

Programme Guide

Sunday, 7th September 2014

18:00-19:30 **Welcome Reception and Registration**
Room: Roberts Foyer G02

Monday, 8th September 2014

from 8:00 **Registration –Roberts Foyer G02**

09:30-9.45 **Welcome address- Profs Michael Arthur (UCL's President and Provost) & Tassos Karayiannis (Chair)**
Room: Darwin B40 LT

09:45-10:30 **Plenary Paper:**
Advances and challenges in computational research of micro and nano flows (id 214)
Professor Dimitris Drikakis
Room: Darwin B40 LT
Chair: T. G. Karayiannis

10:30-11:00 **Coffee/Tea Roberts Foyer G02**

	MINISYMPOSIUM I	Single Phase 1	Multiphase 1	Nanofluids 1
	Mathematical modelling of multiphase microflows	Experimental	Boiling 1	
11:00-13:00	Session 1 Room: Darwin B40 LT Chair: D. Papageorgiou & D. Drikakis	Session 1 Room: Roberts G06 Chair: K. A. Mouza & R. Osellame	Session 1 Room: Roberts 106 Chair: D. Del Col & P. Angeli	Session1 Room: Roberts G08 Chair: G. Tang & A. Gavriilidis
	Paper: Particle self-diffusiophoresis near solid walls and interfaces (id 231) Authors : D. Crowdy	Paper: Electrodiffusion Method of Near-Wall Flow Diagnostics in Microfluidic Systems (id 145) Authors : J. Tihon , V. Penkavova, P. Stanovsky, J. Vejrazka	Paper: Effect of Surfactant on Flow Boiling Heat Transfer of Ethylene Glycol/Water Mixtures in A Mini-tube (id 21) Authors : Z. Feng, Z. Wu, W. Li, B. Sundén	Paper: Thermal conductivity of nanofluids in nanochannels (id 188) Authors: M. Frank, N. Asproulis , D. Drikakis
	Paper: Stretching of a capillary bridge featuring a particle-laden interface: particle sedimentation in the interface (id 232) Authors : L. Botto	Paper: Experimental and Numerical Analysis of Single Phase Flow in a micro T-junction (id 121) Authors : P. Vocale , G. Puccetti, B. Pulvirenti , G. Morini	Paper: The Leidenfrost Phenomenon on Structured Surfaces (id 69) Authors : G. R. Duursma, R. A.P. Kennedy, K. Sefiane	Paper: Experimental and numerical investigation on forced convection in circular tubes with nanofluids (id 158) Authors: L. Colla , L. Fedele , O. Manca , L. Marinelli , S. Nardini
	Paper: Macroscopic effects of microscopic roughness in suspensions (id 233) Authors: H. J. Wilson	Paper: Characterization of fluid flow in a microchannel with a flow disturbing step (id 19) Authors : I. A. Stogiannis, A D. Passos , A. A. Mouza , S V. Paras, V. Penkavova , J. Tihon	Paper: Comparative study of heat transfer and pressure drop during flow boiling and flow condensation in minichannels (id 85) Authors : D. Mikielwicz, R.Andrzejczyk , B.Jakubowska, J.Mikielwicz	Paper: Experimental evaluation of heat transfer coefficient for nanofluids (id 12) Authors: C. Menale, F. D'annibale, A. Mariani, R. Bubbico
	Paper: Fluctuating force-coupling method for interacting colloids (id 234) Authors: E.E. Keaveny	Paper: Fluid drag-reducing effect and mechanism of superhydrophobic surfaces with micro-nano textures (59) Authors: J. Zhang, Z. Yao, P. Hao, H. Tian, N. Jiang	Paper: Pool Boiling Enhanced by Electric Field Distribution in Micro Sized Space (id 88) Authors : I. Kano	Paper: Nanofluid flow and heat transfer in channel entrance region (id 23) Authors: J. T. C. Liu, G. Puliti
	Paper: Dynamic unbinding transitions and deposition patterns in dragged meniscus problems (id 235) Authors: M. Galvagno, D.Tseluiko, U. Thiele	Paper: Gas recognition based on the physicochemical parameters determined by monitoring diffusion rates in microfluidic channels (49) Authors: A. Hooshyar Zare , V.Ghafarinia , S. Erfantalab , F. Hossein-Babaei	Paper: Flow Boiling Heat Transfer of Refrigerant R-134a in Copper Microchannel Heat Sink (id 111) Authors: V.V. Kuznetsov , A. S. Shamirzaev	Paper: Study on Thermal Conductivity of Gas Phase in Nanoporous Aerogel (id 65) Authors: C. Bi, G.Tang, Q. Sheng, B. Fu

