

## Indo-French network: Small-scale hydrodynamics

Name	Email	Laboratory/University/City/Country	Research areas
Sakir Amiroudine	sakir.amiroudine@u-bordeaux.fr	I2M, University of Bordeaux, France	- Hydrodynamic and thermal instabilities of supercritical fluids - Non-equilibrium phase transitions of liquid-vapor systems (in near-critical fluids) - Phase transitions of binary fluid systems (immiscible/miscible) - Electrokinetic instabilities in electroosmotic and electrophoretic flows - Numerical modelling by Finite Volume method and Phase Field method
Hugues Bodiguel	hugues.bodiguel@univ-grenoble-alpes.fr	LRP, National Polytechnic Institute, Grenoble, France	- Flow and rheology of suspensions: particles, droplets, capsules. Exp. and numerics (DEM) - Particles in non-newtonian fluids: electrophoresis, microfluidics. Exp. and num. (OpenFoam) - Flow in porous media (micromodels using microfluidics): binary phase flows, complex fluids, suspensions. Exp. - Gels, osmotic flows
Thomas Bickel	thomas.bickel@u-bordeaux.fr	LOMA, University of Bordeaux, France	- Self-propulsion of active particles: thermophoretic swimmers, Marangoni surfers - Marangoni flows at low Re: stability, convection at high Pe - Nonequilibrium fluctuations, Brownian motion
Stephane Zaleski	stephane.zaleski@sorbonne-universite.fr	DALEMBERT, Sorbonne Université, Paris, France	- Multiphase flow - Numerical modelling by Volume of fluid method - Numerical modelling by Phase Field method - Heat and mass transfer
Suman Chakraborty	suman@mech.iitkgp.ac.in	IIT Kharagpur, India	Microfluidics, Nanofluidics, Interfacial flows, electrokinetics, biomedical engineering, physiological flows
Ashis Kumar Sen	ashis@iitm.ac.in	IIT Madras, India	Microfluidics and Nanofluidics, Acoustofluidics, Interfacial flows, Bioengineering
P K Panigrahi	panig@iitk.ac.in	IIT Kanpur, India	- Optofluidics - Electrohydrodynamics - Optical Diagnostics - Flow Control - Sensors and Actuators
Jean-Philippe Matas	<a href="mailto:jean-philippe.matas@univ-lyon1.fr">jean-philippe.matas@univ-lyon1.fr</a>	LMFA, Lyon, France	spray and bubble dynamics, liquid fragmentation, jet and mixing layer instabilities, vibrated granular media, suspensions
Kirti Sahu	ksahu@che.iith.ac.in	IIT Hyderabad, India	- Bubbles and droplets - Phase change in multicomponent sessile drops - Viscosity-stratified flows and small-scale hydrodynamics
Gaurav Tomar	gtom@iisc.ac.in	IISc, Bangalore	Two phase flows, electrohydrodynamics, viscoelasticity, dynamics of soft capsules
Thomas Salez	thomas.salez@cnrs.fr	CNRS / Université de Bordeaux, France	Brownian motion at interfaces, mechanics of interfacial soft matter, hydrogel thin films, lift at low Reynolds number
Susmita Dash	susmitadash@iisc.ac.in	IISc, Bangalore	Phase change phenomena, Microfluidics, Heat transfer, Interfacial Flow, Droplet dynamics
Diwakar S. Venkatesan	diwakar@jncasr.ac.in	JNCASR, Bangalore	Multiphase flows, Interfacial flows and instabilities, Microgravity systems, Numerical simulations, Heat and mass transfer
Uddipta Ghosh	uddipta.ghosh@iitgn.ac.in	IIT Gandhinagar	- Droplet dynamics - Analytical (Asymptotics), Numerical using Phase-field/Level-set methods - Electrokinetics, Electrophoresis - Phase-change Materials (PCM) - Motion of Complex (Non-Newtonian) fluids - Transport in porous and fractured media.
Gautam Biswas	gtm@iitk.ac.in	IIT Kanpur	- Multiphase flows, Dynamics of Bubbles and Drops, Computational Fluid Dynamics, Bio-Microfluidics
Chaoqi Misbah	chaoqi.misbah@univ-grenoble-alpes.fr	CNRS / Université de Grenoble	Blood flow: simulation and experiments, biochemical signaling, Blood-endothelium interaction, microfluidics, Microswimmers, Cell motility, Active matter
Bahni Ray	bray@mech.iitd.ac.in	IIT Delhi	- Dynamics of Bubbles and Drops, Computational Fluid Dynamics, phase change, Particulate flow
Ratul Dasgupta	dasgupta.ratul@gmail.com OR dasgupta.ratul@iitb.ac.in	IIT Bombay	Theory of instabilities and waves in multiphase flows, atomisation and spray formation, numerical modelling using open source CFD, parametric instabilities (Faraday waves), drops and bubbles
Eric Climent	eric.climent@imft.fr	IMFT, INP-ENSEEHT, Toulouse, France	dispersed phase (drops, bubbles, solid particles), two-phase reactive systems, magnetic particles, biological suspensions
Farzam Zoueshtiagh	farzam.zoueshtiagh@univ-lille.fr	IEMN, Université de Lille, France	- Multiphase flows - Electrodeposition - Drops and bubbles - Binary fluids
Anubhab Roy	<a href="mailto:anubhab@smail.iitm.ac.in">anubhab@smail.iitm.ac.in</a>	IIT Madras, India	Microhydrodynamics. Living fluids - Dynamics of swimming cells. Hydrodynamic stability. Geophysical flows. Perturbation methods
Michael Baudoin	<a href="mailto:michael.baudoin@univ-lille.fr">michael.baudoin@univ-lille.fr</a>	IEMN, Université de Lille, France	Acoustic tweezers for micromanipulation of fluids and particles, Dynamics and stability of two-phase microfluidic flows, Sounds produced by fast interfacial dynamics