

DR. MADHUMITA MAHANTA



Designation: Associate Professor & HoD (i/c), Mathematics

Date of joining: 11.07.2008

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Academic/ Administrative Experience:

- *HOD (i/c), Mathematics, GCU (since April 2023)*
- *Ph. D Supervisor, GCU (since April 2023)*
- *Chairperson, Gender Sensitization Cell, GCU (since February 2023)*
- *Resource Person in Workshops (Both internal and external)*
- *Convenor of Workshop/Seminar/Conference (GIMT & GCU)*
- *Dean, Student Affairs, GIMT (September 2020-December 2022)*
- *Member of college Anti Ragging Squad, GIMT & GCU*
- *Mentor of 10/15 students, GIMT*
- *Member of Counselling cum Selection Committee for AIEEE qualified candidates, GIMT*
- *Department coordinator of Routine Committee, GIMT*
- *Teacher member in College Magazine Committee, GIMT*
- *Teacher member in Marketing Committee, GIMT*
- *Teacher member in various sports and literature Committees, GIMT*
- *Syllabus Preparation Committee, ASTU*

Research Publications

1. *Free Convective MHD Flow of a Visco-elastic Fluid past an Infinite Vertical Plate, International Journal of Applied Mathematics, ISSN 1311-1728, 22 (2), 2009 (189-203)*
2. *Heat and Mass Transfer in a Visco-elastic MHD Flow Past a Vertical Plate Under Oscillatory Suction Velocity, International Journal of Computational Science and Mathematics, ISSN 0974-3189, 2 (3), 2010 (137-146)*

3. *Periodic MHD Flow of Visco-elastic Fluid Through a Channel with Heat Transfer*, International Journal of Mathematical Sciences and Engineering Applications, ISSN 0973-9424, 5 (VI), 2011 (395-404)
4. *Mixed Convective MHD Flow of Visco-elastic Fluid Past a Vertical Infinite Plate with Mass Transfer*, International Journal of Scientific and Engineering Research, ISSN 2229-5518, 3 (2), 2012 (1-7)
5. *MHD Mixed Convective Oscillatory Flow of a Visco-elastic Fluid in a porous Channel*, JP Journal of Heat and Mass Transfer, ISSN 0973-5763, 6 (2), 2012 (177-190)
6. *Free Convective Oscillatory Flow of a Visco-Elastic Fluid Past A Porous Plate In Presence Of Radiation And Mass Transfer*, International Journal of Engineering and Science, ISSN 2319-1813(e), 2319-1805(p), 2 (9), 2013 (51-57)
7. *Visco-elastic Fluid Flow with Heat and Mass Transfer in a Vertical Channel Through Porous Medium*, Journal of Global Research in Mathematical Archives, ISSN 2320-5822, 2(1) 2014 (22-33)

Book Publication

1. *A Textbook of Engineering Mathematics-III (As per Syllabus of ASTU)*, Mani Manik Prakash, Guwahati-781001, ISBN: 978-81-85917-47-7 (Partial Differential Equations (09-72))

Conference/Workshop/FDP/STTP/Symposium attended/participated:

1. *50th Annual Technical Session and National Conference on Current Trends of Research in Science and Technology*, Gauhati University & Assam Science Society, 28-29 January 2005 (presented a paper)
2. *First National Workshop on Techniques in Applied Mathematics*, Department of Applied Mathematics, University of Calcutta, Kolkata, 18-28 October 2005
3. *Third National Workshop on Techniques in Applied Mathematics*, Department of Applied Mathematics, University of Calcutta, Kolkata, 10-18 October 2006
4. *Workshop on Development of Self-instructional Material for Distance Education*, Post Graduate Correspondence School, Gauhati University, Assam, 22-24 January 2007
5. *International Conference on Frontier of Mathematics and Applications*, Department of Mathematics, The University of Burdwan, Burdwan, 16-18 January 2008 (presented a paper)
6. *National Conference on Advances in Mathematics*, Department of Mathematics, Gauhati University, Assam, 4-7 September 2008 (presented a paper)

7. *Workshop on Introduction to MATLAB and Labview*, Department of Physics, Gauhati University, Assam, Gauhati University, 19-20 December 2008
8. *96th Indian Science Congress*, North East Hill University, Meghalaya, 3-7 January 2009
9. *National Conference on Recent Trends in Mathematics and its Applications*, Assam Science Society, Assam and Department of Mathematics, Gauhati University, 12-13 September 2009
(presented a paper)
10. *National Workshop cum Training Programme on Recent Trends in Fluid Mechanics*, Department of Mathematics, Banaras Hindu University, Varanasi, 06-12 July 2010
(delivered a talk on ‘Slow Motion’)
11. *North East Regional Conference of Mathematics-II*, Assam Academy of Mathematics, Assam, 16 July 2011 (presented a paper)
12. *National Conference on Frontiers of Mathematics*, Department of Mathematics, Gauhati University, Assam, 29-30 September 2011 (presented a paper)
13. *57th Annual Technical Session of the Assam Science Society*, Gauhati University, 16 March 2012 (presented a paper)
14. *Staff Development Programme on Emerging Trends and Practices in Management*, Department of Business Administration, Girijananda Chowdhury Institute of Management and Technology, Guwahati, 7-19 May 2012
15. *One Day Symposium on the occasion of National Mathematics Year*, Department of Mathematical Sciences, Institute of Science and Technology, Gauhati University, 22 September 2012
16. *Technical Session on Mathematical Sciences on the occasion of 125th Birth Day Celebration of Srinivasa Raamanujan*, Department of Mathematics, Gauhati University & Assam Academy of Mathematics, 22 December 2012
17. *International Conference on Recent Advances in Mathematical Statistics and Its Applications in Applied Sciences*, Department of Statistics, Gauhati University & ISI, Kolkata, 31 December 2012 to 2 January 2013 (presented a paper)
18. *National Conference on Mathematics Commemorating Birth Anniversary of Srinivasa Ramanujan*, Department of Mathematics, GIMT Guwahati, 23 December 2013 (acted as Joint Secretary)

