unit No	UnitName/Location	Terminals & Peripherals
Unit-0	Central ComputerCentre (Academic Building-2)	Terminals = 60(Core i5 /Windows 10/11 Pro.Desktops upgraded with SSD)Scanner =2 Projector=1
Unit-1	ComputerCentre-Cluster-1 (SoE Complex)	Terminals = 100 (Core i5 /Windows 10/11 Pro.Desktops upgraded with SSD) Scanner=1 Projector=1

SOFTWARE SUBSCRIPTIONS

Sl No.	Packages	Renewal Period
1	Microsoft Campus Agreement	Yearly
2	Kaspersky Total Space Security	Yearly

OTHER SIGNIFICANT ACTIVITIES OF THE CENTRE

- At present 5000+ users use the G-Suite for Education platform along with google classroom sessions.
- The *Campus Connect Wi-Fi* Scheme on OPEX mode has been further extended for another 5 years with augmentation of 160 more Wi-Fi access points. The services are mostly provided in the hostels, academic complexes, and administration excluding the residential apartments and the services are fully maintained by RailTel of India.
- The Wi-Fi services in the residential apartments are operational. The services are looked after by dedicated staff.
- A state-of-the-art recording studio cum virtual class room is also built to aid quality Audio/Video teaching/learning experience both in online and offline mode.
- The Campus Telephony services through BSNL are functional.

PERSONNEL OF THE CENTRE

DIRECTOR OF THE CENTRE

Nityananda Sarma

Professor, Department of Computer Science and Engineering

Email: nitya@tezu.ernet.in

Computer Engineer

Dhiraj K Sarma

Email: dhiraj@tezu.ernet.in

Junior Programmer

Dipak C Choudhury

Email: dcc@tezu.ernet.in

Jamil Ahmed

Email: jamil@tezu.ernet.in

Senior Technical Assistant

Abani K Das

Email: abani@tezu.ernet.in

Niranjana K Deka

Email: niranjana@tezu.ernet.in

Technical Assistant

Manjul Baruah

Email: manjul@tezu.ernet.in

Prandeep Borah

Email: prandeep@tezu.ernet.in

Raghvendra Choudhary

Email: raghav@tezu.ernet.in

Milan Kumar Deka

Email: milan16@tezu.ernet.in

MTS

Ripunjay Baruah

Email: ripu123@tezu.ernet.in

Safiullah Khan

Email: khan@tezu.ernet.in

Islam Ali

Email: islam@tezu.ernet.in

EPABX Technicians

Ratan Debnath

ENGINEERING CELL

THE CELL

The Engineering Cell of the University was established in March 1995. It is assigned the prime responsibility of developing and maintaining the infrastructure in the University campus, covering an area of about 262 acres of land. The following are the major duties and responsibilities entrusted on the Engineering Cell:

- Allotment and Execution of construction projects involving civil, electrical, water supply and sanitary works.
- Maintenance and repairing of buildings and roads.
- Maintenance of power supply to the University campus.
- Maintenance of water supply to all the buildings including hostels and canteens.
- Preparing of agenda notes and writing minutes of building Committee meetings.
- Maintenance and development of the University campus.

CONSTRUCTION ACTIVITIES

The following construction activities were accomplished during the year:

- Construction of 180 capacity RCC three-storied hostel for girls.
- Repairing of two of Basketball courts.
- Repairing of the Lawn Tennis court.
- Repairing and painting of Pobitora Madam Curie Women Hostel at TU.
- Construction of Bicycle stand in Jiri Women's Hostel.
- Construction of foundation for High Mast light.
- RCC Water reservoir in Saraighat Men's Hostel.
- Replacement of generator power supply cable to sub- station No. 2, near the Chandraprabha Saikiani Hall of the campus.
- Development of parking area in front of ECE and CSE Departments and on the right-hand side berms of the road towards Dean's SOE Building.
- Providing and installation of High Mast lamps at various locations in the campus.
- Providing electrification for storeroom at Department of Energy.
- Providing machine foundation and installation including aluminium partition in newly renovated storeroom in the Department of Energy.
- Construction of concrete pavement in and around the Experimental Green House of the Department of Environmental Science.

WORK DONE WITH TENDER PROCESS

- Nine building projects including Academic Buildings and Hostels under HEFA funding are in construction stage under PWD.
- Upgradation of 2x 315, 11 KV/0.433 KV Sub-station No-2 to 2x 500 KV.
- Construction of 40 Capacity RCC two-storied hostel building.

POWER SUPPLY

The Govt. of Assam has sanctioned 2 MW of power to Tezpur University. This power is released to the university by APDCL as per the load demand. Currently, the University is drawing 2MW load from 132/33 KV Depota Grid Sub-Station of APDCL through dedicated power line. This power is received at the university end through a 2x2.5 MVA, 33/11 KV Sub-Station constructed by the University and is distributed through an 11KV H.T. Ring main connected to five numbers of sub-stations of the following capacities:

- 2x 500 KVA: 2 Nos.
- 3x 315 KVA: 2 Nos.
- 2x315 KVA+ 1x 500 KVA: 1 No.

SOLAR POWER

The University has installed a 1 MW capacity rooftop grid connected solar power plant at different locations within the campus. The electricity generated by the solar power plant is directly supplied to the University grid, and any excess power is fed to the APDCL. In total, the solar power plant generated 906123 kWh, resulting in a reduction of the electricity bill served by the APDCL. As a result, the net savings in the University's electricity bill for the year amounted to about Rs. 39.05 lakhs.

WATER SUPPLY

Four deep tube-wells, each 102 meters deep, associated with submersible pumps were installed in the University campus to access ground water. Treatment plants consist of aerator, flush-mixture, sedimentation tank, filter unit, chlorination unit, and underground clear water storage tank are used for proper treatment of raw water. Two overhead reservoirs (OHR) of capacity three lakh liters were constructed to store treated water. Water from OHRs reaches the consumer points through a pipe-line network under gravity flow. The present requirement of water in the University campus is more than 11 lakh liters per day. The demand is likely to increase with the increase of new academic and residential buildings, and hostels. There was no instance of interruption in supply of treated water during this period.

PERSONNEL OF THE CELL

Executive Engineer

Ratul R Hazarika, BE (Civil Engineering)
Email: rrhz@tezu.ernet.in

Assistant Engineer

Jadab C Nath, BTech (Civil Engineering), PGDEM
Email: janth@tezu.ernet.in

Gobinda Kalita, Diploma in Electrical Engineering
Email: gobinda@tezu.ernet.in

Junior Architect

Rashmi Dutta, Diploma in Architecture Assistantship
Email: rashmidh@tezu.ernet.in

Junior Engineer

Debasish Borkotoky, Diploma in Electrical Engineering

Email: dborkotaky@tezu.ernet.in

Sapon Goswami, Diploma in Civil Engineering

Email: sapon@tezu.ernet.in

Sailendra N Talukdar, Diploma in Electrical Engineering

Email: sailen@tezu.ernet.in

STAFF MEMBERS***Assistant***

Dhiren K Kalita, MA

Email: dhiren@tezu.ernet.in

Electrician

Pradip Nath, ITI

Email: pradipn@tezu.ernet.in

Himanendra Khatanair, ITI

Email: himan@tezu.ernet.in

Pump Operator

Sanjay Dutta, ITI

Email: sanjayd@tezu.ernet.in

Mriganka M Das, ITI

Email: mmdas@tezu.ernet.in

Multi-Tasking Staff

Tarani Das

Email: taranid@tezu.ernet.in

Prabhat Keot

Email: parbhat@tezu.ernet.in

Mukul C Handique

Email: mukul@tezu.ernet.in

Mon B Chetry

Email: mbchetri@tezu.ernet.in

Mohammad Ali

Email: mdali@tezu.ernet.in

HEALTH CENTRE

THE CENTRE

The Health Centre of Tezpur University has been functioning since 1995. It provides health care services to the students, faculty members, staff, their families and those involved with the University. At present, we have over 6000 beneficiaries.

