Dr Sakshath T N

Assistant Professor

Educational Qualification	M.Sc., Ph.D.
Experience	Teaching: 07 Years, Research: 07 Years
Area of Interest	Fluid mechanics, Hydrodynamic stabilities, Convection, flow problems.
Date of Joining RVCE	21-11-2022
Email ID	tnsakshath@rvce.edu.in

Awards

1. Bangalore University fifth rank holder in B.Sc.
2. Young Scientist awardee in the 62nd Congress of the Indian Society of Theoretical and Applied Mechanics (ISTAM) (International Conference) held at Osmania University, Hyderabad-500 007, India during December 15-18, 2017.
3. Qualified in Karnataka State Eligibility Test (KSET) in the year 2016 for Assistant professor and Lectureship in Karnataka.
4. Best paper awardee in the International Conference on Applications of Fluid Dynamics (ICAFD) held at Vellore Institute of Technology (VIT), Vellore, Tamil Nadu, India during December 13-15, 2018.

International Journals : 13

- National Journals: 0
- International Conferences : 08
- National Conference : 03
- Book chapters Published: 02
- Patent granted: 0

List of International Journal Publications

1. P. G. Siddheshwar and T. N. Sakshath, 2017, “Rayleigh-Bénard convection of Newtonian nanoliquids in a saturated, rotating high porous medium”, Mathematical Sciences International Research Journal, Vol. 6, Issue 1, ISSN: 2278-8697, pp. 35-38.

2. P. G. Siddheshwar and T. N. Sakshath, 2019, “Steady Finite-Amplitude Rayleigh-Bénard-Taylor Convection of Newtonian nanoliquid in a High-Porosity Medium”, Applied Mathematics and Scientific Computing

3. P. G. Siddheshwar and T. N. Sakshath, 2019, “Study of Rayleigh-Bénard convection of a Newtonian nanoliquid in a high porosity medium using local thermal non-equilibrium model”, International Journal of Applied and Computational Mathematics, 5:158, doi: 10.1007/s40819-019-0741-9.

4. P. G. Siddheshwar and T. N. Sakshath, 2020, “Steady finite-amplitude Rayleigh-Bénard convection of ethylene glycol-copper nanoliquid in a high porosity medium”, Journal of thermal analysis and calorimetry, doi: 10.1007/s10973-019-09214-4.

5. T. N. Sakshath and Arundhathi P Joshi, 2021, “Effect of horizontal pressure gradient on the onset of Darcy-Brinkman convection of water-alumina nanoliquid-saturated porous medium using local thermal non-equilibrium model”, Heat Transfer, 50(2), 1631-1657.

6. Siddabasappa, C. and T. N. Sakshath, 2021, “Effect of thermal non-equilibrium and internal heat source on Brinkman–Bénard convection”, Physica A: Statistical Mechanics and its Applications, 566: 125617.

7. Siddheshwar, P. G., and Sakshath, T. N., 2021, “Study of Rayleigh-Bénard Convection of a Newtonian nanoliquid in a Porous Medium Using General Boundary Conditions”, Advances in Fluid Dynamics, (pp. 121-134). Springer, Singapore.

8. Siddheshwar, P. G., and Sakshath, T. N., 2021, “Effect of rotation on Brinkman-Bénard convection of a Newtonian nanoliquid using local thermal non-equilibrium model”, Thermal Science and Engineering Progress, 25, p.100994.

9. Siddabasappa C., and Sakshath, T. N., 2022, “Impact of thermal non-equilibrium on magnetoconvection in a porous enclosure”, Journal of thermal analysis and calorimetry, pp. 1-15.

10. T. N. Sakshath and Hemanth Kumar C, 2023, “Effect of horizontal pressure gradient and internal heat source on linear and non-linear stability of Darcy-Bénard convection using local thermal non-equilibrium model”, European Journal of Physics-Plus,138(8), 1-25.

