ABSTRACTS FOR ISMIP9 CONFERENCE

The scientific committee reviewers have judged the submitted abstracts. 90 abstracts have been selected for ISMIP9 conference of which 50 for **ORAL** and 40 for **POSTER** presentation. **Please note that the final confirmation is bound to the conference registration.**

Lead author	Abstract title	Affiliation	Decision
Alberini, F	Use of super-hydrophobic surfaces to enhance mixing in a stirred vessel	University of Birmingham	POSTER
Algave, R	Simulating Solid Suspension in Stirred Vessels with a Fully Coupled CDF-DEM Algortithm	Siemens PLM Software	POSTER
Al-Najjar, S	On The Error in Mass Transfer in a Stirred Vessel Predicted by Frössling-Type Correlations Based on Particle Settling Velocity	University of Birmingham	POSTER
Al-Sharify, Z	PEPT Measurements of Solid–Liquid Flow Field of Floating Particles in a Stirred Vessel	University of Birmingham	ORAL
Angeli, P	Mixing during plug flow of shear-thinning liquids in microchannels	University College London	ORAL
Angeli,P	Experimental and computational fluid dynamic studies of mixing of complex oral health products	University College London	ORAL
Angeli,P	Experimental and computational fluid dynamic studies of continuous mixing of highly-viscous non-Newtonian mixtures	University College London	POSTER
Annas, S	Influence of the viscosity and speed on the fluid flow of a paddle agitator	Münster University of Applied Sciences	ORAL
Artoni, R	Forces on an intruder during the mixing of granular pastes : insights on rheology and mixture evolution	IFSTTAR	ORAL
Aubin, J	CFD Studies of Transitional Flow in Mixing Vessels	University of Sydney	ORAL
Bach, C	A novel in situ measurement method of bubble sizes in bioreactors using a high speed camera	Technical University of Denmark	ORAL
Brito, M.A	Formulation Screening in Rotational Shear Flow Devices	University of Porto	POSTER
Brown, D	De-Stratification of Cylindrical Storage Vessels Using a Bottom Mounted Horizontal Jet	BHR Group	ORAL
Brucato, A	Scale-up and viscosity effects on gas-liquid mass transfer in unbaffled stirred tanks	Università di Palermo	ORAL
Byrnes, N	A direct numerical simulation of a turbulent stirred vessel driven by a Rushton turbine	Bernal Institute	ORAL
Cao, J	The Numerical Simulation of a Single Bubble Breakup in Jet Flow	Beijing University of Chemical Technology	POSTER
Cardus, J	The Potential Of Reactive PLIF For The Evaluation Of Micromixing And Reaction Yield In Stirred Vessels	University of Birmingham	POSTER
Carrillo De Hert, S	Effect of Viscosity on the Emulsification Kinetics using an In-Line Rotor-Stator	University of Manchester	ORAL
Casugbo, C	Flowrate Constraints on the Selection of In-line Dynamic Mixers	Unilever/University of Manchester	ORAL
Celani, A	Effect of Mixing Conditions on the Wet Preparation of Ceramic Foams	University of Birmingham/Johnson Matthey	ORAL
Chekroun, A	Lagrangian particle tracking in an industrial photobioreactor	LISBP - INSA de Toulouse	POSTER

