



ESANewsletter

Electrostatics Society of America - The Friendly Society

ESA President's Message

It has been a while since the last ESA newsletter was sent out to our members. The ESA webpage records show that we had the last one in December 2019. We had some turbulent times with Covid, cancelled the Joint Conference in 2020. We managed to keep it together though, reconvening with a fully online ESA Annual Meeting in 2021. Special thanks for that effort and flawless organization go to Feng Lai, who was the General Chair and to Xuewei Zhang, who was the Technical Chair.

2022 brought leadership changes at the helm of the ESA. David Go stepped down from the President after serving an extended term. Our long-time Newsletter Editor, Mark Zaretsky, retired from that function. Two Executive Council Members, Shesha Jayaram and Poupak Mehrani also stepped down. Please join me in extending a big thank you and expressing gratitude for their service. They are still supporting our organization, but in different capacities.

The new slate of the ESA Officers and Council Members was approved on June 13, 2022, and starting July 1, 2022, we have Maciej Noras as the ESA President, Poupak Mehrani serving as the Vice-President, Monayem Mazumder is the Secretary and the Newsletter Editor, Steve Cooper is the Treasurer, Keith Forward and Xuewei Zhang share Webmaster duties. Our new Executive Council consists of Mike Arnold, James Chen, and Feng Lai.

2022 was also the year in which the ESA held a Joint Conference with the sister societies of France and Japan, and with the Electrostatic Processes Committee of the IAS/IEEE and the Electrostatic Committee of the Chinese Physical Society. That was a hybrid conference that marked 50 years of the Electrostatic Society of America. We had our anniversary shifted by two years due to the Covid pandemic, but we celebrated it properly (and responsibly).

Moving forward, the ESA leadership recognizes challenges facing us, and we will do what is needed to keep us strong and together. We have to maintain good communication with our members, so we have to bring the newsletter up to speed and our website up to more modern standards. We need your participation in the ESA annual conferences and educational activities. We need your feedback, opinions, and suggestions. We are, after all, calling ourselves a Friendly Society.

Please join us at the 2023 ESA Annual Meeting in Memphis, TN on June 25-29.



Report on 2022 Joint Conference on Electrostatics

The Electrostatic Society of America (ESA), the Institute of Electrostatics Japan (IEJ), la Société Française d'Electrostatique (SFE), the Electrostatic Processes Committee (EPC) of the IAS/IEEE and the Electrostatic Committee of the Chinese Physical Society (EC-CPS) organized a joint conference on June 12-15, 2022, in Charlotte, NC, USA. The meeting was held to celebrate the 50th anniversary of the ESA.

This was the first in-person meeting after the Covid pandemic. We also had an online participation option for those unable to travel. The conference was attended by 84 researchers from 16 countries, 51 of them joining in person and 33 were participating in the online mode.

We had four days of activities, filled with tutorials, technical presentations, poster sessions and demonstrations. The conferences started on Sunday June 12 with a set of tutorials on “Electrostatic Instruments and Measurements”, “Electrostatic Processes and Technologies”, and “Breakdown, Gas Discharges and Plasmas”.



Shesha Jayaram presenting a tutorial on "Breakdown, Gas Discharges and Plasmas" (a joint presentation with Akira Mizuno)



Each of the following days started with a keynote talk. On Monday we had John Foster from Univ. of Michigan discussing water treatment with plasmas, followed by Hak-Joon Kim from Korea Institute of Machinery and Metals talking about electrostatic precipitation on Tuesday. Wednesday invited talk featured Michael Mascagni from Florida State Univ. discussing stochastic computing electrostatics and applications.

The conference featured 13 technical sessions with presentations on a broad range of topics related to electrostatics. The combined poster and demonstration session on Monday night was a fun-filled activity; we had eight posters and six demos to play with and we took advantage of that. The demonstrations were provided by Steve Cooper, Vahid Ebadat, Richard Puig, Tom Ricciardelli, Kelly Robinson and Dave Swenson, who did that at no charge, volunteering their time and effort to enrich our meeting, providing fun and education.



Kelly Robinson presenting the operation of a Van de Graaf generator

On Wednesday June 15 we held a Conference Banquet, during which we had the ESA Awards and the Student Paper Awards presentations. We also reminisced about the 50 years history of the ESA and its people.

The ESA Awards were presented to the following recipients:

Shesha Jayaram - 2020 Distinguished Service Award and 2020 ESA Lifetime Achievement Award

Mark Zaretsky - 2020 ESA Lifetime Achievement Award

Akira Mizuno - 2021 ESA Lifetime Achievement Award



G rard Touchard - 2020 ESA Honorary Life Member Award

Kelly Robinson - 2020 ESA Honorary Life Member Award

Thiago Augusto de Lima Burgo - 2020 ESA Rising Star Award

James Chen - 2021 ESA Rising Star Award

Electrostatic Hall of Fame also gained two new members: Michael Faraday and John William Strutt, Lord Rayleigh.

The ESA also recognized Xuewei Zhang and Feng Lai with 2021 ESA Appreciation Awards.

27 students participated in the student presentation competition. Each student received an award comprised of a diploma and a monetary gratuity in the form of a gift card.



Student paper award recipients

The Conference Banquet concluded the formal part of the 2022 Joint Conference on Electrostatics. On Thursday June 16 the conference attendees had an opportunity to visit the UNC Charlotte Energy Production and Infrastructure Center.

Summing up, the conference was a very busy meeting, filled with interesting technical talks, educational presentations, and demos. It was an opportunity to meet face-to-face with old time friends, make new connections, have fun, and maybe learn something new. It was good to see the



excitement and good energy. We hope to see you all back in Memphis, TN, for the ESA Annual Meeting in 2023.



UNC Charlotte EPIC tour - Smart Grid laboratory



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2023 Annual Meeting of the
Electrostatics Society of America
June 25-29, 2023
Memphis, TN, USA