11. Siddabasappa, C. and Sakshath, T.N., 2024, “Stability Analyses of Brinkman–Bénard Convection in Hybrid-Nanoliquid Saturated-Porous Medium Using Local Thermal Non-equilibrium Model”, International Journal of Applied and Computational Mathematics, 10(1), p.29.

12. Sakshath, T.N. and Siddheshwar, P.G., 2024, “Exploration of the effects of anisotropy and rotation on Rayleigh–Bénard convection of nanoliquid-saturated porous medium using general boundary conditions”, International Journal of Ambient Energy, 45(1), p.2368103.

13. T. N. Sakshath, Mahesha Narayana, P. G. Siddheshwar, Shekar M, 2025,“Effect of general boundary conditions on Brinkman-Bénard convection of a Newtonian nanoliquid using LTNE model”, Journal of nanofluids, 14, 59-68.

14. Siddabasappa, C., Babitha, Bhavya, K.and Sakshath, T.N., 2025, “A study on regular and chaotic convection in an anisotropic porous cavity”, Chinese Journal of Physics, https://doi.org/10.1016/j.cjph.2025.03.034

List of International Conference Proceedings

1. Presented a paper entitled "Steady finite amplitude Brinkman-Bénard convection in a nanofluid saturated porous medium" in the 60th Congress of the Indian Society of Theoretical and Applied Mechanics (ISTAM) (International Conference) held at Malaviya National Institute of Technology (MNIT), Jaipur, Rajasthan, India during December 16-19, 2015.
2. Presented a paper entitled “Steady finite amplitude Rayleigh-Bénard convection of Ethylene glycol-Copper nanoliquid in a high porosity medium made of 30% glass fiber reinforced polycarbonate” in the 61st Congress of the Indian Society of Theoretical and Applied Mechanics(ISTAM)(International Conference) held at Vellore Institute of Technology (VIT), Vellore, Tamil Nadu, India during December 11-14, 2016.
3. Presented a paper entitled “Rayleigh-Bénard convection of Newtonian nanoliquids in a saturated, rotating high porous medium in free-free boundaries” at the International Conference on Mathematics and Computer Science held at Jyothi Nivas College Autonomous, Bangalore during February 16-18, 2017.
4. Presented a paper entitled “Steady-finite amplitude Rayleigh-Bénard convection of Newtonian nanoliquid in a porous medium using general boundary conditions” at the International Conference on Fluid dynamics and its Applications (ICFDA) held at BNMIT, Bangalore, India during July 12-14, 2017.
5. Presented a paper entitled “Steady-finite amplitude Rayleigh-Bénard-Taylor convection of Newtonian nanoliquid in a high porosity medium” at the International Conference on Advances in Mathematical Sciences (ICAMS) held at Vellore Institute of Technology (VIT), Vellore, Tamil Nadu, India during December 1-3, 2017.
6. Presented a paper entitled “Effect of anisotropy and rotation on Rayleigh- Bénard convection of nanoliquid-saturated porous medium using general boundary conditions” at the 69th Congress of the Indian Society of Theoretical and Applied Mechanics (ISTAM) (International Conference) held at Christ University, Bengaluru-500 029, India during December 19-21, 2024.

List of National Conference Proceedings

1. Presented a paper entitled “Steady finite amplitude Rayleigh-Bénard convection of nanoliquids in a high porosity medium" at the 6th national conference in Fluid Mechanics(NCFM) held at Christ University, Bangalore during April 29-30, 2016.
2. Presented a paper entitled “Brinkman-Bénard convection of Newtonian nanoliquids in a saturated, rotating porous medium” in the UGC sponsored two day National Conference held at Government Science Colllege, Bangalore during February 9-10, 2017.

3. Presented a paper entitled “Rayleigh-Bénard convection of nanoliquids in porous media using LTNE model” at the National Symposium on Mathematics and its Applications(NSMA) held at Bangalore University, J. B. Campus, India on April 27th, 2019.