MAJOR FACILITIES/EQUIPMENT AVAILABLE

The Health Centre offers OPD services. Ten beds are available to provide initial care to indoor patients, including emergency cases.

One Medical Officer is always available for 24 hrs emergency duty. The cases requiring hospitalization are referred to the referral Hospitals at Tezpur. Ambulance service is available round the clock and is free of cost for students. There are two ambulances available at present, and one is specifically meant for students with disabilities in order to enable them to attend to their academic activities with a nominal charge. A stock of common medicines, including life saving drugs, is maintained, and are supplied free of cost. Routine laboratory investigations are also done. An Autoanalyser (fully automatic) and a Hormone Analyser (Mini-Vidas) are available for doing the investigations. In addition, ECG and X-ray facilities are also made available at the Health Centre to serve the University community. The Centre also keeps a set of appliances for persons with disabilities.

THE OPD TIMINGS

Session	Morning	Evening
April to September	8:30 AM to 12:30 PM	4:00 PM to 6:00 PM
October to March	8:30 AM to 12:30 PM	3:00 PM to 6:00 PM
Saturdays and Sundays- From 10:00 AM to 12:00 NOON		

VISIT BY SPECIALISTS

The University has engaged Specialists of different disciplines (Paediatrics, Obstetrics and Gynaecology) who regularly visit the Health Centre on different days of the week for the benefit of the University community. A Clinical Psychologist is also available on working days at the office of the DSW to provide counseling on stress-related issues. In addition, a Physiotherapist visits the Health Centre twice a week for offering physiotherapy to the differently abled students and other patients.

MAJOR ACTIVITIES

- The Medical Officers visit the hostels and canteens to assess the overall hygiene of the dining hall and the drainage system of the surroundings to check for any outbreak of waterborne diseases.
- Fogging on the campus was done on 03 November 2022 to prevent any outbreak of mosquito-borne diseases.
- Covid-19 Vaccination camps were held at the Health Centre on 11 August 2022 and 12 August 2022.
- Blood donation camp was held at Health Centre on 17 September 2022 in collaboration with Indian Red cross Society.

- A lecture cum demonstration was given to PGDT students by Dr. Rupam Boro, MO, regarding First Aid.
- Laboratory practical classes related to common blood tests were demonstrated by Anuj Baruah, Lab. Technician of the Centre to the Integrated MSc Students of MBBT Department during 19-20 September 2022.
- BMD test was carried out at the Health Centre on 02 July 2022.
- Special drive programmes related to Mental Health were conducted during 10-14 October 2022 on the occasion of World Mental Health Day.
- Medical test was conducted for newly admitted BTech students.

PERSONNEL OF THE CENTRE

Chief Medical Officer

Dr. Junali S Goswami, MBBS, DLO

Medical Officer

Dr. Rupam Boro, MBBS

Dr. Bijit Barman, MBBS

Visiting Senior Consultant

Dr. Matiur Rahman, MBBS, MD (Pediatrics)

Visiting Consultant

Dr. Purnima Das, MBBS, DGO

Visiting Physiotherapist

Utpal Bora, MPT

Clinical Psychologist

Asish P Bora, MSc, MPhil

Nurse

Eliza H Barla, GNM Diploma

Amrita Purty, GNM Diploma

Pharmacist

Pranab Baruah, DPharma

Lab Technician

Anuj Baruah, BA, CMLT

Niramoni Das, ANM Certificate

Radiographer

Hiten Debnath, DMRT

MTS

Manoj K Saikia

Jiten Rajbongshi

THE HORTICULTURE SECTION

The Horticulture Section of Tezpur University is entrusted to carry out plantation, landscaping, and beautification activities inside the University campus. The Assistant Horticulturist attached to the Horticulture Section is looking after the day-to-day landscaping and maintenance activities under the guidance of a Campus Horticultural Committee with a faculty Coordinator. The annual horticultural activities during the concerned period were the following-

PLANTATION PROGRAMME

More than 900 nos. of plant saplings of different species (like ornamental plants/shrubs, fruit trees, medicinal plants, etc.) were planted in different parts of the University campus. Plantation activities include premises of Jiri Women's' Hostel, TLC building, HSS building, Dept. of Energy, Dept. of Chemical Science, Academic building II, SoE Dhaba, Cafeteria, Shopping complex, Auditorium, Swimming Pool, SAIC, Citrus Garden II, along the boundary wall, etc. through routine and special plantation programme organized by the Horticulture Section on various events/occasions with active participation from university communities.

MAINTENANCE OF PLANTATIONS

Apart from the maintenance of gardens, all previously planted trees (like roadside and other plantations) in different locations on the University campus were regularly nurtured by cleaning, fertilization, and watering.

MAINTENANCE OF THE GARDENS AND LANDSCAPE

In addition to new plantation drives and landscaping/beautification activities, all essential maintenance work (like lawn, hedge, existing plants /shrubs, growing of seasonal flowers) for previously developed flower and other gardens as well as other locations of the University campus are done regularly under the supervision of Horticulture Section.

MAINTENANCE OF HOUSE PLANT POTS FOR INDOOR DECORATION

Considering the different benefits of house plants, more than 1300 nos. of House plant pots are placed in the interior space of different administrative offices and Academic buildings, Guest House, Library, Auditorium, VC's residence, and other amenity centers for beautification, greenery, and purifying air. Essential maintenance works of these house plants are carried out regularly.

MAINTENANCE OF VERMICOMPOST UNIT

A Vermicompost unit has also been running successfully to fulfill the need for organic manure for plantation/gardening work of the University. Vermicompost is produced entirely from leaf litter on the University campus. More than 65 quintals of vermicompost were produced during the concerned year. Essential maintenance works of the Vermicompost Unit were carried out throughout the year.

MAINTENANCE OF THE DEPARTMENTAL NURSERY

The Horticulture section has a nursery, which is the source of seedlings of ornamental/avenue trees & shrubs, fruit trees, shrubs, valuable timber trees, indoor plants of different types, and also some seasonal flowers for the use of the University. It is located within the premises of the Botanical Garden. Essential maintenance works of the nursery were carried out throughout the year.

OTHER ACTIVITIES

In addition to the above, cleaning (by jungle cutting) of different parts of the University campus like surroundings of the Administrative Building, different Offices and Academic Buildings, the Library, the KBR Auditorium, the Guest House, the Chandraprabha Saikhanee Bhaban, the Community hall, the Shopping Complex/Day Care Centre, the Children park, the Takshashilla Vidyapeeth, the Kendriya Vidyalaya, the Car parking area and both sides of different roads including boundary footpath etc. were done from time to time.

