

CURRICULUM VITAE

Pankaj Kumar Das

Associate Professor

Department of Mathematical Sciences

Tezpur University, Napaam

Sonitpur, Assam-784028, India

Email: *pankaj4thapril@yahoo.co.in*

pankaj4@tezu.ernet.in

Research interest: Coding Theory

Educational qualification: [1]. B.Sc from Goalpara College (Gauhati University)

[2]. M.Sc from Delhi University

[3]. M. Phil. from Delhi University

[4]. Ph. D. from Delhi University

(Thesis entitled: **Codes detecting/correcting periodic and solid burst errors**)

Details of employment: [1] 28th Sept. 2019 to till date - Associate Professor,
Department of Mathematical Sciences, Tezpur University

[2] 28th Sept. 2015 to 27th Sept. 2019 - Assistant Professor,
Department of Mathematical Sciences, Tezpur University

[3] 16th July 2002 to 24th Sept. 2015 - Assistant Professor,
Department of Mathematics, Shivaji College, Delhi University.

Awards / Fellowships: [1] UGC NET Qualified.

[2] National Merit Scholarship in 10th and 12th level.

[3] Teaching Excellence Award for Innovation, Delhi
University, May 1, 2015.

[4] 3rd prize in the R.S. Varma Memorial Student Paper Competition,
Forum for Interdisciplinary Mathematics in IMST 2009-FIM 17,
University of Bohemia, Czech Republic, May 23-26, 2009.

Invited Talk:

- GANITA 2022, Shyam Lal College, Delhi University, 27th April, 2022.
- Invited talk on Three Days National Conference on International Pi Day, Manipur University, March 12-14, 2022.
- National Webinar on "Basic Coding Theory & its Applications", Sadiya College, August 14, 2021.
- Invited talk on Latex on departmental workshop in InSCIgnis21, Tezpur University, February 26 -28, 2021.

- Invited talk in 2-days National Workshop on Cryptography, Department of Mathematics, University of Science and Technology, Meghalaya (USTM), September 25- 26, 2018.
- Invited lecture at Kendriya Vidyalaya, No. 1, Tezpur, 18-29 May 2016.

Ph.D. Students:

- Subodh Kumar (registered at Delhi University) (Completed, September 2021)
- Nabin Kumar Pokhrel (registered at Tezpur University) (Completed, January 2023)
- Letminthang Haokip (registered at Tezpur University) (Completed, October 2023)
- Achal Agarwal (registered at Tezpur University) (Ongoing)
- Puspita Paul (registered at Tezpur University) (Ongoing)
- Aklima Begum (registered at Tezpur University) (Ongoing)

Presentation in Seminar/ Conferences:

- ICMMAAC-21, JECRC University, Jaipur (Raj.), India, August 5-7, 2021.
- 26th International Conference of International Academy of Physical Sciences on Advances in Algebra and Analysis at Marwadi University, Rajkot, Gujrat, December 18-20, 2020.
- National Conference on Application of Mathematical Tools in Social Sciences and Sciences (Online), Zakir Husain Delhi College, University of Delhi, October 17-18, 2020.
- International Conference on Discrete Mathematics and its Applications to Network Science (ICDMANS), BITS Pilani, Goa, July 7 - 10, 2018.
- Indian Science Congress, Manipur University, Imphal, Manipur, March 16-20, 2018.
- National Seminar on Science and Technology for Human Welfare, IASST, Guwahati, Feb. 27, 2017.
- National Conference on Mathematics and its Applications (NCMA-2016), Cotton College State University, Guwahati, Oct. 21-22, 2016.
- International Conference on Current Trends in Graph Theory and Computation, South Asian University, Sept. 17-19, 2016, New Delhi
- IMST 2009-FIM xvii, University of Bohemia, Plzen, Czech Republic, May 23-26, 2009.

Participation in Conference/ Workshop/Program:

- 1-week FDP, organized by the Department of Chemistry and IQAC Kirori Mal College, DU on Environmental Sciences and Public Health, Feb.1-5, 2022.
- Pedagogical Training for Mathematics Teachers, Tezpur University, December 25-30, 2019.
- Science Academies' Refresher Course on Analysis, Feb. 18 - March 02, 2019.
- A 2 Days Workshop on Cyber Security: Issues and Challenges, Dept. of Computer Science & Engineering, Tezpur University, January 29–30, 2018.
- One day Workshop cum Training on Patent Search and Analysis, Tezpur University Intellectual Property Right (IPR) Cell, February 25, 2017.
- Science Academies' Lecture Workshop on Theory of Equation, Department of Mathematics, Shivaji College, University of Delhi, 16-17 October 2014.
- Refresher Course in Mathematical Sciences, CPDHE, University of Delhi, Delhi, Nov. 24-Dec.13, 2014.

