

THURSDAY 23 MAY 2013				
Registration and Reception (Lobby, McKenna Hall); reception starts from 5.00 pm				
FRIDAY 24 MAY 2013				
Registration opens (Lobby, McKenna Hall)				
Opening Remarks (H-C Chang) (DeBartolo, Rm 102)				
<b>Keynote 1:</b> <b>UJ Lee.</b> Nanofluidics For Gene Transfection and DNA Separation (Session Chair: H-C Chang) (DeBartolo, Rm 102)				
<b>Keynote 2:</b> <b>V Kurz, E Nelson, G Timp.</b> Single Cell Transfection with Single Molecule Precision Using a Synthetic Nanopore (Session Chair: H-C Chang) (DeBartolo, Rm 102)				
Break (Coffee and other refreshments available throughout the day in the McKenna Hall Lobby)				
8.00 onwards	Session 1: Nanochannels & Nanopores (Session Chair: X Guan) (DeBartolo, Rm 126)			
8.45-9.00	<i>Invited 1:</i> AM Streets Liang Zhao, X Zhang, F Tang, Y Huang. Label-free Microscopic Phenotyping and Transcriptome Analysis of Single Cells			
9.00-9.30	<i>Invited 2:</i> JC Love. Advances in a Nanowell-Based Integrated Single-Cell Analytical Technology for Ex Vivo Characterization of Clinical Samples			
9.30-10.00	<i>Keynote 2:</i> V Kurz, E Nelson, G Timp. Single Cell Transfection with Single Molecule Precision Using a Synthetic Nanopore (Session Chair: H-C Chang) (DeBartolo, Rm 102)			
10.00-10.10	Break (Coffee and other refreshments available throughout the day in the McKenna Hall Lobby)			
8.00 onwards	Session 2: Cell Manipulation 1 (Session Chair: D Wood) (DeBartolo, Rm 129)			
8.45-9.00	<i>Invited 3:</i> Al Toldy, AZM Badruddoza, L Zheng, RAL Leon, TA Hatton, SA Khan. Pharmaceutical Crystallization and Drug Formulation in Microfluidic Emulsions			
9.00-9.30	<i>Invited 4:</i> DR Tree, Y Wang, KD Dorfman. Mobility of DNA in Nanochannels			
9.30-10.00	<i>Invited 5:</i> AR Rezk, O Manor, JR Friend, LY Yeo. Acoustowetting: Film Spreading, Fingering Instabilities and Soliton-Like Wave Propagation			
10.00-10.10	Break (Coffee and other refreshments available throughout the day in the McKenna Hall Lobby)			
8.00 onwards	Session 3: Fundamentals (Session Chair: DI Kopelevich) (DeBartolo, Rm 131)			
8.45-9.00	<i>Invited 6:</i> DI Kopelevich. Transport Across Fluid Interfaces and Lipid Membranes: Role of Interfacial Fluctuations			
9.00-9.30	<i>Invited 7:</i> DR Tree, Y Wang, KD Dorfman. Mobility of DNA in Nanochannels			
9.30-10.00	<i>Invited 8:</i> AR Rezk, O Manor, JR Friend, LY Yeo. Acoustowetting: Film Spreading, Fingering Instabilities and Soliton-Like Wave Propagation			
10.00-10.10	Break (Coffee and other refreshments available throughout the day in the McKenna Hall Lobby)			
8.00 onwards	Session 4: Sensing & Biosensing 1 (Session Chair: XI Li) (DeBartolo, Rm 126)			
8.45-9.00	<i>Invited 9:</i> U Demirdi. Micro- and Nano-Scale Technologies at the Convergence of Engineering and Biology for Applications in Medicine			
9.00-9.30	<i>Invited 10:</i> H Lu. Microtechnologies for High-throughput High-Content Developmental Biology and Neurogenetics			
9.30-10.00	<i>Invited 11:</i> R Mohan, C Sanpitakser, E Sevgen, AV Desai, CM Schroeder, PJA Kenis. Antibiotic Susceptibility Testing of Polymicrobial Communities using a Multiplexed Microfluidic Platform			
10.00-10.10	Break (Coffee and other refreshments available throughout the day in the McKenna Hall Lobby)			
8.00 onwards	Session 5: Cell Manipulation 2 (Session Chair: AM Ardekani) (DeBartolo, Rm 129)			
8.45-9.00	<i>Invited 12:</i> Z Zheng, B Jing, E Zhu. Aggregation of Model Amyloid Insulin Protein in Crowding Environments and Under AC-Electric Fields			
9.00-9.30	<i>Invited 13:</i> SB Wang, SH Yazdi, AM Ardekani. Motion of Bacteria in a Vortical Flow			
9.30-10.00	<i>Invited 14:</i> Y-L Chen, W Chien. Modeling Inertial and Deformability-Based Separation of Cells			