PERSONNEL OF THE SECTION

Coordinator

Satya S Bhattacharya, PhD (Visva Bharati University, Santiniketan)

Associate Professor, Dept. of Environmental Science

Email: satya72@tezu.ernet.in

Assistant Horticulturist

Girindra Hazarika, MSc (AAU, Jorhat)

Email: girin@tezu.ernet.in

INTERNATIONAL STUDENTS OFFICE

The International Office of Tezpur University was established in February 2013. It was rechristened as the International Students Office on July 28, 2021 vide BoM resolution no. B.102/2021/3/2.2. It has been further rechristened as Directorate of International Affairs, Tezpur University vide BoM resolution no. B.115/2023/5/3.11, dated 06 October 2023.

The International Students Office is run by a part-time Director who is assisted by a Coordinator and an Assistant Coordinator. The International Students Office handles the admission of international students, and organizes talks and seminars on overseas education and research opportunities.

Activities

Tezpur University has been hosting international students who are mostly sponsored by the Indian Council for Cultural Relations (ICCR). The International Students Office therefore decided to host the 72nd Foundation Day of ICCR on April 9 and 10, 2022 in the university campus. 70 international students studying in various institutions in the Northeast participated in the two-day conclave which included cultural and sporting events and a day-trip to Kaziranga national park.

The Director of the International Students Office, along with the Vice-Chancellor and Dean, Academic Affairs, attended the ASEAN-India Network of Universities (AINU) online inaugural programme on August 29. On September 20, the Director attended a virtual meeting called by Nalanda University (the nodal institution) with designated AINU-FEP Coordinators and representatives from the partnering institutions. Following a MoU signed with Nalanda University, a university screening committee scrutinized the Expressions of Interests received from Tezpur University faculty in response to the ASEAN-India Network of Universities (AINU) Faculty Exchange Programme (FEP). It recommended a panel of names for the faculty exchange programme in the academic year 2023-24.

The Director attended an international TU-IEEE Smart Village programme organized by Professor D.C. Baruah, IEEE SV member from Tezpur University, on September 22. On October 13, he also participated in an interaction with eleven international students who visited Tezpur University under the Rotary Youth Exchange programme.

Personnel of the Office

Director

Prasanta K Das, PhD
Professor, Department of English
Email: tuiso@tezu.ernet.in

Coordinator

Ratan Boruah, PhD
Email: rboruah@tezu.ernet.in

Assistant Coordinator

Krishna Das, PhD
Email: saikia@tezu.ernet.in

MTS

Ranjit Saikia

Internal Complaints Committee

The Internal Complaints Committee (ICC) is a quasi-judicial body formed under the Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013 also known as the PoSH Act, 2013. The ICC is responsible for conducting redressal mechanisms on complaints of sexual harassment at the workplace. In addition, it is also mandated to prevent and prohibit any form of sexual harassment in the organization by conducting awareness generation and gender sensitization programmes among students and employees.

The Internal Complaints Committee at Tezpur University was formed in the year 2015 as per the University Grants Commission (Prevention, Prohibition and Redressal of Sexual Harassment of Women Employees) Regulations, 2015. The committee, has since then, been committed to creating a safe environment free from any form of sexual harassment.

Notable Activities

- **Gender Sensitization session during Orientation of the newly admitted students**

A gender sensitisation session was conducted for the newly admitted students from all the four schools (Schools of Engineering, Humanities and Social Sciences, Science and Management Sciences) in the month of November. The students were oriented towards the scope of ICC, the provisions in the PoSH Act and the UGC Regulations, 2015. The students were also given an understanding of sexual harassment as defined in the Act. The process of filing a complaint and the inquiry was elaborated upon.

A session was conducted separately for the newly admitted BTech students at the School of Engineering during their orientation programme. In addition, Gender sensitization workshops were held at various departments separately during the departmental orientation programmes.

- **Awareness Programme on 15 December 2022**

An Awareness programme was organized for the administrative staff of Tezpur University. Resource Person Dr Hemyoti Medhi, oriented the participants on the 'meaning' of the term sexual harassment and emphasized the importance of having a zero-tolerance policy towards sexual harassment. She explained the provisions of the Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013 and the ICC Policy, Tezpur University. The session saw active participation from all participants.

Complaints received

The ICC, Tezpur University received two complaints of Sexual Harassment. The committee followed the due process as per UGC regulations and submitted the final report to the University Authority.

Personnel of the Committee

Presiding Officer

Joya Chakraborty, PhD
Professor, Department of Mass Communication and journalism
Email: jc@tezu.ernet.in

Members

Kedilezo Kikhi, PhD
Professor, Department of Sociology
Email: kedi@tezu.ernet.in

Paragmoni Kalita, PhD
Associate Professor, Department of Mechanical Engineering
Email: paragmk@tezu.ernet.in

Angel H Syiem, LL.M
Assistant Professor, Department of Law
Email: angelsy@tezu.ernet.in

Bornalee Das
Upper Divisional Clerk, Estd. Section
Email: blee_sb@tezu.ernet.in

Kul P Upadhyaya, PhD
Assistant Director (Official Language)
Email: kul@tezu.ernet.in

Santanu Goswami,
PhD Scholar, Department of MBBT
Email: mbp20113@tezu.ernet.in

Lakhimi Sarmah
PG Student, Department of Cultural Studies
Email: ctm21005@tezu.ernet.in

Bidyut B Borah,
UG Student, Department of Education
Email: edb220462@tezu.ernet.in

External Member

Hema Das
Member of The East NGO, Sonitpur
Email: hemadas2@gmail.com

Member Secretary

Namami Sharma, PhD
Assistant Professor, Department of Social Work
Email: namamis@tezu.ernet.in

INTERNAL QUALITY ASSURANCE CELL

As mandated by the National Assessment and Accreditation Council (NAAC), Tezpur University Internal Quality Assurance Cell (TU IQAC) is engaged in a series of activities required to foster the spirit of quality among the individuals and Departments/Centres/Sections of the University. Besides, working for assured quality assessment for the career advancement of Faculty members, IQAC also carries out capacity building activities to support quality teaching-learning and assist feedback and mentoring exercises. IQAC meetings are organized at regular interval for deliberations on major issues concerning quality with appropriate monitoring of the follow-up actions. University's annual activities are appropriately accounted in the Annual Quality Assurance Report (AQAR) prepared by IQAC.

Some of the notable activities conducted during the period 2022-2023 are highlighted below:

1. Academic & Administrative Audit (AAA) for Barbhag College, Nalbari: Director, IQAC was invited for conducting Academic & Administrative Audit (AAA) held on 06 May 2022.
2. Director, IQAC, Tezpur University addressed the Weeklong Blended FDP on "Effective Teaching in Blended Learning Era" as Chief Guest organized by Teaching Learning Centre (TLC), Tezpur University in collaboration with Jhanji HNS College, Sivasagar, Assam during 09-15 June, 2022.
3. Attended as a member of the Centre for Internal Quality Assurance (CIQA) for Directorate of Open and Distance Learning (DODL), Dibrugarh University held on 15 June 2022.
4. Faculty Induction Programme for newly recruited Faculty members of Tezpur University was organized on September 28, 2022.
5. IQAC Committee meeting was held on December 26, 2022. Several issues are deliberated in the meeting.
6. A session on Women in Development Paradigm: An Entrepreneurial Initiative jointly organized by Chandraprabha Saikiani Centre for Women Studies & IQAC, Tezpur University was held on 13 March 2023.
7. Facilitated the constitution of the Departmental Students Grievance Redressal Committee (DSGRC).
8. Prepared the framework/policy document for Implementing the Policy on granting Seed Money for newly recruited Faculty members of the University.
9. Streamlining of previous year's Annual Self-Assessment for the Performance Based Appraisal System (PBAS) of the Faculty members of the University.

