

CURRICULUM VITAE



Dr. HEMANTHKUMAR C
Department of Mathematics
B.M.S. College of Engineering
Bengaluru-560019,
India.

PERSONAL DETAILS

Date of Birth : 04/04/1990

Sex : Male

Marital status : Single

Address : # 3085/B/15, 8th 'B' Cross,
14th 'A' Main, RPC Layout,
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Bangalore-560040, India.

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EDUCATIONAL QUALIFICATION

2016 to 2021 : PhD in Fluid Mechanics
University : Bangalore University
Title : Thermal nonequilibrium effects on linear and nonlinear convection in porous media
Supervisor : Prof. I. S. Shivakumara

Course/Degree	Institution	Board/University	Percentage	Year
Ph.D. (Mathematics)	Jnana Bharathi Campus	Bangalore University	86.28% (course work)	2016-2021
Bed	SVN College	Bangalore University	75%	2015
MSc (Mathematics)	Central College	Bangalore University	73.76%	2012-2014
BSc(PMCs)	Vijaya Degree College	Bangalore University	74.26%	2009-2012

COMPUTER LITERACY

- Microsoft Windows, MS - Office, Latex
- Programming: Mathematica, Scilab, Maxima, Mat-lab

Publication

- **Hemanthkumar, C.**, Raghunatha, K. R., & Shivakumara, I. S. (2020). Nonlinear convection in an elasticoviscous fluid-saturated anisotropic porous layer using a local thermal nonequilibrium model. *Heat Transfer*, 49(4), 1691-1712.
- **Hemanthkumar, C.**, & Shivakumara, I. S. (2020). Thermal instability of an Oldroyd-B fluid-saturated porous layer: implications of pressure gradient and LTNE temperatures. *SN Applied Sciences*, 2(4), 1-14.
- **Hemanthkumar, C.**, Shivakumara, I. S., & Rushikumar, B. (2021). Darcy-Bénard convection with internal heating and a thermal nonequilibrium-A numerical study. *Advances in Fluid Dynamics*, 627-639.
- Pallavi, G., **Hemanthkumar, C.**, Shivakumara, I. S., & Rushikumar, B. (2021). Oscillatory Darcy-Bénard-Poiseuille mixed convection in an Oldroyd-B fluid-saturated porous layer. *Advances in Fluid Dynamics*, 827-837.
- **Hemanthkumar, C.**, Shivakumara, I. S., Shankar, B. M., & Pallavi, G. (2021), "Exploration of anisotropy on nonlinear stability of thermohaline viscoelastic porous convection" *International Communication in Heat and Mass Transfer*, 126, 105427.
- **Hemanthkumar, C.**, Shivakumara, I. S., Shankar, B. M., & Pallavi, G. (2021), "Horizontal pressure gradient and Soret effects on the onset of thermosolutal porous convection" *Heat Transfer*, 50(8), 8204-8223.
- **C. Hemanthkumar**, I. S. Shivakumara and B. M. Shankar, 2022, "Thermosolutal LTNE porous mixed convection under the influence of the Soret effect" *ASME Journal of Heat Transfer*, 144(4): 042602.
- **C. Hemanthkumar**, I. S. Shivakumara and B. M. Shankar, 2022, "Weakly nonlinear stability of thermosolutal convection in an Oldroyd-B fluid saturated anisotropic porous layer using a local thermal nonequilibrium model" *ASME Journal of Heat Transfer*, 144(7): 072701.

PAPER PRESENTATIONS

1. Presented a paper entitled " Darcy-Bénard convection with internal heating and a thermal nonequilibrium-A numerical study" in the International conference on Applications of Fluid Dynamics (ICAFD) held at VIT, Vellore, India during December 13-15, 2018.
2. Presented a paper entitled "Effect of horizontal pressure gradient on the onset of convection in an Oldroyd-B fluid-saturated porous layer using LTNE model" in the UGC and SERB sponsored International Conference on Mathematical Modelling in Science and Engineering (ICMMSE) held on February 1-2, 2019 at the Department of Mathematics, Bharathiar University, Coimbatore, India.
3. Presented a paper entitled "Double diffusive convection in a porous medium using LTNE model: Effect of Soret and horizontal pressure gradient" in the National Conference on Recent Advances in Mathematics held on March 19-20, 2019, at Department of Mathematics, Sri Venkateshwara University, Tirupati, Andhra Pradesh.
4. Presented a paper entitled "Effect of horizontal pressure gradient on the onset of Double diffusive convection in a fluid-saturated porous layer using a local thermal nonequilibrium model" in the National Conference on Recent Trends in Science, Engineering and Management held on June 7-8, 2019 at Dr. AIT, Bangalore-56.
5. Presented a paper entitled "Local thermal nonequilibrium and viscoelastic effects on the stability of buoyancy driven convection in an anisotropic fluid saturated porous layer" in the International Conference on Mathematics and its Applications held on February 28-29, 2020, at Department of Mathematics, Bangalore University, Bengaluru-56

WORKSHOPS

1. I was part of the Six-day workshop on "Computational Tools for Engineering Applications", organized by the Department of Mathematics, Ramaiah Institute of Technology, Bengaluru-560054 held during January 16th to 21st, 2018.

2. I was part of the Six-day workshop on "Applications of Mathematical Tools for Engineering Problems", organized by the Department of Mathematics, Ramaiah Institute of Technology, Bangalore-560054 held during August 30th to 4th, 2018.
3. I was part of One-day workshop on "Celebration of National Mathematics Day" organized by the Department of Mathematics, Bangalore University, Bengaluru-560056 held on December 22nd, 2018.
4. I was part of One-day workshop on "National Symposium on Mathematics and its Applications (NSMA)" organized by Department of Mathematics, Bangalore University, J. B. Campus, Bengaluru-560056 held on April 27th, 2019.

Teaching Experience

- Working as an Assistant Professor in Department of Mathematics at B.M.S. College of Engineering, Bengaluru from October 2021-Present.
- Worked as Guest Lecturer (MTech & BTech) in University Visvesvaraya College of Engineering, Bengaluru from February 2021.
- Handled lab (Scilab/Maxima) classes for M.Sc. (4 hrs/week) at Bangalore University, Bangalore from 01-07-2017 to 08-02-2020.
- Worked as Assistant Professor in Department of Mathematics at Reva Institute of Science and Management, Bengaluru from July 2016 – January 2017.
- Worked as a Guest Lecturer in Department of Mathematics at Reva Institute of Science and Management, Bengaluru from April-2015 – June 2016.
- Worked as an Assistant Professor in Mathematics at Global Institute of Management Sciences, Bengaluru from July 2014 - January 2015.

Research interests

Fluid Mechanics, Hydrodynamic stability, Mathematical Modelling

I affirm that the information given above is true and correct to the best of my knowledge.

Date :

Place : Bangalore, India

[HEMANTHKUMAR C]