



FACULTY PROFILE

Name: Dr. ANJANNA MATTA

Designation: Assistant Professor

Teaching Areas: Differential Equations, Numerical Analysis, Probability & Statistics, Linear Algebra

Research Interests: Computational Fluid Dynamics, Convection in porous media, Hydrodynamic stability.

Education:

- Ph.D., Indian Institute of Technology , Hyderabad, 2016
- M.Tech., Indian Institute of Technology , Madras, 2010
- M.Sc., National Institute of Technology, Warangal, 2004

Professional Experience (12 years)

1. 2016 - till date: Assistant Professor, FST-IFHE, Hyderabad.
2. 2012 - 2016: Teaching Assistant, Indian Institute of Technology, Hyderabad.
3. 2010 - 2012: Assistant Professor, Jyothismathi Institute of technological sciences, Karimnagar, Telangana.
4. 2004 - 2008: Assistant Professor, Jayamukhi Institute of Technological Sciences, Narasmpet, Warangal, Telangana.

Research / Selected Publications:

1. **Anjanna Matta**, P. A. L. Narayana and Antony A. Hill, Double-diffusive Hadley-Prats flow in a horizontal porous layer with a concentration based internal heat source, *Journal of mathematical analysis and applications* (Elsevier Journal SCI) 452, (2017) 1005-1018.
2. **Anjanna Matta**, P. A. L. Narayana and Antony A. Hill, Double-diffusive Hadley-Prats flow in a porous medium subject to gravitational variation, *International Journal of Thermal Sciences* (Elsevier Journal SCI), 102 (2016) 300-307.
3. **Anjanna Matta**, P. A. L. Narayana and Antony A. Hill, Nonlinear thermal instability in a horizontal porous layer with an internal heat source and mass flow, *Acta Mechanica* (Springer Journal SCI), (2016), DOI 10.1007/s00707-016-1591-8.
4. **Anjanna Matta** and P. A. L. Narayana, Effect of variable gravity on linear and nonlinear stability of double diffusive Hadley flow in porous media, *Journal of Porous Media* (Begell house Journal SCI) 19 (4) (2016) 287–301.
5. Tanmay Basak, S. Roy, **Anjanna Matta** and I. Pop, Analysis of heatlines for natural convection within porous trapezoidal enclosures: effect of uniform and non-uniform heating of bottom wall, *International Journal of Heat and Mass Transfer* (Elsevier Journal SCI), 53, (2010), 5947-5961.
6. Tanmay Basak, D. Ramakrishna, S. Roy, **Anjanna Matta** and I. Pop, A comprehensive heatline based approach for natural convection flows in trapezoidal enclosures: Effect of various walls heating, *International Journal of Thermal Sciences* (Elsevier Journal SCI), 50, (2011) 1385-1404.