PERSONNEL OF THE CELL

DIRECTOR OF THE CELL

Rupam Kataki, PhD (Tezpur University)
(since 01 September 2022)
Professor, Department of Energy
Email: iqac@tezu.ernet.in

Debendra C Baruah, PhD (PAU Ludhiana)
(till 31 August 2022)
Professor, Department of Energy
Email: iqac@tezu.ernet.in

Data Consultant

Santanu Mahanta
Email: santanu@tezu.ernet.in

SOPHISTICATED ANALYTICAL INSTRUMENTATION CENTRE

THE CENTRE

Instrumental methods of analyses are an indispensable aspect of research and development. Tezpur University has a number of Departments and Centres working in diverse areas that require sophisticated analytical equipment. **Sophisticated Analytical Instrumentation Centre (SAIC)**, Tezpur University, has been set up to cater to these needs. The Centre extends these facilities not only to users in the University, but also to other educational institutions and industries in the north-east region and beyond. The Centre also provides demonstration of instruments and their utility in different fields of research to the UG/PG students of Colleges.

The Centre was established in 2010 with two (02) equipment, High-performance liquid chromatography (HPLC) and Gel Permeation Chromatography (GPC). Twenty-five (25) different equipment including Transmission Electron Microscope (TEM), Scanning Electron Microscope (SEM), Single Crystal X-ray Diffractometer (SXRD), Powder X-ray Diffractometer (PXRD), BET (Surface and Pore size analyser), Raman spectrometer, Fourier Transform Infrared (FT-IR) spectrometer, Atomic Absorption Spectrometer (AAS), Nuclear Magnetic Resonance (NMR) spectrometer, and Bomb calorimeter are currently maintained by the Centre. The Centre also plans to acquire other sophisticated equipment like XPS, HR-MS, Confocal Microscope, etc. in the near future.

MAJOR FACILITIES AND EQUIPMENT AVAILABLE

SN	Equipment	Make	Date of Installation
1.	Transmission Electron Microscope	FEI Company, USA	22 October 2013
2.	Nuclear Magnetic Resonance	JEOL, Japan	08 April 2010
3.	Scanning Electron Microscope	JEOL, Japan	18 November 2008
4.	BET Surface Analyzer	Quantachrome, USA	15 June 2011
5.	Powder X-ray Diffractometer	Bruker AXS, Germany	02 November 2012
6.	Single Crystal X-Ray Diffractometer	Bruker, Germany	04 July 2012
7.	High Performance Liquid Chromatography	Waters Corporation, USA	08 June 2011
8.	Gel Permeable Chromatography	Waters Corporation, USA	09 June 2011
9.	Atomic Absorption Spectrometer	Thermo Scientific, UK	18 September 2012
10.	Raman Spectrometer	Renishaw, United Kingdom	12 October 2012
11.	Fourier Transform Infrared Spectrometer	Perkin Elmer, USA	29 January 1998
12.	CHN Analyzer	Perkin Elmer, USA	24 September 2006
13.	Thermal Analyzer (TGA-DSC)	Shimadzu Corporation, Japan	26 May 2006

14.	UV-Visible Spectrometer	Shimadzu Corporation, Japan	13 June 2008
15.	X-Ray Diffractometer	Rigaku Corporation, Japan	18 October 2006

CONFERENCE/WORKSHOP/SYMPOSIUM/SEMINAR ETC. ORGANIZED

Title of Event	Level	Date/Period	Mode of Conduct
STUTI Hands-On-Training Programme	National	31 October-07 November 2022	Offline
High Resolution Digital Microscopy & its application for Academic Research	In-House	16-17 January 2023	Offline

PERSONNEL OF THE CENTRE

HEAD OF THE CENTRE

Ashim J Thakur, PhD (CSIR-NEIST Jorhat)
Professor, Department of Chemical Sciences
Email: head_saic@tezu.ernet.in

Technical Officer

Ratan Boruah, PhD (Tezpur University)
Email: rboruah@tezu.ernet.in

Technical Assistant

Prakash Kurmi
Email: pkurmi@tezu.ernet.in

Nava K Gogoi
Email: navag@tezu.ernet.in

Tridip R Nath
Email: trnath@tezu.ernet.in

MTS

Mohendra Das
Email: mohen13@tezu.ernet.in

TEACHING LEARNING CENTRE

THE CENTRE

The Teaching Learning Centre (TLC), Tezpur University was formally inaugurated on 28 January 2016 as a Centre of Excellence for Curriculum and Pedagogy under the Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNTT) scheme. The scheme was launched by the Department of Higher Education, Ministry of Education (formerly MHRD), Govt. of India. TLC envisages developing and promoting a responsive and relevant teaching-learning system for higher education communities and contributing to excellence in teaching and learning as an innovative and resourceful Centre through reflective research-based practice and the optimal use of technology. Besides, keeping in view the needs of the academic fraternity, TLC conducted several ICT training programs enabling the teaching community to engage in online course delivery.

During the financial year 2022-23, TLC has been engaged in training more than 1400 teachers and prospective teachers from across the country, assisting and encouraging them to promote best practices in the teaching-learning environment.

THRUST AREAS

Innovative Pedagogy and Action Research Program

MAJOR FACILITIES/EQUIPMENT AVAILABLE

ICT LAB with 25 PCs

PUBLICATIONS

JOURNAL PUBLICATIONS

Bora S. Cutter-Wardor Xobdokox Aru Dugoraki Missionary Mohila. *Satsori*. 17(9): 35-39, 2022.

BOOK CHAPTERS

Bora S. Tathyo Aru Jogajog Prajuktur Madhyomere Axomiya Bhaxar Xomiddhi Aru Xomproxaron. In *Anushilan: Bhasha-Sahitya-Sanskriti*, Mahaveer Publications, pp. 71-82, 2022, ISBN: 978-93-94095-45-8

PEDAGOGY AND CONTENT DEVELOPMENT

Name of the Developer/ Contributor	Title of E-Content	Number of modules	Target	Access Link
IH Ahmed	Open Access Publication	1	Teachers of HEIs and Research Scholars	https://youtu.be/QS_-glH4u-I

	MS Excel: Some Basic Tips for Educator	1	Teachers of HEIs	https://youtu.be/CAVsu8D7T4I
S Bora	Reference Management System: Zotero	1	Teachers of HEIs and Research Scholars	https://youtu.be/e464I9WAv3w
	Machine Translation and Literary Texts	1	Teachers of HEIs	https://youtu.be/tRB7GpHpEe8
	Online Tool for Teaching and Evaluation	1	Teachers of HEIs	https://youtu.be/YrxJ6BqEXqY

TALKS BY THE FACULTY ABROAD AND IN INDIA

Name of Faculty Member	Title of the Talk	Title of the Event	Date	Organizer and Venue
I H Ahmed	Interactive content development for better teaching	Two Week Capacity Building Programme Research & Training- Learning Process for the Faculty Social Sciences	09 November 2022	University of Science & Technology Meghalaya
S Bora	Open Educational Resources: Acquisition and Use	One Day Workshop on- OER for Students and Teachers	01 August 2022	Dept. of Assamese, Gargaon College, Sibsagar

