

CURRICULUM VITAE

Barnali Chowdhury,
Assistant Professor, Mechanical Engineering
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SUMMARY:

- Currently working as an Assistant Professor in the Department of Mechanical Engineering, School of Engineering, Tezpur University, Tezpur- 784028, Assam.
- Possesses 11+ years of work experience (5.5 years in teaching and 6 years in IT industry).
- Pursuing PhD. from Assam Engineering College, Gauhati University, Guwahati-781014.

AREAS OF INTEREST/RESEARCH:

Industrial Engineering – Six Sigma, System dynamics.
Thermal Engineering, Operations Research.

PROFESSIONAL EXPERIENCE:

- **Teaching Experience : 5.5 years**

| Sl. No. | Name of the Institute | Designation | Period | Duration | Subjects Taught |
|---------|--|---------------------|-------------------------------|-----------|---|
| 1. | Tezpur University (Dept. of Mechanical Engg., School of Engineering) | Assistant Professor | 02Feb2015 to till date | Current | Theory of Machines, Applied Thermodynamics II, Thermodynamics, Applied Thermodynamics I. |
| 2. | NERIST (Dept. of Mechanical Engg.) | Assistant Professor | 15 - 23 January 2015 | 09 days | |
| 3. | Assam Don Bosco University (Dept. of Mechanical Engg., School of Technology) | Assistant Professor | 8 July 2014 to 13January 2015 | 06 months | Engg. Thermodynamics, Engg. Graphics, Machine Drawing, LAB: Engg. Mechanics |
| 4. | Royal School of Engg. and Technology (Dept. of Mechanical Engg.) | Assistant Professor | July 2011 to June 2014 | 03 years | Basic Thermodynamics, Engineering Mechanics I, Applied Thermodynamics I, Applied Thermodynamics II, Fluid Mechanics I, Operations Research and Engineering Graphics II. LAB: Basic Mechanical Engg. Lab, Thermodynamics and Fluid Mechanics I. |
| 5. | Assam Textile Institute, Guwahati. | Lecturer | August 1999 to August 2000 | 01 year | Engineering Drawing, Elements of Mechanical Engineering. |

- **Industry Experience- 5 years 9 months**

| Sl. No. | Name of the Organization | Designation | Period | Duration | Work Profile |
|---------|--|--------------------------|--------------------------------|------------------|--------------|
| 1. | Nucleus Software Exports Limited, Noida, UP. | Senior Software Engineer | January 2001 to September 2006 | 5 years 9 months | ** |

**** Work Profile:**

- Role of a Project Manager with functions viz. Project management, senior management reporting and handling multiple projects. It also included ensuring productive and preventive maintenance.
- As the Project leader had the responsibilities to train the team, design the test strategy mapped with the test data, test plan and execution schedule. The responsibilities also included simulation testing with real time scenarios, ensuring effective regression, resolution meetings, day end status reporting, Project Analysis, managing and reporting defect statistics, preparation of Release Package and product roll outs with impact analysis of open issues.

Other remarkable achievements:

- Performed On site testing of a Core banking project at Citibank, Singapore.
- Received the "Nucleite of the Month" Award for outstanding performances as a test lead on two terms.
- Many successful implementations of FinnOne, the flagship core banking product for stalwarts such as ICICI Bank (Mumbai), HDFC Bank (Mumbai), Arab National Bank, American Express, Citi Financials, State Bank Of Mauritius (Mauritius), United Finance Company (Riyadh), Tokyo Star Bank (Japan), General Motors (Italy), to name a few.

