

LIST OF PUBLICATIONS

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)

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 Vonnn 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. [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.

Dr. Sujan Sinha

1. Dufour Effect On A Transient MHD Flow Past A Uniformly Moving Porous Plate With Heat Sink, *Advances and Applications in Fluid Mechanics*, Volume 13, Number 1, 2013, pp: 1-24, ISSN: 0973-4686
2. Soret Effect On An Oscillatory MHD Mixed Convective Mass Transfer Flow Past An Infinite Vertical Porous Plate With Variable Suction, *Applied Mathematical Sciences*, Volume 7, Number 51, 2013, pp: 2515-2524, ISSN: 1314-7552
3. Transient MHD Mass Transfer Flow Past An Impulsively Started Vertical Plate With Ramped Temperature, Concentration, Thermal Diffusion And Radiation, *International Journal of Research in Mathematics and Computation*, Vol.2, No.2, 2014, pp: 19-32, ISSN: 2348-1528
4. Effects Of Chemical Reaction On A Transient Mass Transfer Flow Past An Impulsively Started Vertical Plate With Ramped Temperature, Concentration, Thermal Diffusion And Radiation, *Journal of Energy, Heat and Mass Transfer*, Vol. 35, 2013, pp: 252-273, ISSN: 0970-9991
5. MHD Effect On An Oscillatory Mixed Convective Flow Past An Infinite Vertical Porous Plate With Radiation, *Open Journal of Fluid Dynamics*, Vol. 3, No. 4, 2013, pp: 271-277, ISSN: 2165-3852

6. MHD Laminar Boundary Flow with Oscillatory Boundary Condition and Mass Transfer with Soret and Radiation Effect, JMI International Journal of Mathematical Science, Vol. 4, No. 2, 2012, pp: 1-9, ISSN: 0976-5913
7. MHD Effect on Unsteady Flow past an Accelerated Vertical Plate, International Journal of Physics and Mathematical Sciences, Vol. 4, No. 4, 2014, pp: 56-70, ISSN: 2277-2111.
8. Effect of chemical reaction on an unsteady MHD free convective flow past a porous plate with ramped temperature, Proceedings of the International Conference on Frontiers in Mathematics, 26-28 March, 2015, ISBN: 978-81-928118-9-5
9. Style and Strategies Practiced in Mathematics Class of Secondary Schools of Nagaland, International Journal of Advanced Research in Education and Technology” Vol. 3, No. 3, 2016, pp: 72-78, ISSN: 2394-6814.
10. Effect of Socio-economic status on performance of Mathematics among students of secondary schools of Guwahati city, IOSR Journal of Mathematics, Vol. 13, No. 1, 2017, pp: 26-33, ISSN: 2278-5728
11. Unsteady MHD Buoyancy Induced flow past an accelerated vertical plate with chemical reaction, International Journal of Engineering Science and Technology (IJEST), Vol. 10, No. 02S, 2018, pp: 185-192, ISSN: 0975-5462
12. Influence of Socio-economic status of parents on performance of Mathematics among the upper primary students of Guwahati metro, International Journal of Latest Engineering and Management Research (IJEST), Vol. 3, No. 4, 2018, pp: 54-64, ISSN: 2455-4847
13. Unsteady MHD Convective Heat and Mass Transfer Flow Past a semi-infinite vertical porous Plate with Chemical Reaction, AJANTA, Vol. 8, No. 2, 2019, pp: 200-214, ISSN: 2277-5730
14. Effect of Radiation on an oscillatory MHD Mixed Convective Mass Transfer Flow Past an Infinite Vertical Porous Plate with variable Suction, AJANTA, Vol. 8, No. 2, 2019, pp: 215-225, ISSN: 2277-5730
15. A study on the students’ perception in Mathematics in relation to Gender of the students and medium of school, Advance research Journal of Multidisciplinary Discoveries, Vol. 1, No. 1, 2019, pp: 11-15, ISSN: 2456-1045
16. Chemical Impact on Heat and Mass Transfer Flow in Presence of Radiation and Rotation with Variable Temperature and Concentration, International Journal of Recent