	<p>Paper: Asymptotic analysis of evaporating droplets (id 236)</p> <p>Authors: N. Savva , A. Rednikov, P Colinet</p>		<p>Paper: Flow Boiling in Rectangular Microchannels: 1-D Modelling of the Influence of Inlet Resistance on Flow Reversal (id 179)</p> <p>Authors: Sateesh Gedupudi, David B.R. Kenning, Tassos G. Karayiannis</p>	<p>Paper: Three-dimensional multi-level heat transfer model of silica aerogel (id 107)</p> <p>Authors: He Liu, Zeng Y. Li, Xin P. Zhao And Wen Q. Tao</p>
	<p>Paper: A particle flow specific boundary element formulation for microfluidic applications (id 206)</p> <p>Authors: B. Baranoglu, B.Çetin</p>		<p>Paper: Flow Patterns and Comparison with Correlations for Vertical Flow Boiling of R245fa in Small to Micro Tubes (id 170)</p> <p>Authors: T. G. Karayiannis, E. A. Pike-Wilson , L. Chen, M. Mahmoud, Y. Tian</p>	<p>Paper: Effect of nanomaterial properties on thermal conductivity heat transfer fluids and nanomaterial suspension (id 182)</p> <p>Authors: R. S. Khedkar, S. S. Sonawane, K. L. Wasewar</p>
	<p>Paper: Absolute and Convective Instabilities in Non-local Active-Dissipative Equations Arising in the Modelling of Thin Liquid Films (id 7)</p> <p>Authors: D Tseluiko, M. G. Blyth, D. T. Papageorgiou</p>			
13:00-14:00	Lunch Roberts Foyer G02			
14:00-14:30	<p>Keynote paper: Blood flow in silico: from single cell to blood rheology (id 215) Professor Gerhard Gompper Room: Roberts G06 Chair: C. Koenig</p>			
	Biomedical 1	Single phase 2	Multiphase 2	
	Blood flow/RBC transport	Heat transfer 1	Evaporation and Condensation	
14:30-15:45	Session 2	Session 2	Session 2	
	Room: Roberts G08	Room: Roberts 106	Room: Roberts G06	
	Chair: K. Tatsumi & S. Balabani	Chair: J. Brandner & V. Kuznetsov	Chair: D. Mikielawicz & M. Mamoud	
	<p>Paper: Microconfined flow behavior of red blood cells by image analysis techniques (id 52)</p> <p>Authors: G. Tomaiuolo, L. Lanotte , A. Cassinese , S. Guido</p>	<p>Paper: Experimental Apparatus for the Study of micro Heat Exchangers with Inlet Temperatures between -200 and 200 °C and Elevated Pressures (id 198)</p> <p>Authors : A. Parahovnik, N. Tzabar, G. Yossifon</p>	<p>Paper: Preliminary measurements of heat transfer during condensation in microchannels (id 2)</p> <p>Authors : H. S. Wang, J. Sun, L. Ruan, J. W. Rose</p>	
	<p>Paper: Multiphase measurement of blood flow in a microchannel (id 192)</p> <p>Authors : J. M. Sherwood, D. Holmes, Efstathios Kaliviotis , S. Balabani</p>	<p>Paper: The Influence of Geometry on the Thermal Performance of Microchannels in Laminar Flow with Viscous Dissipation (id 163)</p> <p>Authors : M. Lorenzini ,N. Suzzi</p>	<p>Paper: Experimental Study of Slug Flow for Condensation in a Square Cross-Section Micro-Channel at Low Mass Velocities (id 136)</p> <p>Authors : G. El Achkar, M. Miscevic, P.Lavieille</p>	
	<p>Paper: Microfluidic interactions between red blood cells and drug carriers by image analysis techniques (id 77)</p> <p>Authors: R. D'apolito, F. Taraballi, S. Minardi , X. Liu , S. Caserta, A. Cevenini, E. Tasciotti , G. Tomaiuolo, S. Guido</p>	<p>Paper: Heat transfer enhancement with gas-to-gas micro heat exchangers (id 173)</p> <p>Authors : I. Gerken, J. J. Brandne, R. Dittmeyer</p>	<p>Paper: Measurement and Modeling of Void Fraction in High Pressure Condensing Flows through Microchannels (id 201)</p> <p>Authors : B. Keinath, S. Garimella</p>	
	<p>Paper: Off-plane motion of an oblate capsule in a simple shear flow (id 13)</p> <p>Authors: A-V Salsac, C. Dupont, F. Delahaye , D. Barthes-Biese</p>	<p>Paper: Heat transfer characteristics of hybrid microjet – microchannel cooling module (id 71)</p> <p>Authors: T. Muszynski , R. Andrzejczyk</p>	<p>Paper: Explosive Vaporization of Water and Isopropyl Alcohol on a Flat Microheater (id 118)</p> <p>Authors : V.V. Kuznetsov, I. A. Kozulin</p>	
			<p>Paper: Flow measurement using micro-PIV within evaporating sessile drops of self-wetting mixtures (id 28)</p> <p>Authors: J. R.E. Christy, K. Sefiane , J. C. Ebeling , T. Seewald , S. Harman</p>	
15:45-16:15	Coffee/Tea Roberts Foyer G02			