SEMINAR/ WORKSHOP/ SYMPOSIA/ LECTURES ORGANISED

Event	Duration
Weeklong Faculty Development Programme (FDP) on E-Content Development (In collaboration with USTM); (Online)	04-08 April 2022
Weeklong Training Programme on Administrative Rules and Office Procedures for the non-teaching staff of Tezpur University; (Blended)	10-14 May 2022
15 Days Interdisciplinary Refresher Course on Academic Writing and Research; (Online)	16-30 May 2022
Weeklong FDP on Effective Teaching in Blended Learning Era; (Blended)	09-15 June 2022
Three-day Capacity Building Programme on Development of Youths of North Eastern Region; (Offline)	06-08 July 2022

Month-long Faculty Induction Program (FIP); (Online)	02-31 August 2022
Weeklong FDP on Effective Teaching in Blended Learning Era (In association with JDSG College); (Blended)	14-20 September 2022
Weeklong FDP on Assessment and Evaluation (In association with the IQAC, Women's College, Tinsukia and Moran Mahila Mahavidyalaya, Charaideo); (Online)	26-30 September 2022
Weeklong Faculty Development Program on Academic Writing and Publication; (Online)	01-07 November 2022
15 Days Refresher Course (RC) on Literature of North East India, Translation, and National Integration; (Online)	13-27 December 2022
Weeklong FDP on Effective Teaching Pedagogy in association with NIPER, Guwahati; (Blended)	18-24 January 2023
Month-long Faculty Induction Program (FIP); (Online)	01 February-01 March 2023
Weeklong FDP on ICT Tools for Effective Teaching and Learning; (Online)	22-28 March 2023

DIRECTOR OF THE CENTRE

Subhrangshu S Sarkar, PhD (Tezpur University)
Professor, Department of Business Administration
Email: subh@tezu.ernet.in

DEPUTY DIRECTOR OF THE CENTRE

Bipul K Sarmah, PhD (Tezpur University)
Assistant Professor, Department of Mathematical Sciences
Email: bipul@tezu.ernet.in

FACULTY MEMBERS

Assistant Professor

Swapnarani Bora, PhD (Dibrugarh University)
Specializations/Area of Interest: Assamese and Cultural Studies
Email: swapnabora@tezu.ernet.in

Ikbal H Ahmed, MPhil (Delhi University)
Specializations/Area of Interest: Philosophy and Education
Email: ikbal@tezu.ernet.in

TECHNOLOGY ENABLING CENTRE

THE CENTRE

The Technology Enabling Centre (DST-TEC) was established at Tezpur University in the Year 2019, and is funded by the DST. The objective of the centre is to create an Ecosystem for Technology Development in the Universities and academic Institutions in Assam and nearby NE states, and to provide a platform to network researchers with other institutes, National laboratories and industry.

ACTIVITIES PERFORMED

● Participation in the North-East Research Conclave, IIT Guwahati

The Technology Enabling Centre, Tezpur University (TEC, TU) participated in the North East Research & Innovation Exhibition at NERC 2022 organized by IIT Guwahati, with the objectives to showcase the research capabilities of Tezpur University, to attract potential partners for business collaborations, to explore investment opportunities, to increase industry linkage through networking, and to create partnering opportunities and put forward the facilities offered by TEC, TU. A total of 17 research scholars and 4 employees of TEC, TU participated in the exhibition along with faculty in-charge Prof. M.K. Hazarika, Co-coordinator of TEC, TU during 20-22 May. Twelve potential technologies and research works of Tezpur University were showcased. TEC members interacted with 43 organizations including industries and academic institutions who took part in the Conclave.

● Sensitization Workshops

A workshop at Jorhat Engineering College, Jorhat, Assam was organised during 3-4 June 2022. , Distinguished guests including Dr. Reeta Sarmah (Retired Principal of JEC) and Dr. Rupam Baruah (Principal of JEC) graced the workshop. 131 participants attended the workshop on the first day. There were three technical lectures and two success story sessions on the first day. Prof. Partha P. Dutta, Prof. Pritam Deb and Prof. Manuj K. Hazarika from the University spoke on innovation in academic institutions, technology commercialization, and idea validation and startup development respectively. Mr. Akash Jyoti Gogoi shared his entrepreneurial journey, and Dr. Binoy Saikia, CSIR-NEIST, Jorhat discussed indigenous scientific research. The second day included a lecture on DSIR PRISM Scheme, and an Innovative Idea Competition with four participating teams.

On 21st September 2022, a sensitization session was conducted at North-Eastern Hill University, Tura Campus, Meghalaya. Thirty-five persons including faculty members and students from various academic institutes of India participated in the session. Sensitization lectures on innovation, technology transfer and TEC, TU was delivered by the members of TEC, TU.

● Innovative Idea Competitions

Innovative idea competition at Tezpur University was organized on 17

June 2022 at Council Hall of the University. A total of 17 teams from Tezpur University participated along with the 5 teams who won the Idea Competition conducted in the Colleges by TEC, TU (one each from Gargaon College, Silapathar College, Biswanath College, Puthimari H.S. School and B. Borooah College).

Another innovative Idea Competition for technology development for automated stem removal of King Chilli was announced. Eight teams participated in this competition. The first phase evaluation took place on October 28, 2022 and the second phase on December 08, 2022. The final round of this Competition took place on January 21, 2023.

● **TEC, TU Summer Internship Programme 2022 (4-30 July 2022)**

TEC, TU conducted one (01) month Summer Internship Programme for the undergraduate students in Engineering/Technology/Sciences during the summer of 2022 with the objectives to introduce the young talents to an ambience of research and innovation and to engage them for preparing technical dossiers of available technologies at Tezpur University and offer them with opportunities to interact with the experienced researchers, innovators and resource persons. Thirteen (13) interns successfully completed the internship. During the internship, the interns studied and prepared a technical dossier of the technology assigned to them and presented it in front of the TEC, TU Coordinators. Seven (7) interactive sessions were conducted to sensitize the interns about innovation, technology transfer, Intellectual Property Rights, science communication, social innovation and product development by experts from various fields during the course of the internship. A brainstorming session on social innovation was also conducted among the interns.