PUBLICATIONS AND CONFERENCES

- **Journal:**

| Sl No. | Year | Journal | Paper | Impact factor | Citation |
|--------|------|--|--|---------------|----------|
| 1 | 2014 | International Journal of Precision Technology, Inderscience publishers, UK DOI: 10.1504/IJPTECH.2014.060618 2014 Vol. 4 No. 1 2 69-80 | Chowdhury B. Deb S. K. and Das PC "Computer Aided Measurement System Analysis of Attribute Data: A Case of Liner Manufacturing" | | |
| 2 | 2014 | International Journal of Current Engineering and Technology, Inpressco, USA DOI: http://dx.doi.org/10.14741/ijcet/spl.2.2014.11 Special issue – 2, (2014) 54-61 | Chowdhury B. Deb S. K. and Das PC "Managing And Analyzing Manufacturing Defects–A Case Of Refrigerator Liner Manufacturing" | 4.550 | 01 |
| 3 | 2015 | Journal of Material Science and Mechanical Engineering (JMSME) p-ISSN: 2393-9095; e-ISSN: 2393-9109 Vol 2, Issue 14, Oct- Dec 2015 32-34 | S. Borah B. Chowdhury S. Gogoi and Z. Askary (2015). "A Theoretical Study of Design Parameters of an Archimedean Screw Turbine" | | |
| 4 | 2016 | International Advanced Research Journal in Science, Engineering and Technology , pp. 176-179, March 2016. ISSN (Online) 2393-8021 ISSN (Print) 2394-1588. DOI 10.17148/IARJSET.2016.3337 | S. Biswas and B. Chowdhury, <i>Industrial Applications and Practices of Six Sigma: A Literature Review</i> | 1.198 | |

- **Conference Proceedings:**

| Sl. No. | Name of Conference | Date | Name of paper | ISBN No and page No. |
|---------|--|-------------------------|--|---|
| 1 | <i>3rd International Conference on Industrial Engineering (ICIE-2015) & 57th National Convention of Indian Institution of Industrial Engineering at Sardar Vallabhbhai National Institute of Technology, Surat, Gujarat.</i> | November 26-28, 2015 | S. Biswas and B.Chowdhury “Industrial Applications and Practices of Six Sigma : A Literature Review.” | ISBN: 978-93-84935-56-6. |
| 2 | <i>National Conference On Recent Trends in Mechanical, Electrical, Electronics, Civil, Computer Science and Information Technology (MECIT-2015) held at Jawaharlal Nehru University, New Delhi.</i> | November 21-22, 2015 | S. Borah B. Chowdhury S. Gogoi and Z. Askary “A Theoretical Study of Design Parameters of an Archimedean Screw Turbine.” | p-ISSN: 2393-9095; e-ISSN: 2393-9109 |
| 3 | <i>5th International & 26th All India Manufacturing Technology, Design and Research (AIMTDR), IIT, Guwahati</i> | December 12- 14, 2014 | Chowdhury B. and Deb S. K. “Comparative Analysis of Manufacturing System Using Cause – Effect Diagram and System Dynamics Model” | ISBN: 978-8-19274-612-8, 620- 1to 5 |
| 4 | <i>5th International & 26th All India Manufacturing Technology, Design and Research (AIMTDR), IIT, Guwahati</i> | December 12- 14, 2014 | Chowdhury B. Deb S. K. and Das PC “System Dynamics Model in the Analysis of Manufacturing Defects and Process Improvements.” | ISBN: 978-8-19274-612-8, 542 – 1 to 7 |
| 5 | <i>International Conference on Advances in Mechanical Sciences (ICAMS2014).</i> | January 9-11 2014. | Chowdhury B. Deb S. K. and Das PC “Managing And Analyzing Manufacturing Defects–A Case Of Refrigerator Liner Manufacturing.” | |
| 6 | <i>4th International & 25th All India Manufacturing Technology, Design and Research Conference (AIMTDR).</i> | December 14 - 16, 2012. | Chowdhury B. Deb S. K. and Das PC “Computer Aided Measurement System Analysis of Attribute Data: A Case of Liner Manufacturing” | |

