



ESA Newsletter

Electrostatics Society of America - The Friendly Society

President's Message

The importance of electrostatic science and technology is growing in many applications, making this a great time to be involved. Persistent needs in power generation, mineral separation, copier technology, and microelectronics, together with discoveries and developments in MEMS fabrication, sensor development, nano-technology, biology, and medicine, open wonderful new opportunities. The ESA brings together workers from various disciplines to share expertise and advance electrostatics. Discussions are rich and valuable when individuals with different perspectives and experiences meet to share thoughts and insights.

The Proceedings of the ESA Annual Conference on Electrostatics, 2008 is available at <http://www.electrostatics.org>. For the first time, manuscripts submitted for presentation at our Annual Conference are available at no charge for anyone with internet access. Our readership now extends to all with internet access, be it at home or at a public venue such as a local library. I believe that having this information freely available will enable technical progress and encourage collaboration. Many of our colleagues are unable to travel and participate in our Annual Meetings. Having our complete Proceedings available enables people to be involved in our Annual Meeting "from a distance" and stay technically current. One vision of the future is to have the manuscripts as well as the presentations available, complete with the recorded audio. Would you find this valuable? Do you think that having a multi-media conference proceeding would encourage or discourage participation at our Annual Meeting? I invite your comments and feedback.

My term as ESA President ends this year. I am honored to have served for the last 3 years and I look forward to continuing to serve on our Executive Council. This is a challenging environment for universities, businesses, and professional organizations. Travel is more expensive. Businesses are struggling to evolve as new products displace current ones. Promising new technologies require substantial investment in time and money, as well as expensive infrastructure (fabs, laboratories) for development and commercialization. Businesses and government agencies must prioritize their investments in future technology.

In this turbulent environment, how can the ESA be most effective? How can we improve our Annual Meeting and encourage participation? The strength of the ESA springs from our members, contributors and colleagues. We are very open to your suggestions, input, feedback and recommendations for making the Electrostatics Society of America strong and relevant in the years to come. Please feel free to share your thoughts with the ESA Executive Council.

Thank-you for helping to make the ESA strong and successful.

*Kelly Robinson,
ESA President*

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|  | <h2 style="margin: 0;">ESA 2008 Registration Form</h2> <p style="margin: 0;">June 17-19, 2008 Ramada – Mall of America Near the Mall of America and both the MSP & HHH Airports Bloomington, Minnesota USA</p> | Mail or e-mail this form to: Albert E. Seaver 7861 Somerset Ct. Woodbury, MN 55125 USA E-mail: aseaver@electrostatics.us Tel: 651-735-6760 (See ESA website for this form.) |
|---|---|---|

| | | | |
|--------------|--------|----------------|------|
| Date: | | | |
| Name: | | Name on Badge: | |
| Affiliation: | | | |
| Address: | | | |
| City: | State: | | Zip: |
| Email: | | Phone: | |

CONFERENCE REGISTRATION FEES

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|---|---------------|--------|-----------|
| Full Conference registration fee – ESA Members Includes Welcome Reception, lunches, snacks at breaks, Wednesday evening cruise down the Mississippi and Thursday evening banquet. | by 5/18/08 | \$315 | |
| | after 5/18/08 | \$400 | \$ |
| Full Conference registration fee – Non-Members Includes all the above and a one year ESA membership. | by 5/18/08 | \$335 | |
| | after 5/18/08 | \$420 | \$ |
| Student Registration – requires student ID Includes a one year ESA membership + everything in the Full Conference registration. | | \$160 | \$ |
| Single Day Registration -- member or non-member Includes either Reception or lunch that day & snacks at breaks. Does not include the banquet | | \$175 | \$ |
| Extra Mississippi River Cruise Tickets | # | @ \$35 | \$ |
| Extra Welcome Reception Tickets | # | @ \$15 | \$ |
| Extra Banquet Tickets | # | @ \$40 | \$ |
| TOTAL | | | \$ |

CONFERENCE REGISTRATION PAYMENT METHOD

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| | I will pay on-line using Pay-Pal (www.electrostatics.org). |
| | I have enclosed an international money order or check in \$US drawn on a US bank, made out to “Electrostatics Society of America” |
| | I will pay at conference (sorry, no credit cards accepted) |
| Note: No matter which method of payment you choose, please either mail or e-mail this Registration Form to Al Seaver (addresses: see top right corner) by the registration due date to avail those rates. | |

HOTEL ACCOMMODATIONS

Reservations can be made at the Ramada MOA (Ramada Mall of America) hotel. The special ESA Room Rate is \$89.00/night (not included in conference registration). This special rate is available for June 15-21, 2008. Reservations must be made by May 27, 2008 to qualify, but reserve rooms early to guarantee availability.