	Biomedical 2	Single Phase 3	Multiphase 3	
	Blood flow modelling	Modelling 1-CFD and moment method	Boiling 2	
16:15-18:15	Session 3 Room: Roberts G08 Chair: A. Barakat & J. Sherwood	Session 3 Room: Roberts 106 Chair: J. Reese & S. Paras	Session 3 Room: Roberts G06 Chair: J. Xu & D.Poulikakos	
	Paper: Margination of Micro- and Nano-Particles in Blood Flow and its Effect on the Efficiency of Drug Delivery (id 156) Authors: K. Muller , D. A. Fedosov, G. Gompper	Paper: Cylindrical Couette Flow in the Transition Regime by the Method of Moments (id 11) Authors : X-J. Gu , D. R. Emerson	Paper: Flow boiling heat transfer of a non-azeotropic mixture inside a single microchannel (id 160) Authors : D. Del Col *, M. Azzolin, S. Bortolin	
	Paper: Deformability of red blood cells affects their velocity in deterministic lateral displacement devices (id 53) Authors : T. Krüger, D. Holmes, P. V. Coveney	Paper: Aerodynamic behavior of the bridge of a capacitive RF MEMS switch (id 148) Authors: D. Isvoranu, S. Sorohan, G. Ciuprina	Paper: A numerical study of bubble growing during saturated and sub-cooled flow boiling in micro channels (id 50) Authors : Q. Liu, B. Palm	
	Paper: An investigation on the rheodynamics of human red blood cells using high performance computations (id 189) Authors: D. Xu , A. Munjiza , E. Avital , C. Ji , E. Kaliviotis , J. Williams	Paper: Simulation of Gas Micro Flows based on Finite Element and Finite Volume Method (id 197) Authors : A. Westerkamp, J. Bünger, M. Torrilhon	Paper: On the effect of the dynamic contact angle of a vapor embryo interface trapped in a nucleation site (id 199) Authors : L. Léal, M. Miscevic, P. Lavielle, F. Topin, Lounès Tadrif	
	Paper: Behaviour of the von Willebrand Factor in Blood Flow (id 178) Authors: K. Muller , D. A. Fedosov , G. Gompper	Paper: Microfluidic multiscale model of transport phenomena for engineering and interdisciplinary education applied to elements of a Stirling engine (id 26) Authors : M. Krol	Paper: Variation of Important Non-Dimensional Numbers During Bubble Growth at Nucleation Site in Microchannels (id 83) Authors: S. T. Kadam , R. Kumar	
	Paper: Local Regulation of Arterial Tone: an Insight into Wall Dynamics Using Mathematical Models (id 78) Authors: E. Boileau, D. Parthimos, P. Nithiarasu	Paper: Laminar Fluid Flow in Microchannels with Complex Shape (id 47) Authors: M. B. Atmansikh, O. V. Rusakova, P. Zubkov	Paper: Single Phase Flow Pressure Drop and Heat Transfer in a Rectangular Metallic Microchannel (id 169) Authors: A. M. Sahar , M. R. Ozdemir, M. M. Mahmoud, J. Wissink , T. G. Karayiannis	
	Paper: A model of oxygen dynamics in the cerebral microvasculature and the effects of morphology on flow and metabolism (ID 116) Authors: C. S. Park, S. J. Payne	Paper: Numerical Simulation of Microflows with Moment Method (id 186) Authors: Z. Cai	Paper: Comparison of heat transfer characteristics in surface cooling with boiling microjets of water, ethanol and HFE7100 (id 86) Authors: D. Mikielwicz , T. Muszynski	
	Paper: A CFD and FEM Approach to a Multicompartmental Poroelastic Model for CSF Production and Circulation with Applications in Hydrocephalus Treatment and Cerebral Oedema (id 138) Authors: J. C. Vardakis , D. Chou , B. J. Tully & Y. Ventikos	Paper: Grad's moment equations for binary gas-mixture of hard spheres (id 184) Authors: V. K. Gupta, N. Sarna , M. Torrilhon		
	18:15	End of Sessions		

