

LIST OF PUBLICATIONS

Department of Mathematics, GCU Assam

Dr. Madhumita Mahanta

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)
8. Unsteady MHD Flow of a Viscoelastic Fluid Through a Porous Medium Near an Oscillating Porous Plate, Journal of Fluid Flow, Heat and Mass Transfer (JFFHMT), 12: 417-422, 2025, DOI: 10.11159/jffhmt.2025.041 [SCOPUS, Google Scholar, Semantic Scholar, CAS, Genamics JournalSeek and Mendeley]

Dr. Moytri Sarmah

1. Line Graph associated to Total graph of Idealization, *Afrika Matematika* (2016) 27:485 - 490. [SCOPUS and WEB of Science Indexed]
2. Subset Graph of a Near Ring, *International Journal of Mathematical Archieve* – 8(3),2017,110 – 113. (UGC Listed)
3. Line Graph associated to Vonn Neumann Graph of a Ring, *Journal of Assam Academy of Mathematics*. Vol.9 (2019), 126 – 131.
4. Line Graph associated to Graph of a Near ring with respect to an Ideal, *Tamkang Journal of Mathematics*. Vol. 52, Number 3, 341 – 347. September 2021. [SCOPUS and WEB of Science Indexed]
5. On domination in the Total Torsion Element Graph of a Module, *Proyecciones Journal of Mathematics*. Vol. 42(3):795 – 814. June 2023. [SCOPUS Indexed]
6. Total Near Ring Graph, Accepted for publication. *Journal of Algebraic Systems*, 14(1): 2026, 45-53. <https://doi.org/10.22044/JAS.2024.13537.1753>. [SCOPUS Indexed]

Dr. Ankur Jyoti Kashyap

1. Dynamics in a ratiodependent eco-epidemiological predator-prey model having cross species disease transmission. *Commun. Math. Biol. Neurosci.*, 2021 (2021), Article ID 15 (SCOPUS, ESCI).
2. Dynamical analysis of a predator-prey epidemiological model with density dependent disease recovery, *Commun. Math. Biol. Neurosci.*, 2020 (2020), Article ID 80 (SCOPUS, ESCI).
3. A fractional model in exploring the role of fear in mass mortality of pelicans in the Salton Sea, *An International Journal of Optimization and Control: Theories & Applications (IJOCTA)*, 11(3), 28-51 (2021), (SCOPUS). <https://doi.org/10.11121/ijocta.2021.1123>
4. Bifurcation analysis of a predator-prey system with density dependent disease recovery, *FILOMAT*, Vol 36, No 20 (2022) (SCI, IF 0.844).
5. Dynamical study of a Predator-Prey system incorporating hunting cooperation and Michaelis–Menten type Predator-Harvesting, *International Journal of Biomathematics*, World Scientific, (SCIE, IF 2.129) <https://doi.org/10.1142/S1793524522501352>.

6. Dynamical behaviours of discrete amensalism system with fear effects on first species, *Mathematical Biosciences and Engineering*, 2024, Volume 21, Issue 1: 832-860. (SCIE IF 2.6, SCOPUS), doi:10.3934/mbe.2024035.
7. Dynamics Analysis of a Discrete-Time Commensalism Model with Additive Allee for the Host Species. *Axioms* 2023, 12, 1031. (SCIE IF 2.0,)
<https://doi.org/10.3390/axioms12111031>
8. Analysis of Stability, Sensitivity Index and Hopf Bifurcation of Eco-Epidemiological SIR Model under Pesticide Application, *COMMUN. BIOMATH. SCI.*, VOL. 6, NO. 2, 2023, PP. 126-144. (SCOPUS Q2), <https://doi.org/10.5614/cbms.2023.6.2.4>
9. Dynamical analysis of an anthrax disease model in animals with nonlinear transmission rate, *Mathematical Modelling and Control*, Volume 3, Issue 4, 2023: 370-386, (SCOPUS, ESCI) doi: 10.3934/mmc.2023030.
10. AN ECO-EPIDEMIOLOGICAL MODEL WITH NON-CONSUMPTIVE PREDATION RISK AND A FATAL DISEASE IN PREY. *Journal of Mathematical Sciences*, 2024, 1-31 [Springer | Impact Factor-0, SCOPUS, ESCI]
11. Complex Dynamics in a Predator–Prey Model with Fear Affected Transmission. *Differential Equations and Dynamical Systems*, 2024, 1-32.
<https://doi.org/10.1007/s12591-024-00698-7> [Springer | Impact Factor-1.0, SCOPUS, ESCI]
12. Dynamic Behaviors of a Non-autonomous Single-Species Feedback Control System. *Engineering Letters*, 2024, 32(7), 1291-1299, [IAENG | Impact Factor-0.6, SCOPUS, ESCI]
13. A Stage-Structured Prey-Predator Interaction Model with the Impact of Fear and Hunting Cooperation. *International Journal of Biomathematics*, 2024, 2450110
<https://doi.org/10.1142/S1793524524501109> [World Scientific | Impact Factor-2.4, SCOPUS, SCIE]
14. Natural Convection in Rotating MHD Flow Past a Suddenly Started Infinite Vertical Plate with Ramped Conditions. *International Journal of Applied and Computational Mathematics*, 2024, 10(6), 177 [Springer | Impact Factor-0, SCOPUS, UGC-Care]
15. Nonlinear dynamical analysis of a fractional-order El Niño Southern Oscillation system, *The European Physical Journal Plus*, 2025, 140, 704,

<https://doi.org/10.1140/epjp/s13360-025-06617-1> [Springer Nature| Impact Factor-2.9 | Indexed in SCIE]

16. Combined effects of antipredator behaviors and cooperative hunting in a stage-structured predator-prey model, *Mathematical Modelling and Control*, 2025, 5(4): 338-354, <https://doi.org/10.3934/mmc.2025023> [AIMS Press| Impact Factor-2.7 | Indexed in SCIE)
17. Leslie-Gower Model for prey harvesting with predator cooperation and fear responses, *Boletim Da Sociedade Paranaense de Matemática*, 2025, 43(2). <https://doi.org/10.5269/bspm.78991> [BSPM | Impact Factor (JIF)-0.4 | Indexed in SCOPUS, ESCI]
18. A Mathematical–Dynamical Framework for Coral–Zooxanthellae Interactions under Vibrio-Induced Bleaching, *Chinese Journal of Physics*, 2026, DOI: 10.1016/j.cjph.2026.04.040, ISSN: 0577-9073
19. Dynamical Analysis of a Leslie-Gower Type Harvesting Model Incorporating Nonlinear Harvesting and Fear Effect, *Boletim Da Sociedade Paranaense de Matemática*, 2026, <https://doi.org/10.5269/bspm.81813>
20. Deterministic study of an Eco-epidemiological Model with Prey Refuge and Predator Harvesting, *Boletim Da Sociedade Paranaense de Matemática*, 2026, <https://doi.org/10.5269/bspm.81950>
21. Modeling a delay-driven eco-epidemiological system with fear and migration under ratio-dependent predation, *Mathematics and Computers in Simulation*, 2026, DOI: 10.1016/j.matcom.2026.01.002