10.00-10.10	Break (Coffee and other refreshments available throughout the day in the McKenna Hall Lobby)			
8.00 onwards	Session 6: Electokinetics (Session Chair: G Yossifon) (DeBartolo, Rm 131)			
8.45-9.00	<i>Invited 15:</i> F Ren, S Huang, S Wang. Hybrid-Field Microfluidics Enhanced Polyplex Synthesis and Delivery			
9.00-9.30	<i>Invited 16:</i> Y Green, G Yossifon. Dynamical Trapping of Colloids at the Stagnation Points of Electro-Osmotic Vortices of the Second Kind			
9.30-10.00	<i>Invited 17:</i> E Choi, K Kwon, D Kim, J Park. Nanoparticle Based Ion-Selective Membrane within Microchannel			
10.00-10.10	Break (Coffee and other refreshments available throughout the day in the McKenna Hall Lobby)			
8.00 onwards	Session 7: Sensing & Biosensing 2 (Session Chair: ED Goluch) (DeBartolo, Rm 126)			
8.45-9.00	<i>Invited 18:</i> B Long, E Nugent, A Javer, P Circuta, S Clavari, M Cosentino Lagomarsino, KD Dorfman. Microfluidic Chemostat for Measuring Single Cell Dynamics in Bacteria			
9.00-9.30	<i>Invited 19:</i> G Tomaiuolo, L Lanotte, A Cassinelle, S Guido. Microconfining Flow-Based Imaging Methods to Study Red Blood Cell Deformability <i>In Vitro</i>			
9.30-10.00	<i>Invited 20:</i> B Lin, T Inoue, A Levenchenko. Investigation of Individual and Collective Responses During the Directed Migration of Breast Cancer Cells Using Microfluidics			
10.00-10.10	Break (Coffee and other refreshments available throughout the day in the McKenna Hall Lobby)			
8.00 onwards	Session 8: Fabrication, Methods & Surfaces (Session Chair: AL Elias) (DeBartolo, Rm 129)			
8.45-9.00	<i>Invited 21:</i> J Schiffbauer, P Park, G Yossifon. Transient Response of the Micro-Nanochannel Interface: Effects of Fluid-Flow, Space Charge, and Non-Ideal Selectivity			
9.00-9.30	<i>Invited 22:</i> H-P Chen, C-C Tsai, H-M Lee, T-C Chang, S-C Wang, H-C Chang. Selective Dynamic Concentration of Peptides at Poles of Cation-Selective Nanoporous Granules			
9.30-10.00	<i>Invited 23:</i> AS Nezhad, M Packirisamy, R Bhat, A Geitmann. Buckling Approach on Pollen Tube for Measuring Growth Force			
10.00-10.10	Break (Coffee and other refreshments available throughout the day in the McKenna Hall Lobby)			
8.00 onwards	Session 9: Special Memorial Symposium Session on Electrowetting in Honor of Professor Kwan Hyoung Kang (1968-2012) (Session Chair: F Mugale) (DeBartolo, Rm 131)			
8.45-9.00	<i>Invited 24:</i> SI Kim. Electro-Fluidic Control from a Droplet to an Ion: The Remembrance of Professor Kwan Hyoung Kang			
9.00-9.30	<i>Invited 25:</i> M Hagedon, J Heikenfeld. Electrofluidic Imaging Films for ePaper Displays			
9.30-10.00	<i>Invited 26:</i> YK Suh, KH Baek. Field-Effect Control of EHD Flows			
10.00-10.10	Break (Coffee and other refreshments available throughout the day in the McKenna Hall Lobby)			
8.00 onwards	Session 10: Special Memorial Symposium Session on Electrowetting in Honor of Professor Kwan Hyoung Kang (1968-2012) (Session Chair: F Mugale) (DeBartolo, Rm 131)			
8.45-9.00	<i>Invited 27:</i> J Berthier, K Brakke, S Mermoz, C Fréty, L Di Cioccio. Investigation of the Capillary Self-Alignment of Complex Geometrical Chips			
9.00-9.30	<i>Invited 28:</i> H Lee, D Choi, DJ Im, IS Kang, KH Kang. Conventional Pipetting-Induced Spontaneous Electrical Charging of Droplets			
9.30-10.00	<i>Invited 29:</i> AM Schoeler, DN Josephides, S Sajjadi, P Mesquida. Charge of Water Droplets in Silicone Oil			
10.00-10.10	Break (Coffee and other refreshments available throughout the day in the McKenna Hall Lobby)			
8.00 onwards	Session 11: Keynote 5: H Liu, X Li, Y Xiang, Y Lu, RM Crooks. Microelectrochemical Paper Diagnostic Devices (Session Chair: OD Velev) (DeBartolo, Rm 102)			
8.45-9.00	<i>Invited 30:</i> G Sun, Y Yan, H-C Chang. Nanoporous Silica Membrane Based Ion Current Oscillator for Multi-Target Biosensing			