Tuesday, 9th September 2014

from 8:00	Registration –Roberts Foyer G02		
09:15-09:45	Keynote paper: Optimization of magnetic actuation protocol to enhance mass transfer in solid/liquid microfluidic systems (id 167) Professor Evgeny Rebrov Room: Roberts G06 Chair: P. Angeli		
09:45-11:00	Expert session- part 1 Room: Roberts G06 Chair: M. Oshima & C. Koenig Paper: New look into medicine and biology with thermoacoustic and optoacoustic tomography (id 220) Authors: V. Ntziachristos Paper: Optical sensing of miRNA activity in cells (id 219) Authors: Z. Medarova Paper: Optical assessment of gel-like mechanical and structural properties of surface layers: single particle tracking and molecular rotors (id 221) Authors: A. Marki & A. R. Pries Paper: Towards the identification of spatially resolved mechanical properties in tissues and materials: State of the art, current challenges and opportunities in the field of flow measurements (id 222) Authors: P. D. Ruiz Paper: Optical coherence tomography – variations on a theme (id 230) -POSTER Authors: J. A. T. Halls, N. Fomin, C. A. Greated, C. S. Koenig, M. Collins		
11:00-11:30	Coffee/Tea Roberts Foyer G02		
11:30-12:45	Expert session- part 2 Room: Roberts G06 Chair: M. Oshima & C. Koenig Paper: Monolithic optofluidic chips: from optical manipulation of single cells to quantum sensing of fluids (id 224) Authors: R. Osellame Paper: Plasmonic droplets for high throughput sensing (id 226) Authors: J. B. Edel Paper: Optical coherence tomography measurements of biological fluid flows with picolitre spatial localisation (id 227) Authors: S. J. Matcher Paper: Imaging flows using CMOS sensors (id 228) Authors: S. P. Morgan, D. He, S. Shen, B. R. Hayes-Gill Paper: Continuous and Simultaneous Measurement of Micro Multiphase Flow using confocal Micro-Particle Image Velocimetry (Micro-PIV) (id 229) Authors: M. Oshima & M. Oishi		
12:45-13:45	Lunch Roberts Foyer G02		
13:45-14:15	Keynote paper: Unified modeling suite for two-phase flow, convective boiling and condensation in macro- and micro-channels (id 217) Professor J. Thome Room: Roberts G06 Chair: T. G. Karayiannis		
14:15-16:00	MINISYMPOSIUM II	Single Phase 4	Multiphase 4
	(Lab on a Chip)	Modelling 2-DS, MC, LBM	Liquid-liquid, Droplets 1
	Session 2	Session 2	Session 2
	Room: Roberts G06	Room: Roberts G08	Room: Roberts 106
	Chair: A. Radaelli & C. Koenig	Chair: D. Valougeorgis & G. Gompper	Chair: E. Rebrov & D. Wen
	Paper: Droplet Microfluidics for High Throughput Biological Analysis (id 209)	Paper: Kinetic calculation of rarefied gaseous flows in long tapered rectangular microchannels (id 36)	Paper: Two-phase aqueous-ionic liquid flows in small channels of different diameter (id 172/240)
	Authors : H. Andersson-Svahn	Authors: L. Szalmas	Authors: D. Tsoulidis, Q. Li, M. Chinaud, P. Angeli

