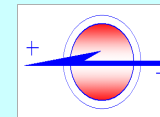


American Electrophoresis Society Program Grid

Annual Meeting 2011, Minneapolis MN , October 16-19, 2011



		Monday, October 17		Tuesday, October 18		Wednesday, October 19		General Announcements		
		Room L100 D		Room L100 D		Room L100 E		Room L100 D		
		(#6) - T3002 Advances In Electrokinetics and Electrophoresis - Fundamentals		#(220) - T3004 Fundamentals of Electrokinetic Flows: Novel Applications and Ionic Fluxes at Interfaces		(#237) - T3009 Microfluidics - Detection		(#424) - T3010 Advances In Electrophoretic Protein Separation and Analysis		
		Chairs: Yolanda Fintschenko and Sumita Pennathur		Chairs: Christa N. Hestekin and Jessica Houston		Chairs: Guiren Wang and Zdenek Slouka		Chairs: Tom Berkelman and Phil Beckett		
8:30 am to 11:00 am	V. M. Ugaz	Stochastic Resonance Enhances DNA Transport In the Entropic Trapping (8:30)	M. Pribyl	Kinetic Mechanism of Electrochemical Reactions In a Microfluidic Cell (8:30)	Y. Wang	A Hybrid Nanoscale Biosensing Platform Based On Dielectrophoresis and (8:30)	E. Pryor	The Use of Microchannel Electrophoresis to Understand Amyloid Aggregation (8:30)	Sunday Workshops Sunday October 16 - AES Workshop 1 "2-D Electrophoresis" (1:00 PM to 4:00 PM) AES Workshop 2 "Microscale Electrophoresis with COMSOL" (1:00 PM to 4:00 PM). See AES Webpage for details http://www.aesociety.org/meetings/2011/	Many thanks to our meeting organizers! Blanca H. Lapizco-Encinas & Zachary Gagnon and to all Session Chairs & Vice Chairs AES AWARD session in honor of Kelvin H. Lee , Wednesday October 19, Room 101 E, 3:15 to 5:45 PM. The 2011 Awardees are: - Professor Kelvin H. Lee , Chemical Engineering, University of Delaware, KHL@udel.edu - Dr. Nancy Kendrick , Kendrick Laboratories, Inc, nancy@kendricklabs.com - Professor Larry Grossman , School of Medicine, Wayne State University l.grossman@wayne.edu
	B. Khusid	Accumulation of Air Bubbles In Field Driven Oscillations of a Droplet (8:48)	A. S. Belyaev	Effect of the Debye Screening Parameter and Electrolyte Valence On the (8:48)	Z. Slouka	Mechanistic Study of Biosensing Using Ion Selective Membranes/Gels (8:51)	A. Ros	Insulator-Based Dielectrophoresis Applied to Immunoglobulin G and Bovine Serum (8:51)		
	C. L. Wirth	Probing the Basset Force Acting On a Particle Undergoing AC (9:06)	J. A. Pascal	Effect of Morphology On Optimal Separation Times In Nanocomposite Polymer (9:06)	R. C. Gallo-Villanueva	Dielectrophoretic Separation of Particles In a Multi-Section Device (9:33)	R. Baliban	PILOT_PROTEIN: A High-Throughput Method for In Silico Discovery of Peptides, Proteins (9:12)		
	X. Xuan	Joule Heating Effects On Fluid and Particle Transport In Insulator-Based DEP (9:24)	J. J. Simhadri	Role of Material Morphology On Electrophoresis of Bio-Molecules (9:24)	G. Wang	Dielectrophoretic Cell Sorters for High Purity and Throughput (9:30)	P. A. DiMaggio Jr	A Multi-Dimensional Approach for Comprehensive LC/MS/MS Identification and Quantitation o (9:33)		
	J. W. Thompson	Impact of Material Morphology On Bioseparations In Nanocomposite (9:42)	A. Mani	Desalination Shocks In Cross Flows (9:42)	B. Khusid	Dielectrophoretic Filter for Engine Oil (9:54)	T. Berkelman	Fractionation of Complex Peptide Mixtures by IEF: Comparison of off-Gel with In-Gel (9:54)		
	A. M. Drews	AC Electrohydrodynamic Flows In Flame Plasmas (10:00)	D. Deng	Observation of Surface-Charge-Induced Overlimiting Current In Porous (10:00)	A. Gencoglu	pH Gradient Formation In An Insulator-Based DEP Device Used In Protein (10:15)	N. Kendrick	Identification of Tyrosine Kinases and Their Substrates In Human Tumor Samples by 2D (10:15)		
