Department of Mathematics

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 Name: Journal of Fluid Flow, Heat and Mass Transfer (JFFHMT), (SCOPUS) ISSN 2368-6111, 12, 2025 (417-422), DOI: 10.11159/jffhmt.2025.041

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, Vol. 14 (No. 1): (2026), pp 45-53, https://doi.org/10.22044/JAS.2024.13537.1753

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, Springer (SCOPUS, ESCI)

11. Complex dynamics in a predator-prey model with fear affected transmission, Differential Equations and Dynamical Systems, Springer (SCOPUS, ESCI, IF: 1.0), https://doi.org/10.1007/s12591-024-00698-7

12. Dynamic Behaviors of a Non-autonomous Single-Species Feedback Control System, Engineering Letters (SCOPUS, ESCI, IF: 0.6), Volume 32, Issue 7, July 2024, Pages 1291-1299.

13. A Stage-Structured Prey-Predator Interaction Model with the Impact of Fear and Hunting Cooperation. International Journal of Biomathematics, World Scientific, 2450110, (SCIE, IF: 2.4), https://doi.org/10.1142/S1793524524501109

14. Nonlinear dynamical analysis of a fractional-order El Niño Southern Oscillation system, The European Physical Journal Plus ,140, 704 (2025), (SCIE, IF: 2.9) https://doi.org/10.1140/epjp/s13360-025-06617-1

15. Combined effects of antipredator behaviors and cooperative hunting in a stage-structured predator-prey model, Mathematical Modelling and Control, 2025, 5(4): 338-354. (SCIE, IF: 2.7) https://doi.org/ 10.3934/mmc.2025023