	<p>Paper: Sample Preparation for Point of Care Molecular Diagnostics (id 211)</p> <p>Authors: W. Balachandran, R. McKay, P. Crow, B. Manoharanehru</p>	<p>Paper: A New Heterogeneous Multiscale Technique for Microscale Gas Flows (id 31)</p> <p>Authors: S. Y. Docherty, M. K. Borg, D. A. Lockerby, J. M. Reese</p>	<p>Paper: From Core-Shell Drops to Drops with Ultra-thin Shells via Non-confined Microfluidics (id 154)</p> <p>Authors: A. Chaurasia, D. Josephides, S. Sajjadi</p>
	<p>Paper: Microfluidic Platform for Adherent Single Cell High-Throughput Screening (id 104)</p> <p>Authors: P. Occhetta, C. Malloggi, A. Gazaneo, M. Licini, A. Redaelli, G. Candiani, M. Rasponi</p>	<p>Paper: Non-equilibrium gas flow and heat transfer in a bottom heated square microcavity (id 17)</p> <p>Authors: G. Tatsios, M. H. Vargas, S. K. Stefanov, D. Valougeorgis</p>	<p>Paper: Electrophoretic manipulation of multiple-emulsion droplets (id 117)</p> <p>Authors: A. M. Schoeler, D. N. Josephides, A. S. Chaurasia, S. Sajjadi, P. Mesquida</p>
	<p>Paper: Design of an air-flow microchamber for microparticles detection (id 103)</p> <p>Authors: E. Bianchi & F. Nason, M. Carminati, L. Redala, L. Cortelezzi, G. Ferrari, M. Sampietro, G. Dubini</p>	<p>Paper: Microchannel fluid flow and heat transfer by lattice boltzmann method (id 74)</p> <p>Authors: R. Zarita, M Hachemi</p>	<p>Paper: Flow pattern in inner cores of double emulsion droplets (id 200)</p> <p>Authors: S. Ma, J.M. Sherwood, W.T.S. Huck, S. Balabani</p>
	<p>Paper: A Passive Micromixer for Bioanalytical Applications (id 152)</p> <p>Authors: I. K. Kefala, V. E. Papadopoulos, G. Kokkoris, G. Karpou, D. Moschou, G. Papadakis and A. Tserepi</p>	<p>Paper: Non-classical Thermal Physics in Force-driven Micro-channel Gas Flows (id 57)</p> <p>Authors: R. S. Myong</p>	<p>Paper: Droplet Initiated Rupture of High Viscosity Jets to Create Uniform Emulsions (id 159)</p> <p>Authors: D. Josephides, S. Sajjadi</p>
