

DR. SOUMITRA SARKAR

Assistant Professor

M. Sc. (Mathematics), Ph. D.

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» **Overview:**

I am Soumitra Sarkar from small-town Gangarampur of West Bengal. I started working as a faculty member in the mathematics department of this college on November 25, 2020. I try to return society for all it has given me by teaching students. What I appreciate best about teaching is that it is a life-long learning process since I am always learning new things when educating students.

» **Date of appointment to the present job:**

25/11/2020

» **Other Academic/ Administrative post:**

- NIL

» **Academic background:**

Mr. Sarkar, has completed his B.Sc. (Hons.) from Gangarampur College and M. Sc. in Mathematical from University of Gour Bangain the year 2013 and 2015 respectively. He obtained Ph.D. degree from University of Gour Banga in 2021.

» **Professional Qualification:**

- **NET:CSIR-NET**, JUNE 2016
- **GATE**: 2016 & 2017

» **Information about Ph. D.:**

- **Date of Award**:23-02-2021
- **Thesis title**: ENTROPY GENERATION ANALYSIS OF NON-NEWTONIAN NANOFLUID FLOW IN PRESENCE OF MAGNETIC FIELD

» **Publications in Journals:**

1. Sarkar S. and Das S., 2022. Magneto-thermo-bio convection of a chemically sensitive Cross nanofluid with aninfusion of gyrotactic microorganisms over a lubriciouscylindrical surface: Statistical analysis, InternationalJournal of Modelling and Simulation (Taylor & Francis). ([10.1080/02286203.2022.2141221](https://doi.org/10.1080/02286203.2022.2141221)).
2. Ali A., Sarkar S., and Das S., 2022. Bioconvective chemically reactive entropy optimized Cross-nano-material conveying oxytactic microorganisms over a flexible cylinder with Lorentz force andArrhenius kinetics, Mathematics and Computers in Simulation (Elsevier), 205(1). ([10.1016/j.matcom.2022.11.002](https://doi.org/10.1016/j.matcom.2022.11.002)).
3. Sarkar S., Ali A., and Das S., (2022). Bioconvection in non-Newtonian nanofluid near a perforated Riga plate induced by haphazard motion of nanoparticles and gyrotactic microorganisms in the attendance of thermal radiation, and Arrhenius chemical reaction: Sensitivity analysis, International Journal of Ambient Energy(Taylor & Francis). ([https://doi.org/ 10.1080/01430750.2022.2086919](https://doi.org/10.1080/01430750.2022.2086919)).
4. Sarkar S., Pal T.K., Ali A., and Das S., (2022). Themo-bioconvection of gyrotactic microorganisms in a polymer solution near a perforated Riga plate immersed in a DF medium involving heat radiation, and Arrhenius kinetics, Chemical Physics Letters (Elsevier), Volume 797, pp. 139557. (<https://doi.org/10.1016/j.cplett.2022.139557>).

5. Ali A., Sarkar S., Das S., and Jana R.N., (2022). A report on entropy generation and Arrhenius kinetics in magneto-bioconvective flow of Cross nanofluid over a cylinder with wall slip, *International Journal of Ambient Energy*(Taylor & Francis), Volume 43. (<https://doi.org/10.1080/01430750.2022.2031292>).
6. Ali A., Sarkar S., Das S., and Jana R.N., 2021. Investigation of Cattaneo–Christov Double Diffusions Theory in Bioconvective Slip Flow of Radiated Magneto-Cross-Nanomaterial Over Stretching Cylinder/Plate with Activation Energy, *International Journal of Applied and Computational Mathematics* (Springer), Volume7, pp. 1-28. (<https://doi.org/10.1007/s40819-021-01144-w>).
7. Sarkar S., Jana R.N., and Das S., 2021. Time-dependent entropy analysis in magnetized Cu-Al₂O₃/ethylene glycol hybrid nanofluid flow due to a vibrating vertical plate. *International Journal of Fluid Mechanics Research*, Volume 47, pp. 419-443. (<https://doi.org/10.1615/InterJFluidMechRes.2020033884>).
8. Sarkar S., Jana R.N., and Das S., 2020. Activation energy impact on radiated magneto-Sisko nanofluid flow over a stretching and slipping cylinder: Entropy analysis, *Multidiscipline Modeling in Materials and Structures*, Volume 16, pp. 1085-1115. (<https://doi.org/10.1108/MMMS-09-2019-0165>).
9. Sarkar S., Jana R.N., and Das S., 2020. Feature of entropy generation in Cu-Al₂O₃/ethylene glycol hybrid nanofluid flow through a rotating channel, *BioNanoScience* (Springer,) Volume 10, pp. 950–967. (<https://doi.org/10.1007/s12668-020-00773-7>).
10. Das S., Sarkar S., and Jana R.N., 2020. Assessment of irreversible losses of non-Newtonian nanofluid flow underlying Hall current, chemical reaction and thermal radiation, *World Journal of Engineering*, Volume 18, pp. 228-250. (<https://doi.org/10.1108/WJE-07-2020-0266>).
11. Das S., Sarkar S., and Jana R.N., 2019. Entropy Generation Minimization of Magnetohydrodynamic Slip Flow of Casson H₂O+Cu Nanofluid in a Porous Microchannel, *Journal of Nanofluids* (American Scientific Publishers), Volume 8, pp. 205-221. (<https://doi.org/10.1166/jon.2019.1554>).
12. Das S., Sarkar S., and Jana R.N., 2018. Entropy Generation Analysis of MHD Slip Flow of Non-Newtonian Cu-Casson Nanofluid in a Porous Microchannel Filled with Saturated Porous Medium Considering Thermal Radiation, *Journal of Nanofluids* (American Scientific Publishers), Volume 7, pp. 1217-1232. (<https://doi.org/10.1166/jon.2018.1530>).

» **Books and Chapters:** NA

» **Seminars, Conferences, Webinars and Workshops attended:**

- Seminars/ Webinars Attended: 3

» **Life Membership:**

NA

» **Professional Courses:**

- **Orientation Programme/FDP/FIP:00**
- **Refresher Course:00**
- **Short Term Course: 00**