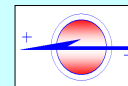
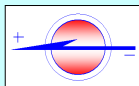


# American Electrophoresis Society Program Grid

Annual Meeting, Salt Lake City, UT, November 7 – 10, 2010

Hilton Salt Lake City Center (Salon III)



	Mondav. November 8	Tuesdav. November 9	Wednesdav November 10			
8:30 am to 11:00 am Session	<b>#5 - Advances In Electrokinetics and Electrophoresis - Fundamentals (T3007)</b> <b>Chairs: Rajiv Bharadwaj; Tarun Khurana</b> N Laachi   DNA Electrophoresis in Inverse Opals (8:30) RC Gallo-Villanueva   Microalgae Viability in Insulator-Based Dielectrophoresis (8:45) DC Pozzo   Engineering Protein Electrophoresis through Surfactant Nanostructure Design (9:00) A Gencoglu   Investigation of Natural pH Gradient Formation within Microchannels (9:15) PG Erlandsson   Ion-Electron Transducing Electrodes for Electroosmotic Micropumps (9:30) JA Pascal   Electrical Field Flow Fractionation (EFFF) Separator with Couette Flow (9:45) EV Dydek   Super-Limiting Current in Porous Media (10:00) TF Kinde   A Microfluidic Platform for Quantitation of Biological Mixtures (10:15) JS Paustian   An Induced-Charge Electro-Osmosis Micropump (10:30) JJ Simhadri   Effect of Channel Morphology for Electrophoresis of Bio-Molecules (10:45)	<b>#198 - Advances In Proteomics: New Technologies (T3000)</b> <b>Chairs: Tom Berkelman; Phil Beckett</b> A Posch   Subcellular Fractionation in a Fluidic Microsystem by Dielectrophoresis (8:30) A Chandrasekaran   Microscale Cell-Free Expression and Activity Screening of Cellulases (8:51) R Baliban   A Novel Approach for Modified Protein Identification (9:12) N Kendrick   Phosphorylated Protein Standards for 2D Gel Western Blotting (9:33) R Westermeier   New Developments in the Gel-Based Proteomics Workflow (9:54) E Pryor   Separation of Amyloid Proteins Via Capillary Electrophoresis (10:15) GB Smejkal   Isolation of Proteins From the Oligo-Miocene Epoch 30-40 Million Years Ago (10:36)	<b>#415 - Nanoscale Electrokinetics (T3002)</b> <b>Chair: Debashis Dutta</b> CL Wirth   Imaging Amperometry: Single Particle Experiments and Theory (8:30) JY Sen   Multiple Measurements On Single DNA Molecules in Nanopore Sensors (8:48) K Zhou   Nanopore Sensing and Characterization of Hepatitis B Viral Capsids (9:06) HW Lau   Applications of Nanoparticle Organic Hybrid Materials in DNA Separation (9:24) AS Khair   Electrokinetic Pre-Concentration in a Voltage Gated Nanochannel (9:42) V Froude   Dielectrophoresis and AC-Field Induced Encapsulate Release of Micelles (10:00) J Baylon-Cardiel   Microparticle Manipulation by Insulator-Based Dielectrophoresis (10:18) JJ Simhadri   Effect of Capillary Morphology On Electrokinetic Cell Design (10:36)	<b>Thank You!</b>  <b>Many thanks to our meeting organizers!</b>  <b>Kevin Dorfman &amp; Shramik Sengupta and to all Session Chairs &amp; Vice-Chairs</b>		