	<p>Paper: Lab-on-Chip for testing Myelotoxic effect of drugs and chemicals (id 114)</p> <p>Authors: M. Rasponi, A. Gazaneo, A. Bonomi, P. Occhetta, L. Cavicchini, V. Cocce, G. B. Fiore, A. Pessina, A. Redaelli</p>	<p>Paper: Numerical study for magnetic fluid by lattice Boltzmann method (id 48)</p> <p>Authors: W. Zhou, Y. Yan</p>	
	<p>Paper: Modeling of on-chip (bio)particle separation and counting using 3D electrode structures (id 66)</p> <p>Authors: B. Cetin, S. Zeinali</p>		
16:00-16:30	Coffee/Tea Roberts Foyer G02		
16:30-18:00	<p>Biomedical 3</p> <p>Blood flow and applications</p> <p>Session 3</p> <p>Room: Roberts G06</p> <p>Chair: T. Yamaguchi & T. Krüger</p>	<p>Single phase 5</p> <p>Modelling 3-Molecular dynamics 1</p> <p>Session 3</p> <p>Room: Roberts G08</p> <p>Chair: J. Zhang & D. Fedosov</p>	<p>Multiphase 5</p> <p>Liquid-liquid, Droplets 2</p> <p>Session 3</p> <p>Room: Roberts 106</p> <p>Chair: A-V. Salsac & D. Tsaoulidis</p>
	<p>Paper: Characterisation of the Mechanobiology of Stents In-Vitro (id 193)</p> <p>Authors: L. Boldock, C. Poitevin, H. L. Casbolt, S. Hsiao, P. C. Evans, C. M. Perrault</p>	<p>Paper: A Molecular Dynamics Study of Proton Hopping in Nafion Membrane (id 34)</p> <p>Authors: T. Mabuchi and T. Tokumasu</p>	<p>Paper: Microfluidic droplet control by photothermal interfacial flow (id 203)</p> <p>Authors: M. Muto, M. Motosuke</p>
	<p>Paper: Optimization of Drug-Eluting Stents (id 171)</p> <p>Authors : F. Bozsak, J. Chomaz, A. Bakarar</p>	<p>Paper: Transport properties and structure of fluids in hydrophobic/hydrophilic nanochannels (id 30)</p> <p>Authors : F. Sofos, T. Karakasidis, A. E. Giannakopoulos and A. Liakopoulos</p>	<p>Paper: Mechanical characterisation of cross-linked albumin capsule membranes (id 20)</p> <p>Authors: P. Gires, A. V. Salsac, E. Leclerc, F. Edwards-Levy, D. Barthes-Biesel</p>
	<p>Paper: Dielectrophoretic Manipulation of Particles and Lymphocytes Using Rail-type Electrodes (id 237)</p> <p>Authors : K. Tatsumi, H. Okui, K. Kawano, K. Nakabe</p>		<p>Paper: Prediction of the liquid film characteristics in open inclined microchannels (id 14)</p> <p>Authors: A. D. Anastasiou, A. Gavriilidis, A. A. Mouza</p>
	18:00	End of Sessions	
19.30	Conference Dinner - Thames Cruise on Symphony		