● **Interaction with Micro, Small & Medium Enterprises (MSMEs) to identify their problems**

Sl. No.	District	Total No. of MSME Contacts available	No. of MSMEs interacted
1	Tinsukia	1215	32
2	Dibrugarh	248	60
3	Golaghat	752	5
4	Sonitpur	1347	20

MSMEs and Industries visited by TEC, TU:

Sl. No	MSME Name	Address	Date of Visit
1	Dabur India	AIDC industrial area Balipara, Tezpur	06 September 2022
2	Northern Aromatics Limited	AIDC industrial area Balipara, Tezpur	
3	Daehsan Biotech Pvt. Ltd	AIDC industrial area Balipara, Tezpur	
4	Sona Vets	AIDC industrial area Balipara, Tezpur	
5	Patanjali	AIDC industrial area Balipara, Tezpur	

6	Sunandaram Foods Pvt. Ltd	SRD industries, Mangaldai	02 November 2022
7	Trinity Fructa Pvt. Ltd	SRD industries, Mangaldai	
8	Priyanka Concrete Udyog	Industrial area, Dolabari, Tezpur	27 December 2022
9	Regalia Scientific	Industrial area, Dolabari, Tezpur	
10	Imperial Extrusions	Industrial area, Dolabari, Tezpur	
11	Imperial Beverage	Industrial area, Dolabari, Tezpur	
12	Morrison and Floyd Enterprises	Industrial area, Dolabari, Tezpur	
13	SPG Foods	Industrial area, Dolabari, Tezpur	
14	Saikia Builders	Industrial area, Dolabari, Tezpur	
15	M D Food Products	Industrial area, Dolabari, Tezpur	
16	Meghna Constructions	Industrial area, Dolabari, Tezpur	
17	Kareng Foods & Beverages	Industrial area, Dolabari, Tezpur	
18	Madhuban Foods	Industrial area, Dolabari, Tezpur	
19	Matti-Indigenous Community	House no. 43, Jotia, Kahilipara Road, Bishnu Rabha path, Dispur, Guwahati	
20	Yangdi Bakers	Umrangso, Dima Hasao, Assam	
21	Ghorura	House no. 3, Jotia, Kahilipara Road, Bishnu Rabha path, Dispur, Guwahati	
22	M/S NELOCglo	House no. 169, Ward no- 20 upper Mawprem, Shillong- 793002	
23	NEI Agro Origin F&B Pvt.Ltd	935, Bylane-10 Dispur, Sarumotia, Guwahati	
24	ATEA Koli Tea Farm	Moranhut, Dibrugarh	
25	Deva Foods	Lamgaon, bamungaon, Kampur (R)	
26	M/S Granus	Khagrabari, Biswanath	08 December 2022
27	Madhuri Food Products	Ketekibari, Tezpur, Sonitpur	21 December 2022
28	Dewan's paper plate industry	Sopora Chapari Diputa, Sonitpur	
29	Eggcellent Homesteaders and Meat Merchant Agro	Depota, Sonitpur	
30	M/S Dhurba	Depota, Sonitpur	

● Support to Grassroot Innovator, Ms. Upasana Boruah

TEC, TU supported Ms. Upasana Boruah, a student of class XI, Kherajkhat Sr. Sec School, Lakhimpur, Assam for her in house food product development from Bhim banana by facilitating the testing and quality analysis of her product. She visited TEC, TU on September 9, 2022 for the same. The Centre also plans to facilitate the technology transfer of the product developed by her in future. A MoA was signed on December 16, 2022 between Tezpur University and Ms. Upasana Boruah represented by her mentor Mr. Jagnoram Borah. This MoA extends testing and quality analysis service for products developed by Ms. Upasana Boruah with the help of TEC, TU using the in-house facility of Tezpur University.

- **Installation of Solar Dryer (2 September, 2022)**

TEC, TU in collaboration with Dr. Srinivasan G., Assistant Professor, Department of Design, Tezpur University (TU), installed a Solar Dryer at the Department of Food Engineering and Technology. The Centre is facilitating the testing of the dryer. In future, the Centre plans to extend the drying facility to MSMEs, Self Help Groups (SHGs), and entrepreneurs for their pilot scale product development.

- **Technology Up gradation of the Eri spinning machine**

Katiram Basumatary, Proprietor of M/S Granus, rears Eri silkworm and sells Eri seeds in the market. The MSME expressed their problem of not being able to spin the Eri yarn in the machine provided to them by Govt. of Assam. About 13 such machines in that locality are lying idle. TEC, TU connected them with the experts at Tezpur University, who have visited the site and taken stock of the problem with the machine. Machine was brought to the Central Workshop of the Department of Mechanical Engineering, TU and upgraded the same to solve the problem. The technology up-gradation was completed on September 23, 2022.

- **Support to JN Agro Industries**

JN Agro Industries, a startup from the district of Golaghat, Assam, deals with production and marketing of an Indian traditional product, "Kheer". In order to enhance the shelf-life of their product, JN Agro Industries received support from TEC, TU in collaboration with the Food Quality Control Laboratory, Department of Food Engineering and Technology, TU. This collaboration successfully accomplished the challenging task of improving the shelf -life of JN Agro Industries' "Kausar Kheer" product. A Memorandum of Agreement (MoA) was signed on 28 September 2022 between JN Agro Industries and TU to establish and further the collaboration between TEC, TU and JN Agro Industries.

- **Support to Trishna Foods**

Mr. Pranjal Sarma, Proprietor of Trishna Foods, a startup from the district of Sonitpur, Assam, approached TEC, TU seeking help in processing of Squash and Ready to Serve (RTS) beverages from lemon and also in testing and quality analysis of the product and to provide him with a working manual and machineries for his work. TEC, TU offered to perform the testing and quality analysis in collaboration with Food Quality Control Laboratory (FQCL), TU and connected them with the experts of Department of Food Engineering and Technology (FET), TU for preparation of the working manual.

- **Interaction with MSMEs at Guwahati (4 November, 2022)**

The event started with a welcome note by Mr. Kandarpa Samua, Project Associate-I, TEC, TU. He briefed about the objective of the meeting. Members from seven (7) MSMEs attended the meeting. Ms. Baishalee Sonowal, Project Associate-I, TEC, TU gave a presentation on "TEC and its Activities". She discussed the various activities and technical guidance and assistance the TEC can provide to

the MSMEs and start-ups. Thereafter, Dr. Juri Borbora Saikia, Research Assistant, IPR Cell, Tezpur University delivered a talk on “Opportunities of patent, copyright, design registration etc. for MSME products and processes”. She discussed the various ways other than patenting that can be adopted by MSMEs for their product and process protection. Following that, the MSME stakeholders expressed and discussed the various technical challenges faced by them and how their products can be protected through patents and other means. TEC, TU members expressed their interest to provide them with suitable solutions for the challenges MSMEs are facing. The meeting ended with a vote of thanks from Mr. Kandarpa Samua.

- **Meeting with representatives of Tata Consultancy Services (TCS) and Kaliabor Tea Estate (25 November 2022)**

A meeting with representatives of TCS and Kaliabor Tea Estate was conducted to understand their challenges that could be solved through the intervention of academicians. Various interventions related to tea plantation, tea garden maintenance, tea processing along with non-tea interventions like pest, disease detection through image processing etc. were discussed. A visit to Kaliabor Tea Estate was also made by members of TEC, TU.

- **Industry Academia Meet (29 November 2022)**

An Industry-academia Meet was organized to understand the current trends and needs of the industries and help the academicians to take necessary measures to address the industrial needs and work in line with the current industrial trends. Mr. Rajesh Saha, Senior GM Operations, Schneider Electric Infrastructure Ltd., Mr. Sharad Garg, Business Leader, Emicon Controls Pvt. Ltd. and Mr. Krishna Kumar, Sales Manager, Emicon Controls Pvt. Ltd. were present at the event. A panel discussion with the industry personnel and faculty members of the School of Engineering, Tezpur University was conducted on the following issues:

- (i) Discussing various Industrial needs, technological and manpower, and scope of various academic institutes across North-East India in addressing those needs.
- (ii) Scope and processes to linkup different academic achievements in the form of research outputs and developed technologies, with industries for commercialization.