9.00-9.30	<i>Invited 31:</i> J Heikenfeld, L Hou, D Rose. Building Enabling Technologies for Sensing Biomarkers in Sweat: Flexible Electronics/Microfluidics and Sweat Simulators			
9.30-10.00	<i>Invited 32:</i> S Senapati, Z Slouka, S Shah, H-C Chang. Designing a Low-Cost Portable Biosensor with Ion-Selective Nanoporous Materials			
10.00-10.10	Break (Coffee and other refreshments available throughout the day in the McKenna Hall Lobby)			
8.00 onwards	Session 12: Keynote 6: NM Contento, SP Branigan, LR Gibson, C Ma, PW Bohn. NanoPlatform Embedded Reactions for Enhanced Chemical Transformations (NanoPERFECT) (Session Chair: OD Velev) (DeBartolo, Rm 102)			
8.45-9.00	<i>Invited 33:</i> A Zeberoff, B Nearingburg, AL Elias. A Laser-Responsive Microactuator Based on Gold Nanoparticle/Wax Composites			
9.00-9.30	<i>Invited 34:</i> JYH Kim, HS Kwak, SJ Sim. Phototaxis-Based Screening Strategy in Microfluidics to Improve Photosynthetic Efficiency of Microalgae			
9.30-10.00	<i>Invited 35:</i> N Chamakos, AG Papathanasiou. Do We Really Need Young's Angle Boundary Condition in Electrowetting Simulation?			
10.00-10.10	Break (Coffee and other refreshments available throughout the day in the McKenna Hall Lobby)			
SATURDAY 25 MAY 2013				
Registration opens (Lobby, McKenna Hall)				
Keynote 5: H Liu, X Li, Y Xiang, Y Lu, RM Crooks. Microelectrochemical Paper Diagnostic Devices (Session Chair: OD Velev) (DeBartolo, Rm 102)				
Keynote 6: NM Contento, SP Branigan, LR Gibson, C Ma, PW Bohn. NanoPlatform Embedded Reactions for Enhanced Chemical Transformations (NanoPERFECT) (Session Chair: OD Velev) (DeBartolo, Rm 102)				
8.00 onwards	Session 13: Keynote 7: A Aung, YN Seo, CJ Jamora, JC del Alamo, S Varghese. Intracellular Forces in Cancer Metastasis			
8.45-9.00	<i>Invited 36:</i> JT Cabral. Engineering Complex fluids by Microfluidic Processing			
9.00-9.30	<i>Invited 37:</i> A Vitale, M Quagliò, M Cocuccia, S Marasso, CF Pirri, R Bongiovanni. Photolithographic Approach to Fabricate PPFE Microfluidic Devices			
9.30-10.00	<i>Invited 38:</i> K Abi-Samra, JR Han, YK Cho. Electrochemical Velocimetry in Paper-Based Microfluidics			
10.00-10.10	Break (Coffee and other refreshments available throughout the day in the McKenna Hall Lobby)			
8.00 onwards	Session 14: Keynote 8: JT Cabral. Engineering Complex fluids by Microfluidic Processing			
8.45-9.00	<i>Invited 39:</i> S Azimi, ZY Dang, K Ansari, MBH Breeze. A New Process for Fabricating Three-Dimensional Micro/Nano Channels			
9.00-9.30	<i>Invited 40:</i> M Hagedon, J Heikenfeld. Electrofluidic Imaging Films for ePaper Displays			
9.30-10.00	<i>Invited 41:</i> YK Suh, KH Baek. Field-Effect Control of EHD Flows			
10.00-10.10	Break (Coffee and other refreshments available throughout the day in the McKenna Hall Lobby)			
8.00 onwards	Session 15: Keynote 9: SI Kim. Electro-Fluidic Control from a Droplet to an Ion: The Remembrance of Professor Kwan Hyoung Kang			
8.45-9.00	<i>Invited 42:</i> R de Ruiter, AM Pit, MHG Duits, HTM van den Ende, F Mugale. Electro-wetting Controlled Drop Manipulation in Microchannels			
9.00-9.30	<i>Invited 43:</i> H Lee, D Choi, DJ Im, IS Kang, KH Kang. Conventional Pipetting-Induced Spontaneous Electrical Charging of Droplets			
9.30-10.00	<i>Invited 44:</i> AM Schoeler, DN Josephides, S Sajjadi, P Mesquida. Charge of Water Droplets in Silicone Oil			
10.00-10.10	Break (Coffee and other refreshments available throughout the day in the McKenna Hall Lobby)			
8.00 onwards	Session 16: Keynote 10: SI Kim. Electro-Fluidic Control from a Droplet to an Ion: The Remembrance of Professor Kwan Hyoung Kang			
8.45-9.00	<i>Invited 45:</i> N Chamakos, AG Papathanasiou. Do We Really Need Young's Angle Boundary Condition in Electrowetting Simulation?			