	12:30 pm to 3:00 pm	<b>#96 - Fundamentals of Electrokinetic Flows: Novel Applications and Ionic Fluxes at Interfaces (T3001)</b> <b>Chairs: Jonathan D. Posner; Aditya S. Khair</b> A Mani   Desalination Shocks in Microstructures (12:30) S Basuray   Asymmetric Electrophoresis and Warburg Impedance Across Nanoslots (12:50) CF Ivory   Electrokinetic Flows in Gradient Monoliths (1:06) S Ghosal   DNA Electrophoresis through Nanopores (1:22) R Kekre   Electrophoretic Mobility of Polyelectrolytes in Uniform Shear Flow (1:38) G Azadi   Protein-Surfactant Structure for High Resolution Microchip Electrophoresis (1:54) CL Wirth   2D Assembly of Colloid Particles on an Electrode (2:10) A Sen   Chemo and Phototactic Nano/Microbots (2:26) G Vidal   Guided Motion of Self-Propelled Magnetic Colloidal Particles (2:42)	<b>#258 - Biomedical Diagnostics I (T3008)</b> <b>Chair: Adam Woolley</b> GA Liddiard   Scalable Disposable Microfluidic Sample Handling Device (12:30) MA Johnson   A Fully Automated Microfluidic Platform for Nucleic Acid Extraction (12:48) TN Chiesi   Microfluidic Mars Organic Analyzer for Detection of Organic Biomarkers (1:06) AC Jernigan   Detection of Rare Variants of Type 2 Diabetes by CE-SSCP (1:24) KB Neeves   Microfluidic Flow Assays for Diagnosing Bleeding and Thrombotic Disorders (1:42) S Senapati   Electrochemical Biomolecule Sensing by Carbon Nanotubes (2:00) KM Leonard   Response of Human Erythrocytes to AC Dielectrophoretic Stimulus (2:18) SK Srivastava   Insulator Based Dielectrophoresis: Dependence of Erythrocyte Antigens (2:36)	<b>#462 - DNA Analysis in Microfluidic and Nanofluidic Devices (T3003)</b> <b>Chair: Anubhav Tripathi</b> CC Hsieh   Electrophoretic Stretching of DNA in a Microcontraction (12:30) CM Edmonds   DNA Translocation through Nanopores Under Time-Varying Electric Fields (12:45) H Liu   Polyelectrolyte Conformational Dynamics Under An AC Electric Field (1:00) T Niedringhaus   Effect of Polyacrylamide Chain Orientation on Peak Width in DNA Sequencing (1:15) RJ Meagher   Electrophoretic Concentration of DNA at Nanoporous Polymer Membranes (1:30) J Ou   Long DNA Separation Using a Sparse Micropost Array (1:45) J Wu   DNA Separation and Sequencing at a Stretch (2:00) N Shi   Exploiting the Entropic Trapping Regime for Enhanced Separations (2:15) T Geng   Microfluidic Native Chromatin Immunoprecipitation Assay (2:30) G Wang   Far-Field Optical Nanoscopy for Nanofluidics (2:45)	<b>General Announcements</b>  <b>Sunday Workshops (Room 252 A/B)</b> <b>S5: AES Workshop Part I (9:00 AM to 12:00 PM) - Electrokinetic Transport in Microfluidic Devices (Registration fee includes S6-AES Workshop Part II). Member rate is \$249. Student and Post-doc discounts are available via AICHE Customer Service at 800-242-4363 or 203-702-7660 (outside of U.S.).</b>  <b>S6: AES Workshop Part II (1:00 PM to 4:00 PM) - Microscale Electrokinetics with COMSOL. Member rate is \$75 if this course is not taken in conjunction with Part I. A light lunch will be served between workshops.</b>	
		3:15 pm to 5:45 pm	<b>#166 - Plenary Session of the American Electrophoresis Society (T3005)</b> <b>Chairs: Kevin Dorfman; Shramik Sengupta</b> JD Posner   Electrokinetic Locomotion by Reaction Induced Charge (Auto-Electrophoresis) (3:15) WD Ristenpart   Non-Coalescence of Oppositely Charged Drops (3:45) TM Squires   Ion Conservation and its Consequences for Electro-Osmosis and Electrophoresis (3:15) HC Chang   A New Quantitative Molecular Detection Platform for Field Applications (4:45) AK Singh   Studying Host-Pathogen Interactions with Single-Cell Resolution (5:15)	<b>#314 - Biomedical Diagnostics II (T3009)</b> <b>Chairs: Bruce Gale; Adam Woolley</b> MA Johnson   Selective RNA or DNA Extraction From Various Raw Biological Samples (3:15) Y Zhan   One-Step Extraction of