Wednesday, 10th September 2011

from 8:00	Registration		
09:30-10:00	Keynote paper: Microfluidics for energy applications (id 216) Professor D. Sinton Room: Roberts G06 Chair: S. Balabani		
10:00-11:15	Biomedical 4 Applications & Biotechnology 1	Single Phase 6 Heat transfer 2	Multiphase 6 Solid-liquid
	Session 1	Session 1	Session 1
	Room: Roberts G06	Room: Roberts G08	Room: Roberts 106
	Chair: D. Sinton & S. Oshita	Chair: A. Cioncolini & M. Tiwari	Chair: Y. Yan & K. Tatsumi
	Paper: Effective Transport Template for Particle Separation In Microfluidic Bumper Arrays (id 134)	Paper: Optimal microscale water cooled heat sinks for targeted alleviation of hotspot in microprocessors (id 39)	Paper: Synthesis of Silver Nanoparticles using Non-Fouling Microfluidic Devices with Fast Mixing (id 131)
	Authors: S. Cerbelli, F. Garofalo and M.Giona	Authors: C. S. Sharma, M. K. Tiwari, D. Poulikakos	Authors : R. Baber, L. Mazzei, N. T. K. Thanh, A. Gavriilidis
	Paper: Experimental Investigation on the Behavior of Artificial Magnetic Cilia (id 80)	Paper: Numerical Studies on Geometric Features of Microchannel Heat Sink with Pin Fins (id 180)	Paper: Novel microgels fabricated on microfluidic devices (id 142)
Authors: A. Marucci, G. P. Romano	Authors: J. Zhao, S. Huang, L.g Gong	Authors: B. Lu, M. D. Tarn, T. K. Georgiou, N. Pamme	
Paper: The study of the influence of morphology anisotropy of clusters of superparamagnetic nanoparticle on magnetic hysteresis by Monte Carlo simulations (id 45)	Paper: Influence of metallic porous microlayer on pressure drop and heat transfer of stainless steel plate heat exchanger (id 87)	Paper: Pore-Scale Study on Two-phase Flow in Porous Media (id 129)	
Authors : R. Fu, C. Roberts, Y. Yan	Authors: J. Wajs, D. Mikielwicz	Authors: Z. Liu, H. Wu	
Paper: Electromagnetic Actuated Stirring in Microbioreactors Enabling Easier Multiplexing & Flexible Device Design (id 132)	Paper: Temperature Stabilisation in Fischer Tropsch Reactors using Phase Change Material (id 82)	Paper: Photothermal Conversion Efficiencies of Silver Nanoparticle Dispersions (id 161)	
Authors: M. J. Davies, I. Munro, C. K.L. Tan, M. C. Tracey, N. Szita	Authors: A. O. Odunsi, T. S. O'donovan, D. A. Reay	Authors: D. Wen, H. Zhang, H-J. Chen, G.Lin	
11:15-11:45	Coffee/Tea Roberts Foyer G02		
11:45-13:00	Biomedical 5 Biotechnology 2	Single phase 7 Modelling 4- Molecular Dynamics 2	Multiphase 7 Liquid-liquid, droplets & gas- liquid
	Session 2	Session 2	Session 2
	Room: Roberts G06	Room: Roberts G08	Room: Roberts 106
	Chair: G. Dubini & C. A. Cortes-Quiroz	Chair: Y. Ventikos & B. Cetin	Chair: J. Coupland & S. Kuhn
	Paper: Continuous Flow vs. Static Chamber μPCR Devices on Flexible Polymeric Substrates (id 153)	Paper: Fluid transport properties under confined conditions (id 15)	Paper: Magnetic actuation of microparticles for mass transfer enhancement (id 79)
	Authors: V. E. Papadopoulos, I. N. Kefala, G. Kokkoris, A. Tserepi	Authors: V. Rudyak, A. Belkin, D. Ivanov	Authors: P. A. Lisk, E. Bonnot, Md. Taifur Rahman, F. Aiouache, R. Bowman, R. Pollard, E. Rebrov
	Paper: Analysis and design optimization of an integrated micropump-micromixer operated for bio-MEMS applications (id 162)	Paper: Temperature Distribution in the Force-driven Poiseuille Flow by Molecular Dynamics (id 58)	Paper: Microdevices for Continuous Sized Based Sorting by AC Dielectrophoresis (id 106)
	Authors: C. A. Cortes-Quiroz, A. Azarbadegan, I. D. Johnston, M. C. Tracey	Authors: R. Ranjith, J. H. Park, R. S. Myong	Authors: E. Altinagac , Y. Genc, H. Kizil, L. Trabzon, A. Beskok
	Paper: Constant depth microfluidic networks based on a generalised Murray's law for Newtonian and power-law fluids (id 42)	Paper: Nanoscale Prediction of Graphite Surface Erosion by Highly Energetic Gas - Molecular Dynamics Simulation (id 139)	Paper: A Model for Uphill Droplet Motion (id 140)
	Authors: K. Zografos, R. W. Barber, D. R. Emerson and M. S. N. Oliveira	Authors: R. Murugesan, N. Chandrasekaran, J. H. Park	Authors: F. M. Mancio Reis, P. Lavieille, M. Miscevic