9.00-9.30	<i>Invited 46:</i> J Berthier, K Brakke, S Mermoz, C Fréty, L Di Cioccio. Investigation of the Capillary Self-Alignment of Complex Geometrical Chips			
9.30-10.00	<i>Invited 47:</i> H Lee, D Choi, DJ Im, IS Kang, KH Kang. Conventional Pipetting-Induced Spontaneous Electrical Charging of Droplets			
10.00-10.10	Break (Coffee and other refreshments available throughout the day in the McKenna Hall Lobby)			
8.00 onwards	Session 17: Keynote 11: SI Kim. Electro-Fluidic Control from a Droplet to an Ion: The Remembrance of Professor Kwan Hyoung Kang			
8.45-9.00	<i>Invited 48:</i> M Hagedon, J Heikenfeld. Electrofluidic Imaging Films for ePaper Displays			
9.00-9.30	<i>Invited 49:</i> YK Suh, KH Baek. Field-Effect Control of EHD Flows			
9.30-10.00	<i>Invited 50:</i> R de Ruiter, AM Pit, MHG Duits, HTM van den Ende, F Mugale. Electro-wetting Controlled Drop Manipulation in Microchannels			
10.00-10.10	Break (Coffee and other refreshments available throughout the day in the McKenna Hall Lobby)			
8.00 onwards	Session 18: Keynote 12: SI Kim. Electro-Fluidic Control from a Droplet to an Ion: The Remembrance of Professor Kwan Hyoung Kang			
8.45-9.00	<i>Invited 51:</i> H Lee, D Choi, DJ Im, IS Kang, KH Kang. Conventional Pipetting-Induced Spontaneous Electrical Charging of Droplets			
9.00-9.30	<i>Invited 52:</i> AM Schoeler, DN Josephides, S Sajjadi, P Mesquida. Charge of Water Droplets in Silicone Oil			
9.30-10.00	<i>Invited 53:</i> N Chamakos, AG Papathanasiou. Do We Really Need Young's Angle Boundary Condition in Electrowetting Simulation?			
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8.00 onwards	Session 19: Keynote 13: SI Kim. Electro-Fluidic Control from a Droplet to an Ion: The Remembrance of Professor Kwan Hyoung Kang			
8.45-9.00	<i>Invited 54:</i> J Berthier, K Brakke, S Mermoz, C Fréty, L Di Cioccio. Investigation of the Capillary Self-Alignment of Complex Geometrical Chips			
9.00-9.30	<i>Invited 55:</i> H Lee, D Choi, DJ Im, IS Kang, KH Kang. Conventional Pipetting-Induced Spontaneous Electrical Charging of Droplets			
9.30-10.00	<i>Invited 56:</i> AM Schoeler, DN Josephides, S Sajjadi, P Mesquida. Charge of Water Droplets in Silicone Oil			
10.00-10.10	Break (Coffee and other refreshments available throughout the day in the McKenna Hall Lobby)			
8.00 onwards	Session 20: Keynote 14: SI Kim. Electro-Fluidic Control from a Droplet to an Ion: The Remembrance of Professor Kwan Hyoung Kang			
8.45-9.00	<i>Invited 57:</i> M Hagedon, J Heikenfeld. Electrofluidic Imaging Films for ePaper Displays			
9.00-9.30	<i>Invited 58:</i> YK Suh, KH Baek. Field-Effect Control of EHD Flows			
9.30-10.00	<i>Invited 59:</i> R de Ruiter, AM Pit, MHG Duits, HTM van den Ende, F Mugale. Electro-wetting Controlled Drop Manipulation in Microchannels			
10.00-10.10	Break (Coffee and other refreshments available throughout the day in the McKenna Hall Lobby)			
8.00 onwards	Session 21: Keynote 15: SI Kim. Electro-Fluidic Control from a Droplet to an Ion: The Remembrance of Professor Kwan Hyoung Kang			
8.45-9.00	<i>Invited 60:</i> H Lee, D Choi, DJ Im, IS Kang, KH Kang. Conventional Pipetting-Induced Spontaneous Electrical Charging of Droplets			
9.00-9.30	<i>Invited 61:</i> AM Schoeler, DN Josephides, S Sajjadi, P Mesquida. Charge of Water Droplets in Silicone Oil			
9.30-10.00	<i>Invited 62:</i> N Chamakos, AG Papathanasiou. Do We Really Need Young's Angle Boundary Condition in Electrowetting Simulation?			