	S. Pennathur	Determining Zeta Potential Through the Solution Displacement Method (10:18)	J. Zhu	Electrokinetic Particle Separation by Charge In Spiral Microchannels (10:18)	P. Sides	Real-Time Detection of Nanoparticle Deposition by Measurement of Zeta (10:36)	F. Jahnke	The Charge of Green Fluorescent Protein, and Its Effect On Advanced Electrophoretic (10:36)		
	H. Moncada-Hernandez	Dielectrophoretic Assessment of Microparticle Dielectric Properties (10:36)	S. W. Joo	Field Effect Control of DNA Nanoparticle Electrokinetic Translocation (10:36)						
	12:30 pm to 3:00 pm	Room L100 D		Room L100 D		Room L100 E		Room L100 D		
#(101) - T3003 Microfluidics: Bioanalytical Applications		#(320) - T3006 Nanoscale Electrokinetics		#(276) - T3005 Biomedical Diagnostics		#(526) - T3011 Electroporation, Electrophysiology and Cell Electrokinetics				
Chairs: Edgar D. Goluch and Adam R. Hall		Chair: Aditya S. Khair and Petia M. Vlahovska		Chair: Soumya K. Srivastava and Adrienne Minerick		Chairs: Rafael V. Davalos and Stuart J. Williams				
D. W. Olson		The Effect of Disorder On DNA Dynamics In Post Arrays During Electrophoresis (12:30)	M. Bazant	Nanoscale Electrokinetics of Correlated Electrolytes and Ionic Liquids (12:30)	R. Cao	Time-Resolved Measurement Used In Flow Cytometry (12:30)	A. Salmazadeh	High Throughput Marker-Free Cancer Cell Enrichment Technique Using cDEP (12:30)		
P. V. Jones		Bioparticle Capture In a Sawtooth Dielectrophoretic Microchannel (12:48)	D. Gillespie	Efficiently Accounting for Ion Correlations In Electrokinetic Nanofluidic (12:45)	S. Puttaswamy	Rapid Determination of the Minimum Inhibitory Concentrations (12:51)	M. B. Sano	Design, Development, and Analysis of a Multilayer Contactless DEP Device to Separate (12:48)		
H. Moncada-Hernandez		Effects of Cell Shape On Trapping Efficiency In Insulator-Based DEP (12:48)	B. J. Hinds	Highly Efficient Electrophoretic and Electroosmotic Flow Through (1:00)	K. M. Leonard	Dependence of Membrane Antigen Expression On Cross-Over (1:12)	N. Hu	Sterilization of Bacteria by Pulsed Electric Field On Microfluidic Chip (1:06)		
K. Rood		Two-Phase Microfluidic Flow System for the Isolation of Circulating Melanoma Cells (1:24)	H-C Chang	Rectification, Hysteresis and Oscillations In Nanoscale Electrokinetics (1:15)	R. C. Gallo-Villanueva	Dielectrophoretic Separation of Mouse Ovarian Surface Epithelium Cells (1:33)	W-C Liao	Nano electroporation and Its Comparison with Micro and Bulk Electroporation (1:24)		
M. Tanyeri		Multiplexed Detection of Viral Nucleic Acids In a Combinatorial Microfluidic (1:42)	L-J Cheng	Micro- pH Tuner and Its Applications Based On Field-Enhanced Water (1:30)	A. Melvin	Development and Characterization of Degron-Based Substrates Capable of E3 (1:54)	N. Hu	A 3D Bulk Microelectrode Array for High Throughput Cell Electroporation (1:42)		
R. L. Srinivas		Barcoded Microgel Particles and Scanner for Multiplexed Protein Detection (2:00)	P. Sides	Measurement of the Zeta Potential and Darcy Coefficient of Porous (1:45)	S. Senapati	Designing Ion Selective Membranes for Biosensing (2:15)	S. Rose	Developing a Method for the Isolation of Intact Viable Giant Mitochondria Utilizing d (2:00)		
T. A. Webster		Monitoring Pycocyanin Production by Bacteria Using Nanofluidic Electrochemical (2:18)	C. L. Wirth	Symmetry Breaking During AC Electrophoresis Normal to An (2:00)	A. D. Rojas	Dielectrophoretic Separation of Cancer Cells Based On Metastatic Stage(2:36)	C. Satori	Capillary Electrophoresis of Magnetically Enriched Autophagosomes (2:18)		
A. R. Hall		Scanning Helium Ion Microscope (HIM)-Milled Solid-State Nanopores (2:36)	J. Wang	Low-Frequency Dielectrophoretic Response of a Single Particle In (2:15)			C. R. Buie	High Sensitivity Insulator Based Dielectrophoretic Phenotyping of Bacteria (2:36)		
