

Faculty Profile



Name: Dr. ANJALAI AH

Designation: Assistant Professor

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

Research Interests: Stability analysis of thin film flows, Inverse Problems, Stochastic Gradient Decent Methods.

Education:

Ph.D - Indian Institute of Technology Madras, 2014

M.Sc - Pondicherry Central University, Pondicherry, 2006

B.Ed - Institute of Advanced Study in Education, O.U Campus, Hyderabad, 2004.

Research / Selected Publications:

1. **Anjalaiah**, R.Usha and S.Millet. "Thin film flow down a porous substrate in the presence of insoluble surfactant: Stability analysis." **Phys. Fluids**. 25, **022101 (2013)**.
2. R.Usha, **Anjalaiah** and Y. V. S. S. Sanyasiraju. " Dynamics of a pre-lens tear film after a blink: Model, Evolution and Rupture". **Phys. Fluids**. 25, **112111 (2013)**.
3. **Anjalaiah**, S.Chakraborty and R.Usha "Steady solution of an inverse problem in gravitydriven shear- thinning film flow: Reconstruction of an uneven bottom substrate" **J. Non-Newt. Fluid. Mech.** 219, **65-77 (2015)**.
4. **Anjalaiah** and R.Usha "Effects of velocity slip on the inertialess instability of a contaminated two-layer film flow" **Acta Mech.** 226, **3111-3132 (2015)**.
5. R.Usha and **Anjalaiah** "Steady solution and spatial stability of gravity-driven thin-film flow: reconstruction of an uneven slippery bottom substrate" **Acta Mech.** (2016).
6. **Anjalaiah** "The role of surfactants on the mechanism of the long-wave instability in liquid film flows over a slippery substrate". **Presented at APS-66th Annual DFD Meeting**, 24-26, November,(2013), **Pittsburgh, PA, USA**.
7. **Anjalaiah** "Evolution of a pre-lens tear film after a blink". **International Workshop On Advances in PDE Modeling and Computation**, 21-25, October, (2013), IIT Madras, India.