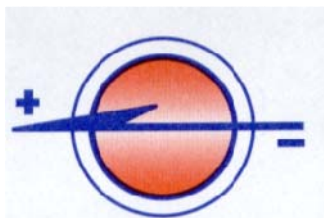


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# AES NEWSLETTER

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Many thanks to our supporters and friends for their generous contributions.

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**DECODON GmbH**  
**GE HealthCare**  
**Kendrick Labs, Inc**

Our traditionally strong meetings would simply not be possible without help from our supporters. Their donations are greatly appreciated.

Send news for the web page to Webmaster  
Adrienne Minerick  
[minerick@che.msstate.edu](mailto:minerick@che.msstate.edu)

Send news for the newsletter to Nancy Kendrick, NL Editor  
[nancy@kendricklabs.com](mailto:nancy@kendricklabs.com)

Contact Matt Hoelter  
AES Executive Director with questions about the society  
[matt-aes@tds.net](mailto:matt-aes@tds.net)

## The New AES Forums are here! [www.aesociety.org/aesforums](http://www.aesociety.org/aesforums)

The American Electrophoresis Society is launching a uniquely-tailored service for our members: Forum interaction. The AES has long been dedicated to promoting excellence across many disciplines, facilitating communication between our members worldwide, facilitating the training of scientists and students in electrophoresis and detection technologies, and facilitating peers training peers. The board believes that member interaction via this unique online communication forum will advance all of these goals. The secure-access online forums will also expand our member's abilities to connect with industrial and academic collaborators. Never before has such a resource been available to the electrophoresis and microfluidics community! The user-friendly interface enables seamless entry of information including uploading of images and documents. Information can be searched by category and keywords, for example to locate collaborators. Discussion boards will be available for the community as a whole to weigh in on important issues. Want more information? Login to [www.aesociety.org/aesforums](http://www.aesociety.org/aesforums) to upload a post, search for information, or start a discussion with existing authors. Questions and comments are welcome. Please email feedback to [minerick@mtu.edu](mailto:minerick@mtu.edu)

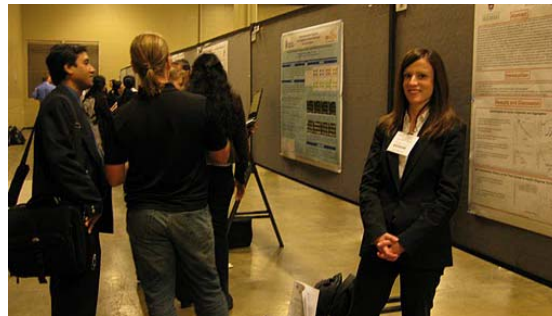
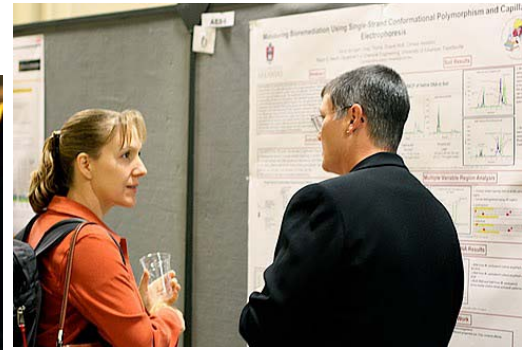
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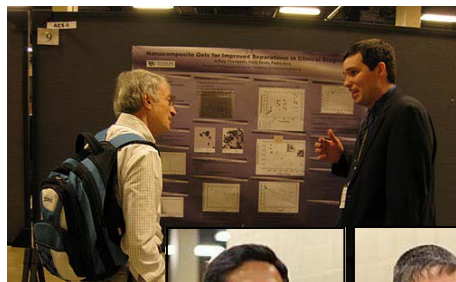
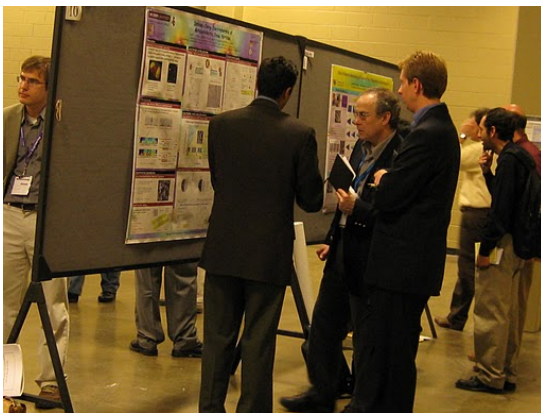
## 2009 Meeting Moments:



Gaylord Hotel



Poster presentations were intense!



Fred Strohl of Oak Ridge National Laboratory speaking on "Things You Don't Know About the Manhattan Project."