The panel discussion was followed by an interactive session between the students and the industry personnel. Nine problem statements have been identified for possible collaborative research. These problem statements are circulated across the academicians of Tezpur University and sixty other institutes of North-east India.

- **Certification Programme (17-21 January 2023)**

A five-day certification programme on IP Rights for Enterprise Development, 17-21 January 2023 was organised by Technology Enabling Centre in collaboration with DPIIT-IPR Chair, IPR Cell of Tezpur University. Thirty-four participants from North-East region, including 6 MSMEs, 21 academicians, 5 entrepreneurs and 2 industry professionals completed the certification programme. Dr. Anita

Aggarwal, Head of Technology Development Transfer, Department of Science and Technology, Government of India was the Chief Guest in the programme. The sessions including hands-on training on Innovation and Enterprise Development, Design Registration, Trademark Registration, TRL sensitization, Entrepreneurship Opportunity in context to Assam, Technology Rollout from Academia were delivered by Professor Amogh Dev Rai, Executive Director, Sanrachna, SGT University; Professor Annamma Samuel, DPIIT-IPR Chair, GNLU Gujarat; Dr. Sujata Chaklanobis, Advisor/Scientist-G, DSIR, Government of India; Shri Triranga Bharatiya Borah, Director of Horticulture & F.P., Assam, Mr. Hemant Lahkar, Lahkar Udyog Pvt. Ltd., Assam; Shri Samir Kundu, CGM-Electrical and Instrumentation, Numaligarh Refinery Limited, Assam; Mr. Parag Phukan, Entrepreneur and Ex-Reliance Official; Dr. Ramana K. Vinjamuri, University of Maryland; Professor Pinaki Ghosh, DPIIT-IPR Chair, NUJS, Kolkata. A few participants presented commercial products and stated their anticipated support from TEC-TU. TEC-TU has taken up one such problem for JN Agro Industries, Golaghat and provided the scientific solution during February 2023 with an active support from the Department of Food Engineering and Technology, Tezpur University.

● **Brainstorming session (27 January 2023)**

A Brainstorming session on Technology Transfer in the Health Sector in India vis-à-vis foreign countries was held on January 27, 2023. The panel members were Dr. Satyajit Borah, Senior Consultant Orthopedics and Medical Director TIMEs Hospital; Dr Shyam Jaiswal, Neurologist, CARE Hospital, Hyderabad; Dr. Ramana K. Vinjamuri, University of Maryland, USA. It has been realized that Artificial Intelligence is one of the most promising tools for future healthcare, specifically in context to the Indian scenario. Further, technology transfer in the health sector would thrive only in an ecosystem where Government, Universities and Industries come together and work synergically. A poster competition organized on Innovative Ideas to Address the Challenges in Healthcare System was in parallel to the session.

● **Technology Transfer and MoU**

A technology “iElecticon: Intelligent Electric Charging Controller” has been transferred from Tezpur University to EBRAIM on 20 January 2023, and was facilitated by TEC-TU in collaboration with the IPR Cell, TU.

On the same day, a Memorandum of Understanding (MoU) was inked between the Foundation Integrated Support and Solution (FISS), Guwahati and the University. Another MoU with Indian Oil Corporation Limited and TU was facilitated by TEC, TU and IPR Cell, TU.

● **Technology Readiness Level (TRL) Assessment**

DST-funded TEC, TU assisted in raising the Technology Readiness Level (TRL) of the 'Programmable Illumination Multimodal Microscope (PIMM) on Smartphone' developed by Labdig Innovations and Systems Private Limited. The final stage of assessment which includes a review by an external expert was successfully

completed.

PERSONNEL OF THE SECTION

Coordinator

Nayan M Kakoty, PhD
(since 26 August 2022)
Professor, Department of Electronics and Communication Engineering
Email: nkakoty@tezu.ernet.in

Charu L Mahanta, PhD
Professor, Department of Food Engineering Technology
(till 25 August 2022)
Email: charu@tezu.ernet.in

Project Assistant

Sontosh Phukan
Email: sphukan@tezu.ernet.in

Biman Das
(till 23 August 2022)

Project Associate-I

Kandarpa Samua
(01 August 2022-16 January 2023)
Email: samua@tezu.ernet.in

Debajyoti Dutta
(till 16 January 2023)
Email: deba34@tezu.ernet.in

Baishalee Sonowal
(till 31 December 2022)
Email: bstec10@tezu.ernet.in

Udangshree Borah
(06 June 2022 - 26 July 2022)

Project Associate-II

Doljit Borah
(till 10 January 2023)
Email: doljit@tezu.ernet.in

PROGRAMMES ORGANISED BY THE UNIVERSITY

The 131st Birth Anniversary of Dr BR Ambedkar: Tezpur University observed the birth anniversary of Bharat Ratna Dr BR Ambedkar on 14 April 2022 by offering floral tributes and distributing sweets among the participants. As a part of the celebration, a drawing competition on 'Life of Dr BR Ambedkar' & an elocution competition on 'Role of Dr BR Ambedkar in Indian National Movement' were organized among the school students at Mount Carmel Convent School, Harigaon, Tezpur.

World Intellectual Property Day: The Intellectual Property Rights cell celebrated World Intellectual Property Day on 26 April 2022 with an array of programmes. This year the theme of World Intellectual Property Day was "IP and Youth: Innovating for a Better Future" which celebrated youth-led innovation and creativity. Programs including IP Quiz and Slogan writing competition were also organised on the occasion.

World Immunology Day: The University observed the World Immunology Day on 29 April 2022 by organising a quiz competition.

World Bicycle Day: Tezpur University organized a bicycle rally to observe World Bicycle Day held on 3 June 2022. The event was organized under the aegis of *Azadi Ka Amrit Mahotsav*.

World Environment Day: The Department of Environmental Science celebrated the World Environment Day on 5 June 2022. The programme included lectures by distinguished speakers, tree plantation drive, workshop & environmental games, an essay competition on "Only One Earth" and a drawing competition among school children.

132nd Birth Anniversary of Lokapriya Gopinath Bordoloi: On the occasion of Birth Anniversary of Gopinath Bordoloi, Tezpur University paid floral tributes at the bust of the Lokapriya on 6 June 2022. Heads of various Departments, Faculty Members, and other officials of the University were present on the Occasion.

World Blood Donor Day: Tezpur University along with National Service Scheme celebrated "World Blood Donor Day 2022" on 15 June 2022 under the aegis of *Azadi ka Amrit Mahotsav*. A blood donation camp was organized at the premise of University Health Centre. Many members of the University family along with jawans of Head Quarter 106 Infantry Brigade, Phulbari donated blood in the noble event.

8th International Yoga Day: In order to promote the theme 'Yoga for Humanity', the Yoga Centre of the University observed the 8th International Yoga Day with several activities. A two-month long *Yoga Mahotsava* with several activities were organized with active participation from the University fraternity and local community, NSS and the 16 JAT regiment of Indian Army. On 21 June 2022, spectacular yoga asanas were performed in the form of Common Yoga Protocol by the participants.

72nd Death Anniversary of Lokpriya Gopinath Bordoloi: Tezpur University paid floral tribute to the first Chief Minister of Assam Lokpriya Gopinath Bordoloi on his 72nd death anniversary on 5 August 2022.

