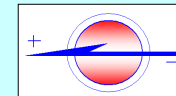


American Electrophoresis Society Program Grid



Annual Meeting, Nashville TN, November 9 – 12, 2009
Sessions held at the Gaylord Opryland Hotel (Mon-Wed: Canal A; Thurs: Canal D)

	Monday, November 9	Tuesday, November 10	Wednesday November 11	Thursday, November 12	
8:30 am to 11:00 am Session	#9 - Advances In Electrokinetics and Electrophoresis - Fundamentals (T3000) <i>Chair: Rajiv Bhargava</i>	#215 - Nanoscale Electrokinetics (T3003) <i>Chairs: Debashis Dutta; Sumita Pennathur</i>	#342 - Advances In Proteomics: New Technologies (T3006) <i>Chairs: Tom Berkelman; Phil Beckett</i>	#501 - BioMEMS and Microfluidics: Novel Applications (T3008) <i>Chairs: Xiangchun Xuan ; Jeremy Tzuen-Rong Tzeng</i>	Many thanks to our meeting organizers! Christa Hesteken & Anup Singh and to Session Chairs and Vice-Chairs Many thanks also to the companies who serve as friends and benefactors to the AES: BD Diagnostics Bio-Rad Labs CBS Scientific Decodon GmbH GE Healthcare Kendrick Labs Ludesi
	TM Squires: Asymmetric Flows Over Symmetric Surfaces (8:30)	R Qiao: Structure and Charging of Electrical Double Layers at Large Voltages (8:30)	A Paulus: Comparison of High Abundance Protein Depletion Techniques (8:30)	R Bharadwaj: Microfluidics Meets Bioenergy: Challenges and Opportunities (8:30)	
	JJ Simhadri: Gel Morphology and Separation in Nanocomposite Gels (8:50)	LD Menard Jr.: DNA Transport in Focused Beam-Milled Nanofluidic Devices (8:50)	E Dratz: Differential Covalent Labeling of Proteins for 2D & 1D Gel Analysis (8:50)	J Park: Microfluidics Enabled Co-Cultivation of Compartmentalized Human Microbiota (8:50)	
	GJ Sommer: Separation of Proteins Using Pore Limit Electrophoresis (9:10)	S Senapati: Electrokinetic Nanocolloid Platform for Molecular Sensing (9:10)	GB Smejkal: "Freeze Frames" of Cellular Processes by Thermal Stabilization (9:10)	ES Park: Microfluidic Migration Assay for Single-Cell Tracking in Gradient Fields (9:10)	
	JE Butler: Transverse Polyelectrolyte Migration by Electrophoresis and Pressure (9:30)	AS Khair: Tunable Voltage-Gated Nanochannel for Electrokinetic Preconcentration (9:30)	N Kendrick: Optimization of 2D Gel Transblotting of Complex Protein Mixtures (9:30)	J Wang: Total Internal Reflection Fluorescence Flow Cytometry (9:30)	
	EO Elele: Electrical Conductivity of Surfactant Solutions with Added Electrolytes (9:50)	X Cheng: Electro-spray Nanocolloid Assay for Rapid Biomarker Detection (9:50)	YK Kim: Acid-Degradable PAGE for Isolation of Intact Proteins (9:50)	SG Achanta: Environmental Stimuli towards Oxygen Gradient with Integrated O2 Sensors (9:50)	
	ST Chang: Ionic Liquid Effects - Microfluidic Electrophoresis of Phenolic Acids (10:10)	JJ Simhadri: Material Morphology Effect on Electrophoresis of Bio-Molecules (10:10)	R Baliban: De Novo Untargeted Post-Translational Modification Prediction (10:10)	C Church: Cell Focusing in a Serpentine Microchannel with Insulative Dielectrophoresis (10:10)	
CF Ivory: Electrofocusing Small Organic Ions (10:30)	RJ Meagher: Microscale 2-Stage Liquid-Liquid Extraction for Protein Purification (10:30)	R Sue: Detecting Low Abundance Proteins in Skinned Cardiac Myofibrils (10:30)	N Chetwani: Mass Spectrometry of Biomolecules Using AC Electro-spray Ionization (10:30)		
12:30 pm to 3:00 pm	#72 - Advances In Electrokinetics and Electrophoresis - Particles and Biomolecules (T3001) <i>Chairs: Blanca Lapizco; Rafael Davalos</i>	#240 - BioMEMS and Microfluidics: Cell & Biomolecule Analysis (T3002) <i>Chairs: Rui Qiao; Huanchun Cui</i>	#391 - BioMEMS and Microfluidics: Biomedical Diagnostics I (T3009) <i>Chairs: Adrienne Minerick; Xuanhong Cheng</i>	Tuesday: The Poster Reception will be held in the poster area from 3:00 to 6:00 pm. This year's poster session will include judging by 3 members of the AES Council for awards of \$100 for First Place, \$50 for Second Place and \$25 for Honorable Mention for AES student members. Wednesday: The AES Business Meeting will be held on Wednesday at 6:00pm. Volunteer for the AES council or a committee to help the society decide on its future course. Contact Victor Ugaz, President, for more information. ugaz@tamu.edu The AES Banquet will be held at the Ristorante Volare in the Gaylord Hotel at 7:30pm. Delicious choices of appetizer, entrée and dessert are included along with a glass of wine at dinner. The cost is \$50 payable either to AICHE at registration or at the door.	
