

FLUID MIXING VIII INTERNATIONAL CONFERENCE - PROGRAMME

KING'S COLLEGE LONDON, GREAT HALL, STRAND CAMPUS, 9-12 APRIL 2006

Time slot	Sunday 9 April 2006	Monday 10 April 2006	Tuesday 11 April 2006	Wednesday 12 April 2006
9:30-10:00		Registration	Session 4: Solid-Liquid Mixing Chairs: C. Xuereb & F. Magelli Direct Numerical Simulation of turbulent particle dispersion in an unbaffled Stirred-Tank Reactor: <i>F. Sbrizzai, V. Lavezzo, R. Verzico, M. Campolo, A. Soldati, University of Udine, Italy</i>	Session 6: Micromixers and bioreactors Chairs: J. Bertrand & I. Fort Fluid mixing in a T-shaped micro-mixer: <i>D. Bothe, C. Stemich & H.J. Warnecke, RWTH Aachen & University of Paderborn, Germany</i>
10:00-10:30		10:15 Welcoming address, Professor Michael Yianneskis, Chair, IChemE Fluid Mixing Processes Subject Group and Fluid Mixing VIII Safety and fire precautions/conference arrangements	Development of a networks-of-zones fluid mixing model for an unbaffled stirred vessel used for precipitation: <i>M. Kagoshima and R. Mann, University of Manchester, UK</i>	Impact of Fluid Path Geometry and Operating Parameters on I/I-Dispersion in Interdigital Micromixers: <i>P. Löb, H. Pennemann, V. Hessel & Y. Men, Institut für Mikrotechnik Mainz, Germany</i>
10:30-11:00		Session 1: Laminar and turbulent single-phase mixing Chairs: P. Tanguy & S. Balabani Foundations of laminar chaotic mixing and spectral theory of linear operators: <i>S. Cerbelli, A. Adrover, F. Creta and M. Giona, University of Rome "La Sapienza", Italy</i>	Experimental Investigations of Stirred Solid/Liquid Systems in three different Scales: Particle Distribution and Power consumption: <i>R. Angst & M. Kraume, Technische Universität Berlin, Germany</i>	Experimental Investigation of Liquid-Liquid Mixing in T-shaped Micro-mixers using μ -LI and μ -PIV: <i>M. Hoffman, M. Schluter & N. Rabiger, University of Bremen, Germany</i>
11:00-11:30		Coffee, manufacturers forum & poster session, Council Room	Coffee, manufacturers forum & poster session, Council Room	Coffee, manufacturers forum & poster session, Council Room
11:30-12:00		Investigation of laminar flow in a stirred vessel at low Reynolds numbers: <i>M. Rice, J.Hall, G. Papadakis and M. Yianneskis, King's College London, UK</i>	Influence of solid particles on temperature spectra in a turbulent flow: <i>S. Peryt, A.R. Paschedag & M. Kraume, Technical University of Berlin, Germany</i>	Investigation of the convective motion through a staggered herringbone micromixer at low Reynolds number flow: <i>D. G. Hassell and W.B. Zimmerman, University of Sheffield, UK</i>
12:00-12:30		Effect of the attack angle on the roll and trailing vortex structures in an agitated vessel with a paddle impeller: <i>K. Suzukawa, S. Mochizuki & H. Osaka, Ube Industries & Yamaguchi University, Japan</i>	Effect of scale on the draw down of floating solids: <i>G. Ozcan-Taskin, BHR Group, UK</i>	Fluid mixing in shaken bioreactors: Implications for scale-up predictions from microtitre scale microbial and mammalian cell cultures: <i>M. Micheletti, T. Barrett, S.D. Doig, F. Baganz, M.S. Levy, J.M. Woodley and G.J. Lye, University College London, UK</i>
12:30-13:00		Angle-resolved stereo-PIV measurements close to a down-pumping pitched-blade turbine: <i>F.R. Khan, C.D. Rielly and D. Brown, Loughborough University and BHR Group, UK</i>	Numerical simulation of a dissolution process in a stirred tank reactor: <i>H. Hartmann, J.J. Derksen, H.E.A. van den Akker, Technical University of Delft, Netherlands</i>	CFD Analysis of a Rotor-Stator Mixer with Viscous Fluids: <i>F. Barailler, M. Heniche & P. Tanguy, Ecole Polytechnique Montreal, Canada</i>
13:00-14:00		Lunch, Great Hall	Lunch, Great Hall	Lunch, Great Hall