- Refresher Course in Mathematics, ASC, Lucknow University, Feb. 14.- March 07, 2014.
- One day Brainstorming Session of Teacher Empowerment Program, Centre for Excellence in Interdisciplinary Mathematics (CEIM) in IP University, Kashmere Gate, Delhi-6, May 16, 2009.
- Eighteenth International Conference of Forum for Interdisciplinary Mathematics on Interdisciplinary Mathematical & Statistical Techniques (IMST 2009-FIM XVIII), Jaypee University of Information Technology, Wagnaghat (HP), August 2-4, 2009.
- Pre-ICM International Convention on Mathematical Sciences, University of Delhi, India, December 18-20, 2008.
- Symposium on AAEECC-17 & IWAA workshop, Department of Mathematics, Indian Institute of Science, Bangalore, December 16-20, 2007.
- Orientation course, CPDHE, University of Delhi, Delhi, May 06- June 03, 2008.
- A course on Interception and Analysis of Digital Signals under Continuing Education Program of DRDO, SAG, Delhi, India, November 19 -29, 2001.

Total Publications: 36

Publications of last 5 years:

1. P.K. Das and N.K. Pokhrel (2023), "Asymmetric solid burst correcting integer codes", Kuwait Journal of Science , In press, https://doi.org/10.1016/j.kjs.2023.08.005 .
2. P. K. Das (2023), "Location of solid burst within two adjacent sub-blocks", Journal of Algebraic Systems , 11(1), 137-147.
3. N.K. Pokhrel, P.K. Das and A. Radonjic (2023), "Integer codes capable of correcting burst asymmetric errors", Journal of Applied Mathematics and Computing , 69, 771–784, https://doi.org/10.1007/s12190-022-01770-7 .
4. N.K. Pokhrel and P.K. Das (2022), "Low-density and high-density asymmetric CT-burst correcting integer codes", Advances in Mathematics of Communications , doi/10.3934/amc.2022030 .
5. P.K. Das and L. Haokip (2022), "Codes with burst distance and periodical burst errors", Journal of Computational and Applied Mathematics , 411, 114240, doi.org/10.1016/j.cam.2022.114240 .
6. P.K. Das and L. Haokip (2022), "Low-density periodical burst correcting codes with decoding probability and detection capability", Journal of Applied Mathematics and Computing , 68, 4537–4557, https://doi.org/10.1007/s12190-022-01716-z .
7. P.K. Das and S. Kumar (2022), "Location of burst and repeated burst error in single and adjacent sub-blocks", TWMS Journal of Applied and Engineering Mathematics , 12 (3), 996--1003.
8. P.K. Das and L. Haokip (2022), "Periodical burst error correcting codes with decoding error probability", Discrete Mathematics Letters , 8, 49–56.
9. P.K. Das and N.K. Pokhrel (2021), "Asymmetric CT-Burst Correcting Integer Codes," 2021 5th International Conference on Information Systems and Computer Networks (ISCON) , 1-5, IEEE, DOI: 10.1109/ISCON52037.2021.9702506.
10. P.K. Das and L. Haokip (2021), "Correction and Weight Distribution of Periodic Random Errors", Science and Technology Asia , 26 (4), 39–48, Dec. 2021.

11. N.K. Pokhrel and P.K. Das (2021), “Unidirectional solid burst correcting integer codes”, Journal of Applied Mathematics and Computing , Online first article, DOI:10.1007/s12190-021-01662-2 .
12. P.K Das and S. Kumar (2021), “Location and weight distribution of key errors”, Matematicki Vesnik , 73(1), 43–54
13. P.K. Das and S. Kumar (2020), “Correcting key errors blockwise and correcting low density key errors”, International Journal of Mathematical, Engineering and Management Sciences , 5(6), 1234-1248.
14. P.K Das and S. Kumar (2020), “Bounds on Linear Codes Capable of Detecting, Locating and Correcting of m-Repeated Burst Errors Prevailing in Multiple Sub-Blocks”, Proyecciones Journal of Mathematics , 39 (6), 1577-1596.
15. P.K. Das (2019), “Codes detecting, locating and correcting random errors occurring in multiple sub-blocks”, Proyecciones Journal of Mathematics , 38(1), 129-144.
16. P.K. Das (2018), “A class of solid burst error correcting codes derived from a reversible code”, University Politehnica of Bucharest Scientific Bulletin, Series A , 80(4), 153-162.
17. L.K. Vashisht, S. Garg, Deepshikha, P.K. Das (2018), “On generalized weaving frames of Hilbert spaces”, Rocky Mountain Journal of Mathematics , 48 (2), pp. 661-685.
18. P.K. Das (2018), “Error Locating Codes and Extended Hamming Code”, Matematicki Vesnik , 70(1), 89-94.

Professional Activities:

- Editorial Board Member
 1. Bulletin of Pure and Applied Sciences - Mathematics and Statistics.
 2. Cultural and Historical Heritage: Preservation, Presentation, Digitalization (KIN Journal).
- Reviewer of
 1. American Mathematical Reviews (MathSciNet)
 2. IEEE Wireless Communications Letters
 3. IEEE Access
 4. IEEE Transactions on Computers
 5. Cryptography and Communications
 6. Italian Journal of Pure and Applied Mathematics
 7. Khayyam Journal of Mathematics
 8. European Journal of Mathematics
 9. Scientific Programming
 10. Computational and Applied Mathematics
 11. Journal of Applied Mathematics and Computing

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