76th Independence Day: Tezpur University celebrated India's 76th Independence Day on 15 August 2022, with a flag hoisting ceremony followed by a cultural programme. Hon'ble Vice-Chancellor of the University Prof VK Jain hoisted the National Flag and addressed the people gathered for the celebration. A cultural programme was organized where students of the University and Kendriya Vidyalaya, Tezpur University and the children of University faculty/staff performed patriotic songs, dances and drama play.

Fit India Freedom Run: On the occasion of National Sports Day, commemorating the birth anniversary of hockey legend, Major Dhyan Chand, the University organised Fit India Freedom Run 2022. The inaugural ceremony of the event was held on 29 August 2022, where students, faculty, non-teaching staff, children and other campus dwellers participated enthusiastically.

Teachers' Day: Tezpur University celebrated Teachers' Day on 5 September 2022 at the Kalaguru Bishnuprasad Rabha (KBR) auditorium. During the occasion, a vibrant cultural programme was organised by faculty members of the University.

Hindi fortnight: The University organised Hindi fortnight to promote the official language of the country. Various competitions such as essay writing, quiz, recitation etc. were organised amongst the employees and the students of the University during the fortnight.

Gandhi Jayanti: The University observed Gandhi Jayanti on 2 October 2022 in the premises of the Community Hall. During the occasion, the University fraternity paid homage to India's second Prime Minister Shri Lal Bahadur Shastri who also shares his birth anniversary on 2 October with the Father of the Nation Mahatma Gandhi.

International Day of the Girl Child: Chandraprabha Saikiani Centre for Women Studies, organized International Day of the Girl Child on 11 October 2022 where 40 female students of the Panchmile Higher Secondary School, Tezpur participated actively. The Chandraprabha Saikiani Centre for Women Studies has been celebrating the International Day of the Girl Child every year to educate and inspire girl children about their rights and wrongdoings in the society.

Vigilance Awareness Week: The University organised Vigilance Awareness Week 2022 to uphold the spirit of vigilance among the students as well as teaching and non-teaching staff of the University. A number of activities were organised on the occasion.

National Unity Day: On the occasion of birth anniversary of Sardar Vallabhbhai Patel observed as National Unity Day, NSS cell of the University organised the 'Run for Unity' programme to invoke the feeling of peace and harmony among the fellow citizens of the country on 31 October 2022.

The 73rd Constitution Day (Samvidhan Diwas): The 73rd Constitution Day celebration was organised at Tezpur University with a series of events jointly conducted by Dr Ambedkar Chair, Chandraprabha Saikiani Centre for Women Studies, the Department of Law, and the Department of Sociology of Tezpur University.

National Education Day: National Education Day was observed by the University on 11 November 2022. Prof KK Deka, former Vice Chancellor, Dibrugarh University delivered a speech

on 'National Education Policy 2020: Background and Perspectives' as the chief guest on the occasion.

400th Birth Anniversary of Bir Lachit Barphukan: The University celebrated the 400th Birth Anniversary of Bir Lachit Barphukan on 24 November 2022.

XX Convocation: The 20th Convocation of Tezpur University was held on 30 December 2022, where a total of 1,362 students were conferred their degrees and diplomas. Prof Sankar Kumar Pal, Member of European Academy of Sciences & Arts, National Science Chair, Science and Engineering Research Board (SERB) and President, Indian Statistical Institute was the Chief Guest, while Hon'ble Governor of Assam Prof Jagdish Mukhi presided over the Convocation as the Chancellor of the University.

Homage to Rupkonwor Jyoti Prasad Agarwala: The Tezpur University community paid homage to Jyoti Prasad Agarwala, the cultural icon of Assam on his death anniversary on 17 January 2023, which is celebrated across the state as *Silpi Divas*. The University members offered floral tribute in the morning to the statue of Jyoti Prasad Agarwala.

30th Foundation Day: Tezpur University observed its 30th foundation day on 21 January 2023 with hosts of activities. Prof Dhruba J Saikia, Head of the Teaching Learning Centre and National Resource Centre for Astronomy and the Founding Vice Chancellor, Cotton University delivered the foundation day oration as the Chief Guest.

Republic Day: The University celebrated the 74th Republic Day with great fervour and joy with a daylong programme. The day started with a *Prabhat Pheri* by the students followed by hoisting of the National Flag by the Vice Chancellor. It was followed by some relevant programs including patriotic songs, chorus, and group dance by the students of the University, Takshashila Vidyapeeth and Kendriya Vidyalaya.

Annual Meet: The 25th Annual Meet of Tezpur University was held during 9 - 11 February 2023. The sporting/cultural event witnessed a wide range of cultural and sporting competitions participated by the students of the University with great enthusiasm.

inSCIgnis: The 10th edition of the annual science fest of Tezpur University observed every year on the occasion of National Science Day, kick started on 26 February 2023. The three-day science fest witnessed several new and thrilling events viz. Blitz: The Start-Up Event hunting for modern scientific start-up etc.

STATISTICS OF THE YEAR

Employees (Teaching)

Category	As on 01.04.2022	Joined during 2022-23	Left during 2022-23	As on 31.03.2023
Professor	83	02	03	82
Associate Professor	32	01	02	31
Assistant Professor	158	03	00	161
Total	273	06	05	274

Employees (Non-teaching)

Category	As on 01.04.2022	Joined during 2022-23	Left during 2022-23	As on 31.03.2023
Group-A	34	01	03	32
Group-B	56	04	03	57
Group-C	105	00	03	102
Group-C (MTS)	72	00	01	71
Total	267	05	10	262

Female/Male Employees (as on 31 March, 2023)

Teaching	SC	ST	OBC	GEN	EWS	Total	PWD	Female	Male	Total
Professor	10	06	18	48	00	82	01	12	70	82
Associate Professor	03	02	07	19	00	31	00	05	26	31
Assistant Professor	26	14	45	74	02	161	06	56	105	161
Total	39	22	70	141	02	274	07	73	201	274

Non-Teaching	SC	ST	OBC	GEN	EWS	Total	PWD	Female	Male	Total
Group-A	05	03	07	16	01	32	00	03	29	32
Group-B	08	06	19	24	00	57	03	10	47	57
Group-C	19	11	39	33	00	102	03	15	87	102
Group-C (MTS)	12	05	23	31	00	71	03	04	67	71
Total	44	25	88	104	01	262	09	32	230	262

Students

Total			General		SC		ST		OBC/MOB C		PWD		EWS	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
4601	2541	2060	1256	1068	305	190	172	179	603	486	20	09	185	128

Compiled and edited by:

Prof. Rupam Kataki, Dept of Energy
Prof. Ashim Jyoti Thakur, Dept of Chemical Sciences
Dr. Pramod Kr. Sharma, Dept. of Hindi
Dr. Somnath Paul, Dept of Applied Sciences
Dr. Barnali Choudhary, Dept. of Mechanical Engineering
Dr. Ritupan Sarmah, Dept of Physics
Dr. Bipasha Patgiri, Dept. of English
Dr. Kapou Malakar, Dept. of Mass Communication and Journalism

Hindi version Prepared by:

Kul Pd Upadhyay, Assistant Director (Official language)
Rekha Rani Bezbaruah, Junior Translation Officer
Simimoyee Devi, Hindi Typist

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TEZPUR UNIVERSITY

Napam, Tezpur 784028, Assam

Phone: 03712-267100

Fax: +91 3712 267005/6

Email: registrartu@tezu.ernet.in

Web: <http://tezu.ernet.in>