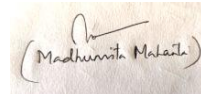
19. *FDP on Meeting Global Challenges in Higher Technical Education*, GIMT, Guwahati, 28 July to 01 August 2015
20. *National Seminar on Advances in Mathematical Sciences*, Department of Mathematics, Gauhati University & Assam Science Society, 21-22 December, 2015 (*presented a paper*)
21. *Short Term Course on Higher Secondary Mathematics*, Department of Mathematics, GIMT, Guwahati, 20-24 June, 2016
22. *National Workshop on Mathematical Modelling and Computational Techniques using Mathematica*, Department of Mathematics, Zakir Husain Delhi College, New Delhi, 30-31 March 2017
23. *SAMANTRANA-2018: A National Seminar on Role and Importance of Research in Technical Education*, GIMT Guwahati & Assam Science and Technology University, 18-19 January 2018
24. *Short Term Training Programme on Topics in Discrete Mathematics*, NITTTR, Kolkata, 12-16 March 2018
25. *Symposium on World Environment Day*, GIMT Guwahati, 05 June 2018
26. *Symposium on National Education Day*, GIMT Guwahati, 10 Nov 2018
27. *Two-Day Workshop on Fuzzy Logic Applications in Engineering*, Assam Science and Technology University and GIMT Guwahati, 17-18 May 2019
28. *One day workshop on 'Mathematics Education in Engineering Colleges of Assam'*, Assam Science and Technology University and GIMT Guwahati, 27 June 2019
29. *FDP on "Student Induction" (AICTE)*, GIMT Guwahati, 22-24 July 2019
30. *Indian Women and Mathematics (IWM) Regional Workshop on Research and Opportunities*, NIT Meghalaya, 19-20 October 2019
31. *Faculty Development Programme (FDP) on "Engaging Today's Learner"*, Assam Science and Technology University and GIMT Guwahati, 09-14 December 2019
32. *9th National Conference on Technology & Innovations in Math Education (TIME 2019)*, IISER Pune, 26-28 December 2019
33. *3-days Faculty Development Program for Student Induction (FDP-SI AICTE)*, SITM Guwahati, 23-25 January 2020
34. *Webinar on "Technical Scenario post COVID-19 Lockdown: Challenges and Opportunities"* GIMT Guwahati, 13 May 2020

35. *5-day Webinar on "Strategies for Mental and Physical Health Protection During & Aftermath Pandemic: #COVID 19"*, GIMT Guwahati and Assam Science & Technology University (under TEQIP-III), 17-21 June 2020
36. *Webinar on "Prime Divisors in an Arithmetic Progression"*, G. C. College, Assam Academy of Mathematics, Silchar and Gonit Sora.com, 07 July 2020
37. *Webinar on "The Congruent Number Problem and Elliptic Curves"*, IQAC Lakhimpur Girls' College and Gonit Sora, 12 July 2020
38. *Webinar on "Differential Equations as they arise in large water bodies and how to solve them"*, Gonit Sora, 19 July 2020
39. *STC-QIP on "Differential Equations: Solution Techniques and Applications"*, IIT Guwahati sponsored by AICTE/MHRD, 7-12 September 2020
40. *FDP on Coastal and Offshore Engineering*, IIT Guwahati, organized by AICTE Training and Learning (ATAL) Academy, 14-18 September 2020
41. *Two Day International Webinar on Mathematics: Needs & its Scope in Sciences*, Patharkandi College in association with Gonit Sora, 18-19 September 2021
42. *STTP on Numerical Linear Algebra & Optimization Techniques in Engineering*, NIT Meghalaya, 18-19 March 2022
43. *4th National Web Series on NEP-2020 East Edition*, AICTE, 24 March 2022
44. *One week National Level FDP on "Moodle-Open Source Learning Management System"*, GIMT Guwahati 20-24 June 2022
45. *Webinar on "Teaching and Learning Mathematics, in Endemic and Beyond"*, Mathematics Pedagogy Unit, St. Xavier's Institute of Education, Mumbai, 27 August 2022
46. *FDP on "Essentials of HRM"*, NITTTR Kolkata, 19-23 December 2022
47. *FDP on "Circuit Design Simulation and PCB Fabrication under AICTE-IDEA Lab"*, GIMT Guwahati, 04-09 January 2023
48. *One day Orientation Programme on Academic Governance*, IQAC GCU Assam, 25 July 2023
49. *Webinar on "Introduction to Einstein's General Theory of Relativity"*, 'Physics for Students' registered under Ministry of Micro, Small and Medium Enterprises Govt. of India, 31 December 2023
50. *5-day Face-to-Face UHV-II FDP* organized by All India Council for Technical Education (AICTE), 8-12 January 2024

51. 3-day workshop on “Multivariate Data Analysis and Mathematical tools for Sciences, Engineering and Management (MDAMSEM-2024)”, Department of Engineering Sciences, ABV-IIITM, Gwalior, 20-22 May 2024

Membership of Professional bodies:

- Life member of Assam Academy of Mathematics (AAM)



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