10.00-10.10	Break (Coffee and other refreshments available throughout the day in the McKenna Hall Lobby)			
8.00 onwards	Session 22: Keynote 16: SI Kim. Electro-Fluidic Control from a Droplet to an Ion: The Remembrance of Professor Kwan Hyoung Kang			
8.45-9.00	<i>Invited 63:</i> J Berthier, K Brakke, S Mermoz, C Fréty, L Di Cioccio. Investigation of the Capillary Self-Alignment of Complex Geometrical Chips			
9.00-9.30	<i>Invited 64:</i> H Lee, D Choi, DJ Im, IS Kang, KH Kang. Conventional Pipetting-Induced Spontaneous Electrical Charging of Droplets			
9.30-10.00	<i>Invited 65:</i> AM Schoeler, DN Josephides, S Sajjadi, P Mesquida. Charge of Water Droplets in Silicone Oil			
10.00-10.10	Break (Coffee and other refreshments available throughout the day in the McKenna Hall Lobby)			
8.00 onwards	Session 23: Keynote 17: SI Kim. Electro-Fluidic Control from a Droplet to an Ion: The Remembrance of Professor Kwan Hyoung Kang			
8.45-9.00	<i>Invited 66:</i> M Hagedon, J Heikenfeld. Electrofluidic Imaging Films for ePaper Displays			
9.00-9.30	<i>Invited 67:</i> YK Suh, KH Baek. Field-Effect Control of EHD Flows			
9.30-10.00	<i>Invited 68:</i> R de Ruiter, AM Pit, MHG Duits, HTM van den Ende, F Mugale. Electro-wetting Controlled Drop Manipulation in Microchannels			
10.00-10.10	Break (Coffee and other refreshments available throughout the day in the McKenna Hall Lobby)			
8.00 onwards	Session 24: Keynote 18: SI Kim. Electro-Fluidic Control from a Droplet to an Ion: The Remembrance of Professor Kwan Hyoung Kang			
8.45-9.00	<i>Invited 69:</i> H Lee, D Choi, DJ Im, IS Kang, KH Kang. Conventional Pipetting-Induced Spontaneous Electrical Charging of Droplets			
9.00-9.30	<i>Invited 70:</i> AM Schoeler, DN Josephides, S Sajjadi, P Mesquida. Charge of Water Droplets in Silicone Oil			
9.30-10.00	<i>Invited 71:</i> N Chamakos, AG Papathanasiou. Do We Really Need Young's Angle Boundary Condition in Electrowetting Simulation?			