**Winners of the 2009 Poster Competition (left to right)**

**First Place: Sumit Gangwal**, North Carolina State University, Chemical and Biomolecular Engineering

**Second Place: Alice Jernigan**, University of Arkansas Chemical Engineering

**Third Place: Neha Gujarati**, University of Missouri-Columbia, Biological Engineering

**Honorable Mention: Phillip Jamison**, Mississippi State University, Chemical Engineering

**Judges:** Drs. Tom Berkelman (Bio-Rad Labs), Neil Ivory (Washington State University) and Victor Ugaz (Texas A&M University)

## Welcome to the New Council Members who took office in November 09

### Phil Beckett, New AES Secretary

My background is a strong knowledge and use of electrophoretic applications. I received a B.Sc in Biochemistry from Liverpool University (UK) before pursuing postgraduate studies in Plant Biochemistry at Lancaster University (UK) where I investigated pollution induced changes in protein expression and honed my skills on classical 2DE and the new IPG technology. I then moved into industry working for a pharmaceutical company (Evans Medical, Liverpool, UK) where I was involved with the development and characterization of a new recombinant vaccine against hepatitis B (and at the time invented the Beckett Blob a.k.a "The Western Smudge"). I then moved to Pharmacia Biotech as a technical support specialist for the electrophoresis product line and then 10 years ago moved to the US as an applications scientist to support the proteomics portfolio of products at GE Healthcare. Since my move to the States I have been involved with the society in some shape or form: at various times being a member, presenter, co-chair or a combination of these. I would like to help raise the profile of the society within the proteomics community and help promote further applications and development within the society.



Phil Beckett, Senior Scientist,  
Proteomics Applications  
GE Healthcare, Piscataway, NJ  
[Phil.Beckett@ge.com](mailto:Phil.Beckett@ge.com)

### Kevin Dorfman , New AES Councilor

I am presently an Assistant Professor in the Department of Chemical Engineering and Materials Science at the University of Minnesota. I received my PhD in Chemical Engineering from MIT and I was a postdoc with Jean-Louis Viovy at Institut Curie. My current research focuses primarily on DNA electrophoresis in microfabricated devices. I feel that the most important part of AES is the annual meeting. As a councilor, I am interested in raising the visibility of the AES with the chemical engineering community and broadening the participation in the AES topical sessions.



Kevin Dorfman, Assistant Professor  
University of Minnesota  
Chem Engineering & Materials Science  
Minneapolis, MN  
[dorfman@umn.edu](mailto:dorfman@umn.edu)

### Blanca Lapizco, New AES Councilor

I started focusing on miniaturization/microfluidics during my PhD stint at the University of Cincinnati, working on development of a micro-chromatograph. Upon graduating in 2003, I joined the Microfluidics Department at Sandia National Laboratories as a post-doctoral researcher, where I worked on insulator-

based dielectrophoresis (iDEP) for the concentration and separation of microbes from water. At Sandia I had the wonderful opportunity to work with Eric Cummings, one the inventors of iDEP. From 2005 to 2009 I was a professor of at Tecnológico de Monterrey, where I started a research group on microscale bio-separations. In Dec 2009 I joined CINVESTAV-Monterrey, a Government Research Center, where I am continuing our work in microfluidics and electrokinetics. Our main work has been focused on the development of electrokinetic techniques for the manipulation of bioparticles; we have worked with proteins, DNA, bacteria, yeast, microalgae and mammalian cells. Our objective is to develop electrokinetic-based microdevices that would answer the needs of many different applications. Some of these possible applications are: concentrating DNA for genomics, separating microalgae species for environmental applications, protein concentration and separation for biopharmaceuticals, etc.

I joined AES in 2008, and it has been a very positive experience to belong to this dynamic research community. My goals as Councilor include promoting research on electrokinetic techniques; to learn and inform the scientific community about the great potential of these methods for solving many separation challenges in biological applications.



Blanca Lapizco Encinas  
Senior Research Scientist  
Microscale Bioseparations Laboratory  
CINVESTAV-Monterrey  
[blapizco@cinvestav.mx](mailto:blapizco@cinvestav.mx)

### Shramik Sengupta, New AES Councilor

It is a pleasure to serve as a councilor, and co-chair of this year's annual meeting of the AES. I first presented my research at AES in 2004, when I was a graduate student at the University of Minnesota. During my subsequent years as a post-doc at the Center for Microfluidics and Medical Diagnostics at Notre Dame, and as an Assistant Professor of Biological Engineering at the University of Missouri, the annual meeting of the AES has served as a wonderful forum to present my work on the use of electrokinetic phenomena to isolate and detect targets of interests (primarily pathogens) to a discerning audience consisting of experts in various related areas and enthusiastic graduate students, and post-docs. It is my hope that this years meeting will, like the previous ones, will feature great new ideas, and foster more of them among the attendees.