Cunliffe, C	Tracking compositional evolution during batch manufacturing using spectroscopic methods	Unilever/University of Manchester	POSTER
Date, T	Fluid deformation induced by a rotationally reciprocating anchor Impeller	Kobe University	POSTER
Davoody, M	Optimum design for the mitigation of scale in mixing tanks	RMIT University	POSTER
Dawson, M	Influence of Additive to Bulk Viscosity Ratio on Inline Blending in Laminar and Transitional Flow	BHR Group	ORAL
Ejim, L	A design of experiment (DoE) approach to optimize liquid-solid plug flows in meso-scale tubes operating with oscillatory flow mixing	University of Loughborough	ORAL
Espinoza, C	Flow Studies in an In-Line Silverson 150/250 High Shear Mixer Using PIV	University of Birmingham	ORAL
Esteves, L.P	Mixing of fluids with very dissimilar viscosities in CIJs	University of Porto	ORAL
Etchells, A.W	A Correlation for Cloud Height in Liquid – Solid Agitated Vessels	Rowan University Department of Chemical Engineering	POSTER
Forte, G	Towards Increased Quantification of Electrical Resistance Tomography using Linear Probes in Fluid Mixing Diagnosis	University of Birmingham/Johnson Matthey	ORAL
Fujiwara, M	Quantification by image analysis of mixing of two fluids with large viscosity ratio in static mixers having elements of two types	Yokohama National University	POSTER
Galindo, E	Local kLa in a three phases system, including mycelial biomass, in a pilot stirred tank at constant gassed power drawn	Instituto de Biotecnología Unam	ORAL
Gavi, E	Breakup of nanoparticle clusters using a Microfluidizer	Loughborough University	ORAL
Ghorbanian, S	Effect of Thixotropy on Fluid Mixing in a Stirred Tank	University of Birmingham	POSTER
Giacomelli, J	Measurement and Analysis of Local Turbulence Properties By Using Large Eddy Simulations	Philadelphia Mixing Solutions, Ltd.	ORAL
Gong, He	Characteristics and mechanism of the just drawdown of floating particles in laminar stirred tanks	Beijing University of Chemical Technology	ORAL
Grenville, R	Validation Of The Wall Shear Stress Model For Blending Shear-Thinning Fluids	Philadelphia Mixing Solutions, Ltd.	ORAL
Grenville, R	Defining impeller efficiency	Philadelphia Mixing Solutions, Ltd.	POSTER
Grundtvig, I.A	Shape optimization of a gas-inducing impeller	Technical University of Denmark	POSTER
Hayashi, H	Evaluation by image analysis of time evolution of the crystal particle aggregation state during batch cooling crystallization	Yokohama National University	ORAL
Hirata, Y	Mixing Processes in SAR Plate Static Mixers Combined with 180°-Rotation of Fluid Interface under Reversed Flow Operation	Osaka University	POSTER
Hohl, L	Modeling of drop sizes and drop interactions in liquid three phase systems	Techinal University of Berlin	ORAL
Ifachsyad, D	Influence of Water Phase Temperature on Emulsion Produced with High Shear Mixer	PT. Tetra Pak Stainless Equipment	POSTER
Jamshed, A	Gas-Liquid Multiphase Mixing in dual axial radial agitated vessel in Heterogeneous Regime	University of Manchester	ORAL
Kanazawa, K	Energy Efficiency Improvement of a Cylindrical-Wall Revolving Mixer	Primix corporation	POSTER

Kehn, R	The Effect of Impeller Type on Dip Pipe Design Forces in Stirred Vessels	SPXFlow	ORAL
Kolano, M	Influence of viscoelastic flow properties on cavern formation in stirred tanks – an experimental and numerical study	Technical University of Berlin	ORAL
Komoda, Y	Power characteristics of a rotationally reciprocating anchor impeller	Kobe University	POSTER
Kovalchuk, N	Drops coalescence and mixing in microchannel	University of Birmingham	ORAL
Kretzschmar, T	Evaluation of micromixer performance	Fraunhofer ICT-IMM	ORAL
Li, Y	Study on mixing and suspension characteristics in shaken microwell systems	University College London	POSTER
Liu, L	Effects of input rheology model parameters on the CFD modelling of non-Newtonian fluid mixing	Johnson Matthey	ORAL
Liu, M	On the Mathematical Framework of Mean Age Distribution in General Fluid Flows	The Chemours Company	POSTER
Machin, T	Characterisation of Complex Multiphase Fluids Using Process Tomography	University of Birmingham/ITS	POSTER
Maluta, F	CFD modelling of biohydrogen production in a self-ingesting stirred tank	University of Bologna	POSTER
Mao, Z	Simulation of mixing and crystallization in a non-submerged impinging jet mixer	Chinese Academy of Sciences	ORAL
Masuda, H	Mixing and heat transfer characteristics of Taylor-Couette flow with thermal instability	University of Shizuoka	POSTER
Mendoza, F	Experimental study of the hydrodynamics of the flow in a stirred tank in the transitional flow regime using the POD technique	University of Toulose	ORAL
Mihailova, O	Optimisation of helical ribbon mixers using HEEDS	Unilever/University of Manchester	ORAL
Montante, G	Turbulent flow and scalar mixing in a continuous stirred tank	University of Bologna	ORAL
Moreno Juez, J	Concrete mixing monitoring by image analysis: mixing evolution and applications	IFSTTAR	ORAL
Murasieiwcz, H	Application of aqueous/aqueous and organic/aqueous dispersions for stem cell expansion in a stirred bioreactor	University of Birmingham	POSTER
Nagatomo, D	A study for slurry wear patterns of Maxblend®	Sumitomo Heavy Industries Process Equipment	POSTER
Nishi, K	Power consumption and mixing performance of an eccentrically located large type impeller in a laminar region	Chiba Institute of Technology	POSTER
Özcan-Taşkın, G & Padron, G	Particle De-agglomeration with an In-Line Rotor-Stator Mixer at Different Solids Loadings	BHR Group	ORAL
Quedeville, V	Interactions between mixing and bioreactions: a matter of cell uptake	LISBP - INSA de Toulouse	ORAL
Ramsay, J	Effect of specific mechanical energy input on viscoelastic properties of a model cheese	Massey University	POSTER
Riccomi, M	Ghost Particle Velocimetry implementation in millimetres devices and comparison with µPIV	University of Birmingham	POSTER
Rodiguez, G	Planar induced measurements in a shaken bioreactor for different fluid viscosity	University College London	ORAL

