

Research Profile Template

Name:

Dr. Manoj Kumar C

Current Position:

Assistant Professor

Educational Background:

- **Ph.D.:** Fluid mechanics, Presidency University, 2024
- **Master's Degree:** Mathematics, Bengaluru North University, 2020
- **Bachelor's Degree:** B.Sc. [P, C, M], Bangalore University, 2018

Areas of Research Interest:

Numerical methods, nanofluids, heat and mass transfer.

Current Research Focus:

My current research is oriented towards applying artificial neural networks to optimize heat transfer performance in nanofluids. ANNs offer an innovative approach to managing the complex, nonlinear relationships that define heat transfer in nanofluid systems, making them particularly well-suited to the task. By leveraging machine learning, I aim to establish a comprehensive optimization framework that predicts optimal particle concentration, fluid composition, and flow conditions to achieve maximum thermal performance.

Research Achievements:

- 3
- Best researcher award, Young Researcher award.

Key Publications:

1. Impact of Flow, Heat and Mass Transfer of Newtonian and Non-Newtonian Nanofluids Flow over a Non-Darcy Stretching Sheet in the Context of Fuel Applications. *Journal of Mines, Metals and Fuels*, 71(10), 1754–1763. (2023)
2. Numerical and Statistical Analysis of Newtonian/non-Newtonian Traits of MoS₂-C₂H₆O₂ nanofluids over a porous surface with variable fluid properties. (2024), "Advances in Nano Research," 16(4), 341-352. (2024).
3. A comparative study of Newtonian and non-Newtonian nanofluids with variable thermal conductivity over a 3-D stretching surface "Journal of nanofluids," 13(2), 600-613. (2024)
4. Numerical Investigation of Heat and Mass Transfer of SWCNT/MWCNT-Water Suspension over a Porous Stretching Sheet using Sisko Fluid Model (2024).

Research Collaborations:

Nil

Professional Memberships:

Nil

Mentorship:

Nil

Contact Information:

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