14:00-14:30		Session 2: Turbulent single-phase mixing Chairs: J. Baldyga & R. Mann Turbulence kinetic energy transport processes in the impeller stream of stirred vessels: <i>A. Ducci and M. Yianneskis, King's College London, UK</i>	Session 5: Liquid-Liquid Dispersion Chairs: C. D. Reilly & K.C. Lee The effect of pH on experimental and simulation results of transient drop size distributions in stirred liquid/liquid dispersions: <i>A. Gäbler, M. Vegener, A.R. Paschedag & M. Kraume, Technical University Berlin, Germany</i>	Session 8: Reactive Mixing & Industrial Applications Chairs: A. Line & M. Kraume Reactor Performance with High Velocity Surface Feed: <i>S. Bhattacharya and S.M. Kresta, University of Alberta, Canada</i>
14:30-15:00		Analysis of turbulence anisotropy in a mixing tank: <i>R.Escudie, and A.Liné, Institut National des Sciences Appliquées de Toulouse, France</i>	Nanoparticle Formation by Highly Diffusion-Controlled Emulsion Polymerisation: <i>F. Jahanzad & S. Sajjadi, Loughborough University & King's College London, UK</i>	Design of Multiple Impeller Stirred Tanks for the Mixing of Highly Viscous Fluids Using CFD: <i>J. Aubin & C. Xuereb, Laboratoire de Génie Chimique Toulouse, France</i>
15:00-15:30		Fluid Dynamics and Mixing of Single-Phase Flow in a Stirred Vessel with a Grid Disc Impeller: Experimental and Numerical Investigations: <i>V. Buwa, A. Dewan, A. Nassar & F. Durst, University of Erlangen-Nurnberg, Germany</i>	Modelling of high viscosity oil drop breakage process in intermittent turbulence: <i>W. Podgórska, Warsaw University of Technology, Poland</i>	CFD simulation of mixing in tall gas-liquid stirred vessel: Role of local flow patterns: <i>A.R. Khopkar, G. R. Kasat, A.B. Pandit & V.V. Ranade, University Institute of Chemical Technology, Mumbai & National Chemical Laboratory, Pune, India</i>
15:30-16:00		Effect of the shaft eccentricity on the hydrodynamics of unbaffled stirred tanks: <i>G. Montante, A. Bakker, A. Paglianti, F. Magelli, University of Bologna, Italy & Fluent Inc., USA</i>	Effect of Mixing Protocol on Formation of Fine Emulsions: <i>S. Sajjadi, King's College London, UK</i>	Coffee, manufacturers forum & poster session, Council Room
16:00-16:30		Coffee, manufacturers forum & poster session, Council Room	Coffee, manufacturers forum & poster session, Council Room	Measurement and CFD Simulation of Single-Phase Flow in Solvent Extraction Pulsed Column: <i>J.M. Bujalski, W. Yang, J. Nikolov, C.B. Solnordal and M.P. Schwarz, CSIRO Minerals, Australia</i>
16:30-17:00		Session 3: Advancing fundamental understanding Chairs: J.J. Derksen & G. Papadakis On the mixing properties of spherically symmetric helical coherent structures in turbulence: <i>W.B Zimmerman & B.N Hewakandamby, University of Sheffield, UK</i>	Session 6: Static mixers Chairs: S.M. Kresta and S. Sajjadi Large-Eddy Simulation and laser diagnostic measurements of mixing in a coaxial jet mixer: <i>E. Hassel, S. Jahnke, N. Kornev, I. Tkatchenko & V. Zhdanov, University of Rostock, Germany</i>	New advances in agitation technology for exothermic reactions in very large reactors: <i>W. Himmelsbach D. Houlton, D. Örtlieb & M. Lovallo, EKATO, Germany & USA & CFD Consultants, GmbH, Germany</i>
17:00-17:30		Measurements of scalar dissipation in a turbulent plume with planar laser-induced fluorescence of acetone: <i>C.N. Markides & E. Mastorakos, University of Cambridge</i>	Homogenisation Devices for the Production of Miniemulsions: <i>K. Ouzineb, C. Lord, N. Lesauze, C. Graillat, P.A. Tanguy & T. McKenna, LCPP-CNRS/ESCPE—Lyon & Laboratoire Génie Chimique Toulouse, France and Ecole Polytechnique Montreal, Canada</i>	Close of Conference
17:30-18:00		Modelling of spray-freezing with compressed carbon dioxide: <i>M. Henczka, J. Baldyga & B. Y. Shekunov, Warsaw University of Technology, Poland & Ferro Corporation, Ohio, USA</i>	Mixing analysis in a coaxial mixer: <i>C. Rivera, S. Foucault, M. Heniche, T. Espinosa-Solares & P. Tanguy, Ecole Polytechnique Montreal, Canada & Universidad Autonoma Chapingo, Mexico</i>	
Evening	18:00-21:00 Welcome Reception & Registration Great Hall, Strand Campus, King's College London	19:00-20:30 Walking tour of Temple area; assemble at 19:00 in Great Hall Foyer	Thames River Cruise and Dinner at Embankment Pier, 19:15; returning to pier ~ 22:45	Embarkation