			O. Schnitzer	Electrokinetic Lift In Shear Flows (2:30)						
		E. Yariv	Streaming Potential Revisited (2:45)							
3:15 pm to 5:45 pm	Room 101 D		Room L100 D		Room L100 E		Room 101 E		Wednesday Oct 19: AES Banquet at 7:30pm! The AES Banquet will take place at Hell's Kitchen . The cost is \$50 payable either to AIChE at registration or at the door. During the banquet we will have a special talk "3M's Early History and Today" written by Donna Bangeon, given by Dr. Tom Hanschen	
	#(179) - T3001 Plenary Session of the American Electrophoresis Society		#(365) - T3008 DNA Analysis In Microfluidic and Nanofluidic Devices		#(366) - T3007 Electrokinetic Behavior of Microparticles and Nanoparticles: Fundamentals and Applications		#(565) - T3012 Award Session of the American Electrophoresis Society In Honor of Kelvin Lee			
	Chairs: Blanca H. Lapizco-Encinas and Zachary R. Gagnon		Chairs: Alexandra Ros and Nathan Swami		Chairs: Mark Hayes and Edgar A. Arriaga		Chairs: David E. Garfin and Blanca H. Lapizco-Encinas			
	E. B. Cummings	Diffusionless Particle Separation In Coherent Arrays of Flow Perturbors (3:15)	J. T. Del Bonis O'Donnell	Analysis of Single Nucleotide Polymorphisms (SNPs) by (3:15)	G. G. Wolken	Characterization of Membrane Potential of Individual Mitochondria by CE and IEF (3:15)	L. I. Grossman D. E. Garfin	History First Award Session of the American Electrophoresis Society (3:15)		
	J. G. Santiago	On-Chip Sample Preparation and Nucleic Acid Profiling Using Isoelectrophoresis (3:45)	J. W. Schneider	Rapid, Gel-Free Electrophoretic Separation of DNA Oligonucleotides Using (3:31)	A. S. Khair	Sedimentation of Charged Colloids In Strong Gravitational Fields (3:33)	K. H. Lee	The Importance of Electrophoresis In Protein Analysis: From Sandefjord and Wild Dunes (3:45)		
	L. Y. Yeo	Acoustically-Driven Microcentrifugation (4:15)	S-G Park	DNA Electrophoresis In a Nanofence Array (3:47)	C. F. Ivory	Size Exclusion Electrofocusing In Nanochannels (3:51)	K. N. Valente	Optimization of Sample Preparation for Two-Dimensional Protein Electrophoresis (4:15)		
	E. A. Arriaga	Subcellular Complexity, An Electrophoretic Perspective (4:45)	J. Butler	Saturation of the Cross-Stream Migration of DNA Driven by a Pressure Gradient a (4:03)	N. Wu	Directed Assembly of Colloidal Dimers Under Electric Field (4:09)	M. A. Burns	Control In Microfluidic Devices (4:45)		
	M. T. Bowser	Applications of Micro Free Flow Electrophoresis (5:15)	R. Martinez-Duarte	Concentration of DNA Using 3D Carbon-Electrode Dielectrophoresis (4:19)	S. J. Williams	Colloid Aggregation and Concentration Through Double Layer Polarization (4:27)	P. C. Wright	Effective Separations: The Key for Proteomics (5:15)		
			L. Gan	Insulator-Based Dielectrophoretic (IDEP) Manipulation of DNA Origami (4:35)	R. M. Rock	Ensemble Average TIRM: Theory and Application In Imaging Amperometry (4:45)				
			W-C Liao	Study of DNA Dynamics In Micro/Nanofluidic De-Wetting Free Surface Flows (4:51)	J. Wang	2-Dimensional Mapping of Dielectrophoresis-Free AC Electroosmotic Flow (5:03)				
			F. R. Phelan Jr	Entropophoresis of a Polymer Chain Confined In a Nanofluidic Staircase (5:07)	R. Sharma	Remote Powering and Steering of Self-Propelling Microcircuits by Modulated (5:21)				
			N. Swami	Nanofluidic Device Design for Ss-DNA and Protein Pre-Concentration In (5:23)						

Many thanks also to companies sponsoring the AES!
Bio-Rad Laboratories
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AES Plenary Session, Monday October 17th, Room 101 D, 3:15 to 5:45 PM.

This year, AES is teaming up with the journal ELECTROPHORESIS to publish a special proceedings issue. See <http://www.aesociety.org/meetings/2011/>

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