Technology and Engineering (IJRTE), Vol. 8, No. 4, 2019, pp: 1966-1970, ISSN: 2277-3878

17. Effect of Radiation and Hall Current on an MHD Transient Heat and Mass Transfer Flow in Presence of Rotation, International Journal of Innovative Technology and Exploring Engineering (IJITEE), Vol. 9, No. 1, 2019, pp: 2501-2504, ISSN: 2278-3075
18. Thermal Diffusion (Soret Effect) on an Unsteady MHD Mixed Convective Heat and Mass Transfer Flow through Vertical Porous Medium with Chemical Reaction, Science and Technology Journal, Vol. 7, No. 1, 2020, pp: 69-77, ISSN: 2321-3388
19. Effect of stretching parameter in a non-linear MHD close to Stagnation point, J. Math. Comput. Sci., Vol. 10, No. 6, 2020, pp: 2249-2260, ISSN: 1927-5307
20. Homotopy Perturbation method for MHD boundary layer flow over a moving vertical plate in presence of heat and mass transfer, South East Asian J. of Mathematical Sciences, Vol. 16, No. 3, 2020, pp: 269-282, ISSN: 0972-7752
21. Consequence of Chemical reaction on an unsteady MHD radiative flow past an erect porous plate with Diffusion-thermo (Dufour Effect), Journal of Rajasthan Academy of Physical Sciences, Vol. 19, No. 3&4, 2020, pp: 191-208, ISSN: 0972-6306
22. Free convective MHD flow past a vertical plate through a porous medium with ramped wall temperature and concentration, J. Math. Comput. Sci., Vol. 11, No.2, 2021, pp: 1206-1222, ISSN: 0972-6306
23. Homotopy Perturbation Analysis in an energy transit problem closed to a Stretching Surface, Turkish Journal of Computer and Mathematics Education, Vol. 12, No.6, 2021, pp: 289-295, ISSN: 1309-4653
24. Influence of thermal diffusion on an unsteady MHD chemically reactive flow past a vertical porous plate with ramped temperature, The Journal of Oriental Research Madras, Vol. 42, No.6, 2021, pp: 9-16, ISSN: 0022-3301
25. Homotopy Perturbation Method over a non-linear Stretching Sheet on the solution of MHD Flow problem, International Journal of Mechanical Engineering, Vol. 6, No.3, 2021, pp: 3762-3765, ISSN: 0974-5823
26. Analysis of Stretching and Magnetic parameter in a non-linear MHD flow close to a stagnation point, Stochastic Modeling and Applications, Vol. 26, No.3, 2022, pp: 1237 – 1243), ISSN: 0972-3641

27. Consequence of rotation on a radiative fluid flow past a porous plate in presence of Dufour number, *Neuroquantology*, Vol. 20, No.12, 2022, pp: 2295 – 2306, ISSN: 1303-5150
28. Influence of Thermal Diffusion in a Non-Linear MHD Flow Close to a Stagnation Point, *Mathematical Statistician and Engineering Applications*, Vol. 71, No.4, 2022, pp: 5464 – 5474, ISSN: 2094-0343
29. Effects of variable viscosity and thermal conductivity on an MHD heat and mass transfer flow past a stretching sheet, *Advance Engineering Science*, Vol. 54, No.2, 2022, pp: 7023 – 7029, ISSN: 2096-3246
30. Soret effect on an unsteady MHD heat and mass transfer flow with consumption of chemical species, *European Chemical Bulletin*, Vol. 12, No.8, 2023, pp: 1814 – 1821, ISSN: 2063-5306
31. Influence of Hall current and Chemical reaction on MHD unsteady Mass and Heat transfer flow under rotation, *Communication in Mathematics and Applications*, Vol. 14, No.2, 2023, pp: 667 – 674, ISSN: 0976-5905