10.00-10.10	Break (Coffee and other refreshments available throughout the day in the McKenna Hall Lobby)			
8.00 onwards	Session 25: Keynote 19: SI Kim. Electro-Fluidic Control from a Droplet to an Ion: The Remembrance of Professor Kwan Hyoung Kang			
8.45-9.00	<i>Invited 72:</i> J Berthier, K Brakke, S Mermoz, C Fréty, L Di Cioccio. Investigation of the Capillary Self-Alignment of Complex Geometrical Chips			
9.00-9.30	<i>Invited 73:</i> H Lee, D Choi, DJ Im, IS Kang, KH Kang. Conventional Pipetting-Induced Spontaneous Electrical Charging of Droplets			
9.30-10.00	<i>Invited 74:</i> AM Schoeler, DN Josephides, S Sajjadi, P Mesquida. Charge of Water Droplets in Silicone Oil			
10.00-10.10	Break (Coffee and other refreshments available throughout the day in the McKenna Hall Lobby)			
8.00 onwards	Session 26: Keynote 20: SI Kim. Electro-Fluidic Control from a Droplet to an Ion: The Remembrance of Professor Kwan Hyoung Kang			
8.45-9.00	<i>Invited 75:</i> M Hagedon, J Heikenfeld. Electrofluidic Imaging Films for ePaper Displays			
9.00-9.30	<i>Invited 76:</i> YK Suh, KH Baek. Field-Effect Control of EHD Flows			
9.30-10.00	<i>Invited 77:</i> R de Ruiter, AM Pit, MHG Duits, HTM van den Ende, F Mugale. Electro-wetting Controlled Drop Manipulation in Microchannels			
10.00-10.10	Break (Coffee and other refreshments available throughout the day in the McKenna Hall Lobby)			
8.00 onwards	Session 27: Keynote 21: SI Kim. Electro-Fluidic Control from a Droplet to an Ion: The Remembrance of Professor Kwan Hyoung Kang			
8.45-9.00	<i>Invited 78:</i> H Lee, D Choi, DJ Im, IS Kang, KH Kang. Conventional Pipetting-Induced Spontaneous Electrical Charging of Droplets			
9.00-9.30	<i>Invited 79:</i> AM Schoeler, DN Josephides, S Sajjadi, P Mesquida. Charge of Water Droplets in Silicone Oil			
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10.00-10.10	Break (Coffee and other refreshments available throughout the day in the McKenna Hall Lobby)			
8.00 onwards	Session 28: Keynote 22: SI Kim. Electro-Fluidic Control from a Droplet to an Ion: The Remembrance of Professor Kwan Hyoung Kang			
8.45-9.00	<i>Invited 81:</i> J Berthier, K Brakke, S Mermoz, C Fréty, L Di Cioccio. Investigation of the Capillary Self-Alignment of Complex Geometrical Chips			
9.00-9.30	<i>Invited 82:</i> H Lee, D Choi, DJ Im, IS Kang, KH Kang. Conventional Pipetting-Induced Spontaneous Electrical Charging of Droplets			
9.30-10.00				

12.00-12.15	T A Webster, H. Sismaita, ED Goluch. Amperometric Detection of Pyocyanin in Nanoscale Constrictions	B Nearingburg, AL Elias. Microfluidic Fuel Cells Fabricated Through <i>In Situ</i> Laminar Flow Maskless Lithography	A Russell, J Heikenfeld. Micro-Electrofluidic Energy Harvesting: Breakthroughs in Both Materials and Device Structure
12.00-12.30	B Davaji, JH Han, CH Lee. Microfabricated Calorimeter for Biosensing and Versatile Thermal Analyses	Q Hamid, C Wang, Y Zhao, J Snyder, W Sun. Surface Treatment of SU-8 for the Development of Biological Microfluidics	JM Oh, D Legendre, J Harting, F Mugele. Mixing Efficiency of Non-chaotic Drop Oscillation on the Basis of Finite Time Lyapunov Exponent
12.30-2.00		Lunch (Lower Level, McKenna Hall)	
2.00-2.30		Keynote 7: DA Weltz, Drop-Based Microfluidics for Single Cell Analysis (Session Chair: PW Bohn) (DeBartolo, Rm 102)	
2.30-3.00		Keynote 8: S Takayama. Micro-Nanofluidic Tools to Model and Analyze the Body (Session Chair: PW Bohn) (DeBartolo, Rm 102)	
3.00-3.10		Break (Coffee and other refreshments available throughout the day in the McKenna Hall Lobby)	
	Session 10: Multiphase Microfluidics & Droplets (Session Chair: SA Vanapalli) (DeBartolo, Rm 126)	Session 11: Magnetofluidic, Acoustofluidic, and Thermal Flows (Session Chair: TN Wong) (DeBartolo, Rm 129)	Session 12: Special Session on Dielectrophoresis 1 (Session Chair: CV Brown) (DeBartolo, Rm 131)