Subcellular Proteins From Eukaryotic Cells (3:31) TN Chiesi   Electrophoresis of Organic Biomarkers in the Mars Organic Analyzer (3:47) GA Liddiard   Nucleic Acid Filter with Integrated Demultiplexing and Multiplexing (4:03) RJ Meagher   Chip-Based Identification of Bacteria From the Human Microbiome (4:19) HJ Sant   Microfluidic Serotype Identification of Foot and Mouth Disease Virus (4:35) VM Arremsetty   Asymmetrical Cross-Flow Based Split Thin Cell Fractionation (4:51) E Liddiard   Measurement of Muscle Force in C. Elegans Worm Using Microfluidics (5:07) MA Johnson   Masked Corona Discharge for Selective PDMS Bonding (5:23)	<b>#535 - Electrokinetic Behavior of Microparticles and Nanoparticles: Fundamentals and Applications (T3004)</b> <b>Chairs: Blanca Lapizco-Encinas; Rafael Davalos</b> RR Chintakuntla   Entrapment of Human Leukemia Cells Using Contactless Dielectrophoresis (3:15) JD Posner   Electrokinetic Vortices and Traveling Waves in Non-Dilute Colloidal Dispersions (3:36) LA Holland   Crossover Frequency of Polystyrene Particles in Dielectrophoresis (3:57) AA Kayani   Dielectrophoretic Manipulation of Silica Nanoparticles in Optofluidics (4:18) H Moncada-Hernández   Dielectrophoretic Manipulation of Microorganisms in Insulator Arrays (4:39) JS Park   Microstructure and Pattern Formation in Suspensions of Polarizable Spheres (5:00) ZR Gagnon   Dielectrophoresis at Conductive Liquid Interfaces (5:21)	<b>Many thanks also to companies sponsoring the AES!</b>  <b>Bio-Rad Labs</b> <b>CBS Scientific</b> <b>DECODON GmbH</b> <b>GE Healthcare</b> <b>LabSmith</b> <b>Kendrick Labs</b>
			<b>#166 - Plenary Session of the American Electrophoresis Society (T3005)</b> <b>Chairs: Kevin Dorfman; Shramik Sengupta</b> JD Posner   Electrokinetic Locomotion by Reaction Induced Charge (Auto-Electrophoresis) (3:15) WD Ristenpart   Non-Coalescence of Oppositely Charged Drops (3:45) TM Squires   Ion Conservation and its Consequences for Electro-Osmosis and Electrophoresis (3:15) HC Chang   A New Quantitative Molecular Detection Platform for Field Applications (4:45) AK Singh   Studying Host-Pathogen Interactions with Single-Cell Resolution (5:15)	<b>#314 - Biomedical Diagnostics II (T3009)</b> <b>Chairs: Bruce Gale; Adam Woolley</b> MA Johnson   Selective RNA or DNA Extraction From Various Raw Biological Samples (3:15) Y Zhan   One-Step Extraction of Subcellular Proteins From Eukaryotic Cells (3:31) TN Chiesi   Electrophoresis of Organic Biomarkers in the Mars Organic Analyzer (3:47) GA Liddiard   Nucleic Acid Filter with Integrated Demultiplexing and Multiplexing (4:03) RJ Meagher   Chip-Based Identification of Bacteria From the Human Microbiome (4:19) HJ Sant   Microfluidic Serotype Identification of Foot and Mouth Disease Virus (4:35) VM Arremsetty   Asymmetrical Cross-Flow Based Split Thin Cell Fractionation (4:51) E Liddiard   Measurement of Muscle Force in C. Elegans Worm Using Microfluidics (5:07) MA Johnson   Masked Corona Discharge for Selective PDMS Bonding (5:23)	<b>#535 - Electrokinetic Behavior of Microparticles and Nanoparticles: Fundamentals and Applications (T3004)</b> <b>Chairs: Blanca Lapizco-Encinas; Rafael Davalos</b> RR Chintakuntla   Entrapment of Human Leukemia Cells Using Contactless Dielectrophoresis (3:15) JD Posner   Electrokinetic Vortices and Traveling Waves in Non-Dilute