



Dr. Kruthik P. S.

Assistant Professor
Department of Mathematics
School of Engineering
Dayananda Sagar University, Bengaluru, Karnataka, India

1. ABOUT / PROFESSIONAL PROFILE

Dr. Kruthik P. S. has completed his Ph.D. thesis at Universiti Malaysia Terengganu, with specialization in applied mathematics and fluid mechanics. He holds a Master's degree in Mathematics and a Bachelor's degree in Physics, Mathematics, and Electronics. His academic training has provided a strong foundation in mathematical modelling, numerical analysis, and computational techniques. He has experience teaching undergraduate and postgraduate courses in core mathematical subjects, along with curriculum design, student mentoring, academic advising, and the development of project-based and activity-oriented learning resources. His research contributions include journal publications, conference presentations, and collaborative scholarly work. He has presented his findings at international conferences and received a Best Paper Presentation award.

2. RESEARCH INTERESTS

- Rayleigh–Bénard convection (RBC) and hydrodynamic stability
- Natural convection in porous media
- Internal heat generation and gravity-modulated flows
- Heat and mass transfer in nanofluids
- Applied mathematics and nonlinear dynamics
- Computational modelling of fluid flows

3. ACADEMIC QUALIFICATIONS

- Ph.D. — Applied Mathematics / Fluid Mechanics, Universiti Malaysia Terengganu (thesis submitted)
- Master's Degree in Mathematics
- Bachelor's Degree in Physics, Mathematics, and Electronics

4. PROFESSIONAL EXPERIENCE

- Assistant Professor — Department of Mathematics, School of Engineering, Dayananda Sagar University, Bengaluru
- Assistant Professor — Department of Data Science, School of Science, Christ University, Pune

5. RESEARCH HIGHLIGHTS

- Publications: 3
- Awards/Recognitions: Won best paper presentation in several international conference
- Academic/Conference Roles: Participated in several international conference

6. SELECTED PUBLICATIONS

- [1] Kruthik, P. S., & Idris, R. (2025). Internal Heat Generated Convection in Nanofluids with Rigid Boundaries: Linear and Nonlinear Regimes. CU Journal of Non-Linear Fluid Mechanics, 1(02), 1-15.
- [2] Kruthik, P. S., Idris, R., & Siddheshwar, P. G. (2025). Study of internal heat source generated natural convection with sinusoidal and non-sinusoidal time-periodic vertical oscillations. Results in Engineering, 106047
- [3] Kruthik, P. S., Idris, R., & Siddheshwar, P. G. (2025). Study of the linear and nonlinear regimes of natural convection with weak or dominating internal heat generation for rigid-free boundaries. Journal of Porous Media, 28.

7. ACADEMIC PROFILES

- **Google Scholar:** <https://scholar.google.com/citations?user=LLMnNX8AAAAJ&hl=en>
- **Scopus:** <https://www.scopus.com/authid/detail.uri?authorId=59895257600&origin=resultslist>
- **ORCID:** <https://orcid.org/0009-0000-9694-5030>
- **LinkedIn:** <https://www.linkedin.com/in/kruthik-ps/>

8. CONTACT

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