- **Workshops Attended:**

| Sl. No. | Seminar/ Workshop | Date | Title | Location |
|---------|-----------------------------|-----------------------|---|---|
| 1 | Training | 2004 | <i>Six Sigma White Belt</i> | Nucleus Software Exports Limited, NOIDA |
| 2 | National Conference | December 23-24, 2011 | <i>National Conference on Statistics and its Practices (NCSAP)</i> | GU, Guwahati |
| 3 | Regional Conference | March 16, 2012 | <i>57th Annual Technical Session, Assam Science Society</i> | GU, Guwahati |
| 4 | FDP | May 19, 2012 | <i>Effective Research Methodology</i> | RGI, Guwahati |
| 5 | International Conference | December 14- 16, 2012 | <i>4th International & 25th All India Manufacturing Technology, Design and Research (AIMTDR)</i> | Jadavpur University, Kolkata |
| 6 | International Workshop | February 21-22, 2013 | <i>Wind Disaster Problems-Challenges Ahead</i> | RGI, Guwahati |
| 7 | Regional Seminar | April 4, 2013 | <i>Workshop on Pedagogy “Challenges of Engineering Education in the NE and Role of Institutions and Teachers”</i> | AEC, Guwahati |
| 8 | National workshop | April 29-30, 2013 | <i>National workshop on ‘Deployment and Use of NPTEL Courses’</i> | RGI, Guwahati |
| 9 | National Conference | May 9-10, 2013 | <i>National Conference on Pure and Applied Mathematics (NCPAM)</i> | RGI, Guwahati |
| 10 | Quality Improvement Program | May 20-24, 2013 | <i>‘Role of Numerical Methods in Scientific Computing’</i> | IIT, Guwahati |
| 11 | National Seminar | October 5, 2013 | <i>“High Performance Computing (HPC) in academia and beyond “organized by CDAC</i> | AEC, Guwahati |
| 12 | International Conference | January 9-11, 2014 | <i>1st International Conference on Advances in Mechanical Sciences 2014</i> | Vardhaman College of Engg., Hyderabad. |
| 13 | National Workshop | May 20-30, 2014 | <i>Two- Week ISTE Main Workshop on “Fluid Mechanics ”</i> | IIT Kharagpur |
| 14 | Workshop | June 5-6, 2014 | <i>Enhancing Professionalism: Discover, Learn, Grow.</i> | RGI, Guwahati |

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|----|----------------------------------|-----------------------|--|--------------------------|
| 15 | Professional Development Program | July 15-16, 2014 | <i>Transformation through reflection and critical Thinking</i> | ADBU, Guwahati |
| 16 | Quality Improvement Program | December 9-13, 2014 | <i>Introduction to experimental, computational Mechanics</i> | AEC. Guwahati |
| 17 | International Conference | December 12- 14, 2014 | <i>5th International & 26th All India Manufacturing Technology, Design and Research (AIMTDR)</i> | IIT, Guwahati |
| 18 | Orientation Program | April 20-21, 2015 | <i>Induction cum Orientation Program in 'Professional qualities in Education'</i> | IQAC, TU |
| 19 | Workshop cum training | March 26-29, 2015 | <i>Six Sigma Green Belt Certification Program</i> | SOM, TU, Tezpur |
| 20 | National Workshop | June 2-12, 2015 | <i>Two- Week ISTE Main Workshop on "Environmental Science "</i> | IIT Bombay |
| 21 | Short Term Course | 20-24 July 2015 | <i>Advances in Mechanical Engineering and Industrial Applications</i> | SOE, TU |
| 22 | Workshop cum Training | November 21, 2015 | <i>Patent Search and Analysis</i> | TU IPR cell |
| 23 | Workshop | February 15-24, 2016 | <i>Research Methodology</i> | Education Department, TU |

ORGANIZATIONAL ACTIVITIES:

- Associate Warden, Kopili Women's Hostel, TU.
- Webmaster, ME Department.
- Convenor, Departmental Grievance Redressal cell.
- Exam Coordinator, ME Department, Spring 2016.
- Member- Anti Ragging Cell, ME Department.
- Member- Students' Appeal Committee, ME Department.
- Departmental Media Coordinator
- Students' Mentor.

PROJECTS GUIDED:

• **M.Tech**

- Application of Six Sigma methodology to reduce Breakdown hours in a thermal power generation unit. *(Ongoing)*

• **B.Tech**

- Design and fabrication of an Archimedean Screw turbine. *(Ongoing)*
- Fabrication of a shell and tube Heat exchanger and analysis of its performance
- Construction of a portable wind turbine and study of its performance.

EDUCATIONAL QUALIFICATIONS:

- Ph.D. (Pursuing) Assam Engineering College, Gauhati University (AEC, GU).
- M.E. (Thermal Engineering, Topper) AEC, GU.
- B.E. (Mechanical Engineering, Honors) AEC, GU.

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