Colloidal Dispersions (3:36) LA Holland   Crossover Frequency of Polystyrene Particles in Dielectrophoresis (3:57) AA Kayani   Dielectrophoretic Manipulation of Silica Nanoparticles in Optofluidics (4:18) H Moncada-Hernández   Dielectrophoretic Manipulation of Microorganisms in Insulator Arrays (4:39) JS Park   Microstructure and Pattern Formation in Suspensions of Polarizable Spheres (5:00) ZR Gagnon   Dielectrophoresis at Conductive Liquid Interfaces (5:21)	<b>Our strong meetings would not be possible without help from these friends and supporters.</b>  <b>The American Electrophoresis Society</b> <b>Contact Matt Hoelter, Executive Director</b> <b>1202 Ann St</b> <b>Madison, WI 53713</b> <b>Tel: 608-258-1565</b> <b>Fax: 608-258-1569</b> <b>matt-aes@tds.net</b>
			<b>#166 - Plenary Session of the American Electrophoresis Society (T3005)</b> <b>Chairs: Kevin Dorfman; Shramik Sengupta</b> JD Posner   Electrokinetic Locomotion by Reaction Induced Charge (Auto-Electrophoresis) (3:15) WD Ristenpart   Non-Coalescence of Oppositely Charged Drops (3:45) TM Squires   Ion Conservation and its Consequences for Electro-Osmosis and Electrophoresis (3:15) HC Chang   A New Quantitative Molecular Detection Platform for Field Applications (4:45) AK Singh   Studying Host-Pathogen Interactions with Single-Cell Resolution (5:15)	<b>#314 - Biomedical Diagnostics II (T3009)</b> <b>Chairs: Bruce Gale; Adam Woolley</b> MA Johnson   Selective RNA or DNA Extraction From Various Raw Biological Samples (3:15) Y Zhan   One-Step Extraction of Subcellular Proteins From Eukaryotic Cells (3:31) TN Chiesi   Electrophoresis of Organic Biomarkers in the Mars Organic Analyzer (3:47) GA Liddiard   Nucleic Acid Filter with Integrated Demultiplexing and Multiplexing (4:03) RJ Meagher   Chip-Based Identification of Bacteria From the Human Microbiome (4:19) HJ Sant   Microfluidic Serotype Identification of Foot and Mouth Disease Virus (4:35) VM Arremsetty   Asymmetrical Cross-Flow Based Split Thin Cell Fractionation (4:51) E Liddiard   Measurement of Muscle Force in C. Elegans Worm Using Microfluidics (5:07) MA Johnson   Masked Corona Discharge for Selective PDMS Bonding (5:23)	<b>#535 - Electrokinetic Behavior of Microparticles and Nanoparticles: Fundamentals and Applications (T3004)</b> <b>Chairs: Blanca Lapizco-Encinas; Rafael Davalos</b> RR Chintakuntla   Entrapment of Human Leukemia Cells Using Contactless Dielectrophoresis (3:15) JD Posner   Electrokinetic Vortices and Traveling Waves in Non-Dilute Colloidal Dispersions (3:36) LA Holland   Crossover Frequency of Polystyrene Particles in Dielectrophoresis (3:57) AA Kayani   Dielectrophoretic Manipulation of Silica Nanoparticles in Optofluidics (4:18) H Moncada-Hernández   Dielectrophoretic Manipulation of Microorganisms in Insulator Arrays (4:39) JS Park   Microstructure and Pattern Formation in Suspensions of Polarizable Spheres (5:00) ZR Gagnon   Dielectrophoresis at Conductive Liquid Interfaces (5:21)	<b>Want to get involved with AES Programming?</b> Attend the business meeting and volunteer by contacting our 2011 organizers: Blanca Lapizco (blapizco@investav.mx) and Zach Gagnon (zgagnon1@hmi.edu).  <b>Wednesday: AES Banquet at 7:30pm!</b> The AES Banquet will take place at Bucca de Bepe. The cost is \$50 payable either to AICHE at registration or at the door.