3.10-3.30	Invited 10: R Dangla, E Fradet, CN Baroud. Droplet Microfluidics Driven by Gradients of Confinement	Invited 11: JT Huang. Acoustic Tweezers: Manipulating Particles, Cells, and Organisms Using Standing Surface Acoustic Waves (SSAW)	Invited 12: ZR Gagnon. Maxwell-Wagner Polarization at Liquid-Liquid Interfaces
3.30-3.45	C Priest, SF Hashmi, J Zhou, R Sedej, J Ralston, K Kawatari, T Kitamori. Influence of Molecular and Particulate Species on Micro-Solvent Extraction	AR Rezk, A Qi, JR Friend, WH Li, LY Yeo. Uniform Mixing in Paper-Based Microfluidic Systems Using MHz Acoustic Waves	Y Yan, D Guo, SZ Wen. Microdroplet Coalescence Under the Effect of Dielectrophoresis in a Convergent Microchannel
3.45-4.00	C Bathany, Y-K Cho, S. Takayama. Towards Dried Biomicromechanical Apparatus Using Aqueous Two-Phase Systems	D Taller, DB Go, and H-C Chang. Patterning of Micro and Nanodroplets by Surface Acoustic Waves	G McHale, CV Brown, MI Newton, N Sampara, GG Wells. Spreading and Super Spreading of Droplets Driven by Liquid Dielectrophoresis (L-DEP)
4.00-4.15	M Sun, SS Bitti, SA Vanapalli. Simple Microfluidic Drop Dilution Platforms	J Kwon, ST Wereley. Theoretical and Experimental Characterization of an Electrothermal Microfluidic Flow	S Patel, A Kale, X Xuan. Joule Heating Effects in Reservoir-based Dielectrophoresis (rDEP)
4.15-4.30	S Ma, M Natoli, X Liu, MP Neubauer, FM Watt, A Fery, WTS Huck. Monodisperse Collagen/Gelatin Beads as Model 3D Cell Culture Microenvironments	P Vi, K Khoshneshan, AF Chrimis, JL Campbell, K Ghorbani, S Nahavandi, G Rosengarten, K Kalantar-zadeh. Thermal Characterization of Nanofluids in Microfluidics Using Infrared Camera	A Ghosh, S Basuray, K Gangopadhyay, S Gangopadhyay. Surface Dielectrophoresis for DNA fractionation
4.30-4.45	E Arnsdadt, DA Weitz. The Microfluidic Nebulator: Production of Sub-30 nm Particles Through Spray Drying	O Yassine, A Zaher, E Li, ST Thoroddsen, J. Kosel. Magnetically Controlled Droplets of Thermosensitive Microgel as Advanced Agent Carriers	H-L Chen, S-W Leung, H-Y Wang, H-H Wei. Trapping Quantum Dots by Giant Induced Dipole Moments
4.45-5.00	A Sahu, S Pushpavarni. Biphasic Liquid Flows and Mass Transfer Characterization in Y Junction Microstructured Contactors	O Fassine, CP Gooneratne, A Ali, J Merzaban, J Kosela. A Magnetic Microfluidic Chip For Purification, Trapping and Selective Isolation Of Cells	NR Wood, Al Wolsteier, KE Heacock, RW Cohn, SJ Williams. Dielectrophoretic Capture of Nanoparticles with a Self-Assembled Nanoprobe
5.00-5.15	C Rascón, AO Parry, EAG Jamie, DGAL Aarts. Phase Transition of a Meniscus in a Capillary under the Influence of Gravity	JJ Wilbanks, GA Kiesling, Z Jian, C Chen, P Vedantam, TJ Tseng, X Xuan. Diamagnetic Particle and Microbe Concentration Using Ferromicrofluidics	JJ Arcenegui, P García-Sánchez, H Morgan, A Ramos. Electric-Field Induced Rotation and Orientation of Metal Nanowires.
5.15-5.30	M Danny Raj, R Raghunathan. Understanding Emergent Dynamics of Drops: A Simple Model Approach	Z Che, TN Wong, N-T Nguyen. Chaotic Mixing of Plug Flow in Meandering Microchannels	YI Lo, YY Lin, LY Chen, U Lei. Measurement of the Imaginary Clausius-Mossotti factor via Electrorotation
7.00-10.00		Conference Banquet (Lower Level, McKenna Hall)	
		<b>SUNDAY 26 MAY 2013</b>	
8.00 onwards		Registration opens (Lobby, McKenna Hall)	
9.00-9.30		Keynote 9: R Bashir. Biomedical Micro and Nanotechnology: From Lab-on-Chip to Building Systems with Cells (Session Chair: S Takayama) (DeBartolo, Rm 102)	
9.30-10.00		Keynote 10: H-C Chang. Molecular Sensing with Ion-Selective Membranes and Nanopores (Session Chair: S Takayama) (DeBartolo, Rm 102)	
10.00-10.10		Break (Coffee and other refreshments available throughout the day in the McKenna Hall Lobby)	