Shramik Sengupta Assistant Professor  
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University of Missouri  
Columbia, MO  
[senguptas@missouri.edu](mailto:senguptas@missouri.edu)

## 2010 AES Meeting Sessions

### T3000 Advances in Proteomics: New Technologies

**Chair:** Tom Berkelman, Bio-Rad Laboratories, Hercules, CA Email: [Thomas\\_berkelman@bio-rad.com](mailto:Thomas_berkelman@bio-rad.com)

### T3001 Electrokinetic Flows: Fundamentals and Novel Applications

**Chair:** Jonathan Posner, Chemical Engineering, Arizona State University, Tempe, AZ Email: [jonathan.posner@asu.edu](mailto:jonathan.posner@asu.edu)  
**Co-Chair:** Aditya Khair, Chemical Engineering, University California-Santa Barbara Email: [akhair@engineering.ucsb.edu](mailto:akhair@engineering.ucsb.edu)

### T3002 Nanoscale Electrokinetics

**Chair:** Debashis Dutta, Chemistry, University of Wyoming, Laramie, WY Email: [ddytta@uwyo.edu](mailto:ddytta@uwyo.edu)

### T3003 DNA Analysis in Microfluidic and Nanofluidic Devices

**Chair:** Anubhav Tripathi, Brown University, Engineering Division, Providence, RI Email: [Anubhav\\_Tripathi@brown.edu](mailto:Anubhav_Tripathi@brown.edu)

### T3004 Electrokinetic Behavior of Micro and Nanoparticles: Fundamentals and Applications

**Chair:** Blanca Lapizco Encinas, Microscale Bioseparations Laboratory, Apocada Mexico Email: [blapizco@itesm.mx](mailto:blapizco@itesm.mx)  
**Co-Chair:** Rafael Davalos, Virginia Tech, Biomedical Engineering Science, Blacksburg, VA Email: [davalos@vt.edu](mailto:davalos@vt.edu)

### T3005 Plenary Session of the American Electrophoresis Society

**Chair:** Kevin Dorfman, Chemical Engineering and Materials Science, University of Minnesota, Minneapolis  
 Email: [dorfman@umn.edu](mailto:dorfman@umn.edu)

**Co-Chair:** Shramik Sengupta, Biological Engineering, University of Missouri, Columbia Email: [senguptas@missouri.edu](mailto:senguptas@missouri.edu)

### T3006 Poster Session

**Chair:** Victor Ugaz, Chemical Engineering, Texas A&M University, College Station, TX Email: [ugaz@tamu.edu](mailto:ugaz@tamu.edu)

### T3007 Advances in Electrokinetics and Electrophoresis: Fundamentals

**Chair:** Rajiv Bharadwaj, The Joint BioEnergy Institute, Emeryville, CA Email: [RBharadwaj@lbl.gov](mailto:RBharadwaj@lbl.gov)  
**Co-Chair:** Tarun Khurana, Illumina Inc, Hayward, CA Email: [tkhurana@illumina.com](mailto:tkhurana@illumina.com)

### T3008 Biomedical Diagnostics I

**Chair:** Adam Woolley, Chemistry & Biochemistry, Brigham Young University, Provo UT Email: [awoolley@chem.byu.edu](mailto:awoolley@chem.byu.edu)

### T3009 Biomedical Diagnostics II

**Chair:** Bruce Gale, Department of Mechanical Engineering, University of Utah, Salt Lake City Email: [bruce.gale@utah.edu](mailto:bruce.gale@utah.edu)

## Abstracts for talks are in. The 2010 meeting of the American Electrophoresis Society is taking shape!



We will again be holding the AES meeting concurrent with the annual meeting of the American Institute of Chemical Engineers (AIChE). The meeting will take place from November 7-12 in the Salt Palace Convention Center in Salt Lake City, UT. Note that late breaking work may be submitted as an abstract for the poster session until October 1! Poster abstracts are published in a separate booklet distributed at the meeting and then posted on the AES website. Please submit poster abstracts to either Victor Ugaz, the Poster Session Chair or to the meeting organizers below. Questions about the meeting as a whole should be directed to the organizers.



**Shramik Sengupta**  
 University of Missouri  
 Biological Engineering  
 Email: [senguptas@missouri.edu](mailto:senguptas@missouri.edu)



**Chair: Kevin Dorfman**  
 University of Minnesota  
 Chem Engineering & Material Science  
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AES 2010 Meeting Co-Chairs