Rodiguez, G	Appraisal of microcarrier suspension dynamics in a shaken bioreactor with conical bottom	University College London	POSTER
Scargiali, F	Power consumption for particle suspention and liquid aeration of unbaffled bioslurry reactors	University of Palermo	POSTER
Stamatopoulos, K	Understanding flow and mixing process in human colon using a biomechanical Dynamic Colon Model	University of Birmingham	ORAL
Tervasmäki, P	Applicability of a bottom agitated draft tube reactor to microbial processes - the effect of agitation power distribution and hydrostatic pressure on gas-liquid mass transfer	University of Oulu	ORAL
Thomas, J	Comparing Experimental Observations, Literature Correlations and CFD Predictions; Minimum Speed Required for Particle Suspension, NJS, Using Rushton Turbines and Other Radial Flow Impellers	University of Birmingham	ORAL
Toba, Y	Effect of disk turbine impeller on lignin decomposition in a sonochemical vessel reactor	Kobe University	ORAL
Umair, A	An energy transport based evolving rheology	Unilever/University of Manchester	POSTER
Vigolo, D	Flow visualization of the trapping induced by vortex breakdown at a junction	University of Birmingham	ORAL
Vikhansky, A	Formation of liquid/liquid dispersion in a Couette device	cd-adapco.com (Siemens)	POSTER
Vipin, M	Modelling turbulent emulsification in an inline high shear static mixer	Unilever/University of Manchester	POSTER
Vlaev, S	Hydrodynamic Characterization of a Dual Impeller Submerged Membrane Bioreactor (SMBR) Relevant to Single-Use Bioreactor (SUB) Options	Bulgarian Academy of Sciences	POSTER
Wang, S	Trapping of Inertial Particles: from Fundamentals to Applications	Newcastle University	ORAL
Wood, T	Incorporation of Floating Solids Into High Solid Content Slurries	University of Birmingham/Johnson Matthey	ORAL
Xie, M.H	Mass transfer performance in multiple-impeller stirred bioreactors for Carboxyl Methylated Cellulose solutions	Zhejiang Greatwall Mixer Co. Ltd	POSTER
Xie, X	Local Hydrodynamic Investigation by PIV within a Dynamic Filtration Unit under Laminar Flow	LISBP - INSA de Toulouse	ORAL
Yajima, T	Fluid Analysis for NANOVisK by MPS method	Sumitomo Heavy Industries Process Equipment	POSTER
Ye, S	Optimisation of structural and operational parameters of a settler via CFD simulation in a mixer-settler	Tsinghua University	POSTER
Zhang, C	Environmentally Friendly Personal Care Products	University of Manchester	POSTER
Zhang, J	Power consumption and mass transfer in a gas-liquid-solid stirred tank reactor with various triple-impeller combinations	Beijing University of Chemical Technology	POSTER
Zhang, W	Study on the mixing of liquid and solid slurry for lithium ion batteries	Chinese Academy of Sciences	ORAL