Reserve on-line at: www.ramadamo.com Click on the “Reservations” tab then click on the button “Make a Group Reservation” and then enter ELECTROSTA to get the special ESA rate. (Why Group button? -- ESA is a Group)

Or Reserve by phone: Call: 952-854-3411, and mention “Electrostatics Society of America” for these rates.

ESA-2008 Annual Meeting

The proceedings for the Annual Meeting may be found at:

http://www.case.edu/cse/eche/ESA2008_Proceedings

Current Events

Solid-state cooling device harnesses corona discharge

Matthew Miller, Editor in Chief, EDN.com – EDN, 5/1/2008

Thorn Micro Technologies has demonstrated a small, silent, no-moving-parts cooling device that generates more airflow than mechanical fans four times its size while consuming less power and space. The 15Å~15Å~ 2-mm RSD5 creates a breeze of 2.4m/sec, outperforming the 1.7m/sec that a mechanical fan measuring 40Å~40Å~10 mm can produce, according to the company.

The product of six years of National Science Foundation-funded research, the technology nestles live wires within half-cylinder beds that the company carves into a nonconducting plate. Application of a voltage through the wires causes a corona discharge, creating a microscale plasma. Free ions in the plasma then migrate from the wires to the plate, displacing air molecules as they go and generating a sustained wind.

Thorn's innovation lies in the structure that channels the airflow effectively enough to cool a 25W chip with a device smaller than 1 cm³ without risk of sparks or arcing. In the company's current design, the contoured plate resides atop a heat sink, but plans call for integrating the technology directly onto ICs.

<http://www.edn.com/article/CA6553636.html?industryid=47042&nid=2432&rid=1258757318>



This device pushes air molecules around to create a cooling breeze for laptops and handheld gadgets.

ESA OFFICERS

President

Kelly Robinson, Electrostatic Applications, LLC

Vice President

Sheryl Barringer, Ohio State University

Executive Council

John Gagliardi, Rutgers University

Steve Cooper, Mystic Tan

Nathaniel Green, University of Bloomsburg

At this time, we have one nominated slate of candidates for this years election:

Slate of ESA Officers for 2008-2010:

President:

Rajeswari Sundararajan, Purdue Univ.

Vice President:

John Gagliardi, Rutgers Univ.

Executive Council

Sheryl Barringer, Ohio State Univ.

Steve Cooper, Mystic Tan, Inc.

Kelly Robinson, Electrostatic Applications, LLC

Calendar

✎ ESA-2008, June 17-19, 2008, Minneapolis, MN, USA
Contact: Al Seaver, Tel: 651-735-6760,

aseaver@electrostatics.us, or Daniel Lacks, Tel: 216-368-4238, daniel.lacks@case.edu, website:

<http://www.electrostatics.org>

✎ 16th Int'l. Conf. on Dielectric Liquids, June 30-July 4, 2008, Poitiers, France, Contact: H. Romat, Tel: 33-(0)5-49-49-69-31, icdl2008@lea.univ-poitiers.fr, (abstracts due Oct. 15, 2008), info at

<http://lea.sp2mi.univ-poitiers.fr/icdl/>

✎ 6th Conf. of the French Electrostatic Society, July 7-9, 2008, Gif-Sur Yvette, France, Contact: Philippe Molinie, Tel: 33-(0) 1-69-85-15-25, sfe2008@sup-elec.fr, (title due Dec. 15, 2007), website:

<http://www.supelec.fr/invi/sfe2008/Welcome.html>

✎ 11th Int'l. Conf. of Electrostatics, May 27-29, 2009, Valencia, Spain, Contact: Dr. Pedro Segovia, Tel: (+34) 96 136 66 70, pedro.llovera@ite.es, website: <http://electrostatics.ite.es> (abstracts due Feb. 29, 2008)

✎ ESA-2009, June 16-19, 2009, Boston, MA Contact: Mark Horenstein, Tel: 617-353-5437, mnh@bu.edu, website:

<http://www.electrostatics.org>

Electrostatics
Society of America



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ESA Information

ESA Home Page: <http://www.electrostatics.org>

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ESA-2008 Annual Meeting
June 17-19, 2008
Minneapolis, MN USA
Registration Form & Other Details Inside