	Session 13: Optofluidics, Plasmonics, Acoustofluidics & Organic Electronics (Session Chair: G Arya) (DeBartolo, Rm 126)	Session 14: Special Session on Dielectrophoresis 2 (Session Chair: AR Minerick) (DeBartolo, Rm 129)	Session 15: Biomicromechanics (Session Chair: C Duan) (DeBartolo, Rm 131)
10.10-10.30	Invited 13: S-H Wu, K-L Lee, A Chiou, X Cheng, P-K Wei. Optofluidic Platforms for Real-time Monitoring of Living Cell Activities under External Stimulation	Invited 14: X Lu, X Xuan. Viscoelastic Effects on Dielectrophoretic Focusing and Trapping of Particles in a Constriction Microchannel	Invited 15: KD Dorfman, Z Chen, DW Olson. Design Principles for 2D Micolithographic Separation Media
10.30-10.45	G Gervinskas, G Senutinės, L Rosa, E Brasselet, PR Stoddart, S Juodkazis. Plasmonic Platforms for Light-Field Enhancement and its Polarization Control for Micro-Fluidics	XK Xing, LY Yobas. DEP-Activated Cell Separation by Interdigitated 3-D Silicon Ring Electrodes	Z Chen, KD Dorfman. Origin of the Deflection Angle in the DNA Prism
10.45-11.00	A Pathak, S Basuray, CJ Mathai, D Menke, PV Cornish, K Gangopadhyay, S Gangopadhyay. Novel Plasmonic Grating Hotspots and Metal-DNA Interactions	K Khoshneshan, D Wlodowicz, S-Y Tang, W Zhang, FJ Tovar-Lopez, A Mitchell, K Kalantar-zadeh. Dielectrophoresis of Bio-particles Using Curved Microelectrodes	MA Sawoniuk, CR Kopathall. Quantification of Spatio-Temporal Diffusion of Biomolecular Gradients Within 3D Scaffoldings Using a Microfluidic Device
11.00-11.15	Y Wang, S Senapati, P Stoddart, S Howard, H-C Chang. Nano-Cone Optical Fiber Array Sensors for miRNA Profiling	V Gupta, I Jafferji, A Menachery, M Garza, VO Melnikova, DK Hasegawa, R Pethig, DW Davis. ApoStream™, a New Dielectrophoretic Device for Antibody Independent Isolation and Recovery of Viable Cancer Cells from Blood	M-E Brett, DE Stone, DT Eddington. Single Cell Chemotropism in a Microfluidic Device
11.15-11.30	A Mishra, K Clayton, R Thakur, S Williams, A Kumar, S Wereley. Rapid Optoelectrokinetic Manipulation of Nanoparticles	A Menachery, V Gupta, VO Melnikova, DK Hasegawa, DW Davis. ApoStream™ from Concept to Market	MA Alibakhshi, C Duan. Label-Free Electrical Detection of Enzymatic Reactions in Nanochannels
11.30-11.45	B Gao, CR Murthy, AR Tao, G Arya. Programmed Assembly of Polymer-Grafted Nanocubes into Plasmonic Nanojunctions	A Salamanzadeh, ES Elvington, PC Roberts, EM Schmelz, RV Davalos. Effects of Non-Toxic Sphingolipid Metabolites on Ovarian Cancer Cells' Dielectrophoretic Characteristics using a Microfluidic Platform	MS Fridlin, NP Smithers, AG Lee, H Morgan, MRR de Planque. Electrophysiology of a Cell-Free Expressed Potassium Channel in Microdroplets Without Protein Purification
11.45-12.00	J-S Kwon, V Velasco, SJ Williams, ST Wereley. Rapid Electrokinetic Patterning Technique for Manipulation of Colloids and Microorganisms, and its Technical Advancement	KM Leonard, AR Minerick. Systematic Quantification of Dielectrophoretic Responses of ABO-Rh Erythrocytes	LR Gibson II, PW Bohn. Non-Aqueous Microchip Electrophoresis – Mass Spectrometry
12.00-12.15	JB Cumby, G Hayes, M Dickey, R Justice, J Heikenfeld. Manipulating the Geometry of Metallic Fluids for Agile Electronics	M Tseyafe, KT Liao, CF Chou, NS Swami. Coupling Dielectrophoresis with Concentration Polarization in Nanochannels	D Han, S Choi, DJ Hassett, AJ Steckl. Porous Electrospun Nanofiber Membrane Electrode for Enhancing Power Density of Micro-Sized Microbial Fuel Cell
12.00-12.30	S Puttaswamy, S Sengupta. Multifrequency Impedance Method for Detecting Viable Bacteria: Theory and Applications	H Zhao. The Dielectrophoretic Polarization of DNA Molecules under the Action of an Electric Field	SJ Sundermier, A Fraiwan, S Choi. Laminar Flow Based Microbial Fuel Cells
12.30-1.00		Closing Ceremony (H-C Chang) (DeBartolo, Rm 102)	