	<p>Paper: Reactive oxygen species by water containing nanobubbles and its role in the improvement of barley seed germination (id 70)</p> <p>Authors: S. Liu, S. Oshita, Y. Makino</p>		<p>Paper: Co-current horizontal flow of a Newtonian and a non-Newtonian fluid in a microchannel (id 213)</p> <p>Authors: E.P. Roumpea, A. D. Passos, A.A. Mouza, S. V. Paras</p>
	<p>Paper: Corner Accumulation Behavior of Spermatozoa in Microchannels (id 181)</p> <p>Authors: R. Nosrati, P. J. Graham, D. Sinton</p>		<p>Paper: Absorption of spherical bubbles in a square microchannel (id 130)</p> <p>Authors: D. Mikaelian, B. Haut, L. De Canniere, B. Scheid</p>
13:00-13:45	Lunch Roberts Foyer G02		
13:45-14:15	<p>Keynote paper</p> <p>Advances in hybrid molecular/continuum methods for micro and nano flows (id 218)</p> <p>Professor Jason Reese</p> <p>Room: Roberts G06</p> <p>Chair: C. Koenig</p>		
	Nanofluids 2	Single Phase 8	Multiphase 8
		Lab on a chip	Gas-liquid, Bubbles
14:15-15:45	<p>Session 3</p> <p>Room: Roberts G08</p> <p>Chair: Y. Yan & Y. Sui</p>	<p>Session 3</p> <p>Room: Roberts 106</p> <p>Chair: D. Emerson & V. Rudyak</p>	<p>Session 3</p> <p>Room: Roberts G06</p> <p>Chair: B. Scheid & J. Christy</p>
	<p>Paper: Dependence of nanofluid viscosity on nanoparticle size and material (id 25)</p> <p>Authors: V. Ya. Rudyak, S. I. Krasnolutskii, D.A. Ivanov</p>	<p>Paper: Similarities in Dielectrophoretic and Electrophoretic Traps (id 93)</p> <p>Authors: N. Chandrasekaran, R. Murugesan, J. H. Park</p>	<p>Paper: A novel micro separator using the capillary separation effect with locally populated micro pin fin structure (id 100)</p> <p>Authors: B. An, J.g Xu, D. Sun</p>
	<p>Paper: The gas leakage dynamic flow in nanoporous silica aerogel under different pressure difference (id 108)</p> <p>Authors: X. P. Zhao, Z. Y. Li, H. Liu, W. Q. Tao</p>	<p>Paper: Electrohydrodynamically Induced Mixing and Pumping of Multifluid Systems in Microchannels (id 10)</p> <p>Authors: R. Cimpeanu, D. T. Papageorgiou</p>	<p>Paper: Measurement of Cavitation in a Sliding Bearing using Digital Holography (id 207)</p> <p>Authors: T. Tang, L. Arevalo, J. M. Coupland</p>
	<p>Paper: Thermal Conductivity and Rheology Behavior of Aqueous Nanofluids Containing Alumina and Carbon Nanotubes (id 9)</p> <p>Authors: Z. Wu, Z. Feng, L. Wadso, B. Sunden</p>	<p>Paper: Ion drag EHD micropump with single walled carbon nanotube (SWCNT) electrodes (id 37)</p> <p>Authors: Md. Kamrul Russel, P. Ravi Selvaganapathy, C. Y. Ching</p>	<p>Paper: A Hydrodynamic Study of Benzyl Alcohol Oxidation in a Micro-Packed Bed Reactor (id 149)</p> <p>Authors: N. Al-Rifai, M. Morad, G.Leivadarou, E. Cao, G. Brett, G. J. Hutchings, A. Gavriilidis</p>
	<p>Paper: Experimental Investigation on Performance of Silver nanofluid in Absorber/Receiver of parabolic Trough Collector (id 208)</p> <p>Authors: D. R Waghole, R .M. Warkhedkar, V.S.Kulkarni</p>	<p>Paper: Development of interconnected silicon micro-evaporators for the on-detector electronics cooling of the future ITS detector in the ALICE experiment at LHC (id 165)</p> <p>Authors : A. Francescon, G. Romagnoli, A. Mapelli, P. Petagna, C. Gargiulo, L. Musa, J. R. Thome, D. Del Col</p>	<p>Paper: Scalability of mass transfer in Taylor flow in capillaries (id 76)</p> <p>Authors : V. Nappo, S. Kuhn</p>
	<p>Paper: An experimental study of dynamic flow of nanofluid with different concentrations (id 43)</p> <p>Authors: J. Hong, P. Glover, Y. Yan</p>	<p>Paper: Investigation of laser induced phosphorescence and fluorescence of acetone at low pressure for molecular tagging velocimetry in gas microflows (id 115)</p> <p>Authors: H Si Hadj Mohand , F. Samouda, C. Barrot , S. Colin ,A. Frezzotti</p>	<p>Paper: Three-dimensional simulation of cavitating flow in real journal bearing geometry (id 29)</p> <p>Authors: M. Schmidt, P. Reinke, M. Nobis, M. Riedel</p>
15:45	Conference closure & farewell coffees		
16:00-18:00	Visits to the London Centre of Nanotechnology		