



# International Conference on Micro Nano Fluidics (ICOM 2025)



October 31 – November 2, 2025, IIT Guwahati

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**Speaker/affiliation:** Prof. Rama Govindarajan, TIFR Bengaluru, India

**Tentative topic of the invited talk**

*Capillary waves and instabilities in a miscible fluid pair*

**Abstract of the invited talk**

Capillary waves are a feature of immiscible interfaces. I will discuss the experimental demonstration of such waves in the mixed layer between a pair of miscible fluids co-flowing in a microchannel. I will also discuss viscosity-contrast-induced instabilities in such microchannel flows. Reference: Emergence of capillary waves in miscible co-flowing fluids. A Carbonaro, G Savorana, L Cipelletti, Rama Govindarajan & D Truzzolillo, Physical Review Letters, 134, 05400, 2025.