	RC Gallo-Villanueva: Insulator-Based DC Dielectrophoresis for DNA Concentration (12:30)	A Gencoglu: Visualizing the Formation of Natural pH Gradients within Microchannels (12:30)	S Basuray: Mismatch-Discriminating Carbon Nanotube EC DNA Sensor (12:30)		
	M Sano: Direct Control of Biological Assembly Using Electrokinetic Forces (12:48)	GJ Sommer: Purification with Microscale Isoelectric Fractionation Membrane (12:48)	HS Zhou: Capturing and Detection in a Magnetic Nanoparticle Biosystem (12:50)		
	J Zhu: Electrokinetic Manipulations of Micro-particles in Curved Microchannels (1:06)	CN Hestekin: Rapid and Sensitive Detection of Drug Resistant Tuberculosis Mutations (1:06)	S Shojaei-Zadeh: Microfluidic Obstacle Course to Array Microbeads & Liposomes (1:10)		
	R Martinez-Duarte: A Novel Approach to Dielectrophoresis Using Carbon Electrodes (1:24)	N Gujarati: Magnifying Differences in Cross Over Frequency of Bacteria (1:24)	J Tice: Electrostatically Actuated Microvalves for Biological Microsystems (1:30)		
	B Cetin: Continuous Particle Separation Via AC-Dielectrophoresis (1:42)	N Bao: Microfluidic Electroperative Flow Cytometry of Single-Cell Biomechanics (1:42)	NS Lynn: Fmole Detection for Immunoassays Using Controlled Evaporation (1:50)		
	SJ Williams: Colloidal Concentration and Patterning with Optical AC Electrokinetics (2:00)	H Moncada-Hernandez: Dielectrophoretic Fractionation of a Mixture of Bacteria and Yeast (2:00)	J Wang: Nucleocytoplasmic Trafficking Studied by Microfluidic Flow Cytometry (2:10)		
N Yanagisawa: Electrokinetic Pressure-Generation at Microchannel Intersections (2:18)	H Shafiee: Contactless Dielectrophoresis for Sample Concentration (2:18)	R Dylla-Spears: Single-Molecule Target Sequence Detection Using Extensional Flow (2:30)			
S Bhattacharya: Dielectrophoretic Separation of Nanoparticle Bacterial Cells (2:36)	ES Park: Microfluidic Chamber Array for Continuously-Perfused Cell Culture (2:36)				
3:15 pm to 5:45 pm	#141 - DNA Analysis in Microfluidic & Nanofluidic Devices (T3004) <i>Chairs: Kevin Dorfman; Xiangchun Xuan</i>	#306 - Electrokinetic Behavior of Micro & Nanoparticles: Fundamentals & Applications (T3005) <i>Chair: Shramik Sengupta</i>	#441 - BioMEMS and Microfluidics: Biomedical Diagnostics II (T3007) <i>Chairs: Adrienne Minerick; Xuanhong Cheng</i>	The American Electrophoresis Society Contact Matt Hoelter, Executive Director 1202 Ann St Madison, WI 53713 Tel: 608-258-1565 Fax: 608-258-1569 matt-aes@tds.net www.aesociety.org	
	JA Coyne: Free-Solution Conj. Electrophoresis DNA Sequencing of >250 Bases (3:15)	G Yossifon: Impedance Spectroscopy of Nanocolloid-Nanochannel Electrokinetics (3:15)	ZR Gagnon: Integrated AC Electrokinetic Microdevices (3:15)		
	RJ Meagher: Nanoporous Membrane for DNA Preconcentration & Electrophoresis (3:33)	LJ Tribby: Diffusion of CdSe Nanocrystals through Nanochannels (3:33)	LD Garza-Garcia: Dielectrophoretic Manipulation of Liver Cancer Cells (3:33)		
	N Shi: Nanoporous Gel Morphology and Entropic Trapping (3:51)	S Bhattacharya: Electrophoretic Transport of Nucleic Acids through Nano Structures (3:51)	SK Srivastava: DC Dielectrophoresis: Separation of Fluorescent Polystyrene Particles (3:51)		
	DW Trahan: DNA Collisions with Polarizable Posts (4:09)	B Dan: Dielectrophoresis and 1D Assembly in Colloidal SWNT Suspensions (4:09)	R Martinez-Duarte: Integration of Dielectrophoresis On a CD-Like Microfluidics Platform (4:09)		
	DM Stein: Tailoring DNA Dynamics Across a Nanotopography (4:27)	HE Cardenas: Corrosion Mitigation in Concrete by Electrokinetic Nanoparticle Tmt (4:27)	RS Kuczynski: Dielectrophoretic Chip for Diagnosing Microbial Infections of Blood (4:27)		
	OL Hemminger: Electrokinetically Driven DNA Dynamics in Nanochannel/Microwell Array (4:45)	H Lee: Pressure Measurement Using Nanoparticle Suspension Volume-Displa. (4:45)	KM Leonard: Dielectrophoretic Responses of Human Erythrocytes (4:45)		
T Geng: DNA Adsorption On Silica Beads in an Electrically Actuated Microdevice (5:03)	J Baylon-Cardiel: Modeling Dielectrophoretic Traps in Cylindrical Structure Arrays (5:03)	BR Schudel: Microfluidic Chips for Multiplexed Viral DNA Detection (5:03)			
ST Chang: Programmable Microfluidic Materials with Controlled Shape & Color (5:21)	J Nieto: Dielectrophoresis of Particles in Serpentine Channels (5:21)	X Wang: A Microfluidic System for Fiber Fluorescence in Situ Hybridization (5:21)			