Tentative Schedule FERMaT-SPP1740 Symposium Toulouse 2016

Symposium on Non-Invasive Measuring Tools and Numerical Methods for the Investigation of Non-Reactive and Reactive Gas-Liquid Flows

Color code:

	Introduction talks & keynotes	
	Presentations FERMaT	
	Presentations SPP1740	
Mon. 6.6.2016	**Hydrodynamics in gas-liquid flows**	
09:00	WELCOME and presentation of FERMaT and of the SPP1740 program	Meireles Billet, Schlüter
09:15	Numerical simulation of bubble flows	H. Marschall
10:15	Direct numerical simulations of rising bubbles or droplets in the presence of surfactants	Lalanne
10:45	Coffee break	
11:00	Turbulence generated by the means of freely vertical moving spheres. A characterization by PIV and hotwire anemometry	Haase
11:30	Macro-scale modelling of two-phase flows within structured packings	Pasquier
12:00	Subgrid scale modeling for reactive mass transfer at rising bubbles	Weiner
12:30	Lunch	
13:30	Hydrodynamics induced by bubble plumes in case of heterogeneous bubble population	Laupsien
14:00	Fluid dynamics of single bubbles with superimposed mass transfer	Merker
14:30	Submerged membrane bioreactor for waste water treatment: determination of the shear stresses produced by coarse bubbles	Alliet
15:00	Break	
15:30	Mixing and mass transfer in a confined bubble column	Roig
16:00	3D position measurement of spherical objects with a holographic single camera setup	Guhathakurta
16:30	Open end with discussion	
	Visit of LISBP lab	
Tue. 7.6.2016	**Mass transfer in gas-liquid flows**	
09:00	Looking under the skirt of a bubble	Legendre
09:30	Gas-liquid mass transfer visualization around free rising bubbles by fluorescence quenching: review and focus on FERMaT-TUHH contributions	Dietrich
10:30	PIV and LIF measurements for the investigation of mass transfer in clean & contaminated Taylor Flows	Kastens
11:00	Coffee Break	
11:30	Mass transfer measurement in Taylor flow using planar laser-induced fluorescence and shadowgraphy techniques	Billet
12:00	Direct numerical method for reactive transport processes in bubble systems	Falcone
12:30	DNS simulation of hydrodynamics and mass transfer in Taylor flows	Butler
13:00	Lunch	
14:30	Experimental investigation of mass transfer of CO2 bubbles with ultrafast electron beam X-ray tomography.	Kipping
14:00	Influence of bubble bouncing on mass transfer and chemical reaction	Timmermann
15:00	Break	
15:15	Round table with discussions	
	Open end, visit of labs (LGC and IMFT) and tour of Toulouse, dinner	

Wed. 8.6.2016	**Reactive mass transfer in gas-liquid flows**	
09:00	Sensitive bioinorganic copper-dioxygen species in a SuperFocus mixer in comparison to stopped-flow measurements	Herres-Pawlis
10:00	Fe-O2-complexes as chemical reaction system in reactive bubbly flows	Miska
10:30	Laser Raman Spectroscopy - A non-invasive tool to measure concentration in the liquid phase of segmented flow in microchannels	Schurr
11:00	Coffee break	
11:30	Use of a colorimetric technique based on an oxygen-sensitive dye to measure Gas-liquid mass transfer around bubbles flowing in millimetric channels	Loubière
12:00	Nitrosyl iron complexes in multiphase reaction media - insitu characterizing with controllable reactivity	Ossberger
12:30	Photochemical reactions as switchable tool for the fundamental investigation of mass transfer processes in gas-liquid flows	Tastan
13:00	Lunch	
	END of the Symposium	

Thu.-Fri. 9.6.-10.6.	Optional participation of French PhD students at the German PhD Seminar "Reactive Bubbly Flows"