

SAS SPECTRUM eNEWS



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SPECTROMETER PURCHASE



Spectroscopists Helping Spectroscopists

Become a Helping Spectroscopist! Contact the SAS Office to Offer Your Help

At the time of this writing, we are getting ready for Pittcon. It is a busy time for the volunteers as they have both work-related and volunteer commitments. We have five announcements:

1. We have presented an award to Vladimir Villanueva Lopez, a graduate student at UPRM, to travel to Matteo Rinaldi's Lab Northeastern University to continue research in sensor tech. Partial funding is provided by the Coblenz Society.
2. Thanks to OLIS, Inc. (<http://olisweb.com/>) for contributing free reconditioning and upgrade of a destroyed spectrometer UPRM. The reconditioned instrument will enable undergraduate and graduate student research. OLIS stepped in early to offer support for our campaign.
3. Horiba (<http://www.horiba.com/>) is providing free diagnostic services and other support for destroyed instruments.
4. InfraRed Associates Inc. (<http://www.irassociates.com/>) is providing replacement and refurbishment of their detectors located in Puerto Rico.
5. Pittcon is sponsoring our effort—If you missed the ceremony, be sure to contact the SAS office directly.



Each of these announcements should have their own contribution to this edition of the SAS Newsletter. Why don't they? Growing and running an active, all-volunteer campaign takes significant effort. You can see what we have done with a skeleton staff; imagine what we could do with more volunteers and funding! Every hand, every voice, every dollar helps us move forward. Don't forget, we have a financial contribution portal in SAS Measure Venture.

You can find us at:

Facebook: <https://www.facebook.com/HelpingSpectro/>

Twitter: [@HelpingSpectro](https://twitter.com/HelpingSpectro)

LinkedIn: <https://www.linkedin.com/company/27199531/>

Coblentz: <http://www.coblentz.org/Membership/spectroscopists-helping-spectroscopists>

Email: helping_spectroscopists@gmail.com

Best regards,

Contributed by Fred Haibach, Ellen Miseo

Purdue University Chapter of Society for Applied Spectroscopy (PUCSAS)

The newly formed SAS chapter at Purdue University had a great start and it has continued to grow during the year 2017–2018. The chapter has started with three main initiatives that include the annual spectroscopy and photonics symposium (September 2017), Science Talks series, and public outreach activities. The Symposium on Applied Spectroscopy and Photonics (SASP) featured prominent scientists within the domain of spectroscopy and photonics fields. The Science Talks Series approached a broader audience by addressing more generalized and popular scientific topics. Finally, public outreach events catered to younger children by showcasing fun spectroscopy experiments to kids of varying ages. These events were planned and executed by the chapter members with key organizational roles tasked among a coalition of undergraduate and graduate students from various groups and departments across the campus.

A summary of symposium and Science Talks series is provided below.

1. Annual Symposium on Applied Spectroscopy and Photonics (September of each year)

With this symposium, Purdue SAS chapter aims to bring a one of its kind TED-like symposium to Purdue, which includes top researchers from around the nation including Purdue researchers. Scientist speaking on Nobel Prize winning gravitational wave research to cutting edge biomedical research to exoplanet research are of importance nationally as well as globally, and invited speakers and Purdue researchers presented to this Purdue community. Last year, Dr. Wiens from LANL highlighted the new results from Mars rover, while Dr. Mahadevan's NASA funded research presented new horizons beyond our own galaxy using precision spectroscopy. Professor Cheng from Boston University highlighted key areas of research in biomedical sciences. This symposium aims to bring all nationally renowned researchers at one platform at Purdue University and also provide Purdue researchers and students to showcase their own cutting edge research. The presentations were recorded and lectures were telecast later for wider audience:

<https://pucsas2017.wixsite.com/symposium2017>.

Presentation videos: https://www.youtube.com/playlist?list=PLGwgTarsp82R_ItMqXBgKNyd_Sli8_V3l

2. Science Talks Series 2017–2018

The Purdue University Chapter of Society for Applied Spectroscopy's (PUCSAS) vision for the Science Talks series is to invite world-renowned scientific figures to Purdue to deliver talks addressing the general topic of science to engage general discussion between undergraduate and graduate student community. This year the chapter's focus is to invite female speakers with STEM advocacy theme as well as speakers who talk about merging science and art. The Science Talks series is open to students and the public free of charge to bring together students, faculty, and the public to discuss topics in science. Science Talks aims to bring prominent invited speaker each semester along with participation from students in the form of a panel discussion. There is lack of popular science related events on campus and this will provide a unique opportunity to Purdue students to get involved. In the past, SAS Purdue chapter has hosted "Bad Astronomer" Phil Plait (October 27, 2017), "The Space Gal", Emily Calandrelli, (February 8, 2018), and "sciencejedi" Dr. Shane Larson from the LIGO project. Visit <http://www.purdue.edu/newsroom/releases/2018/Q1/speakers-scheduled-for-science-talks-series-at-purdue.html> for event coverage from previous speakers.

For March and April, two other prominent speakers are planned with the theme of blending art with science, TED speaker Danielle Feinberg, Harvard computer science graduate, and PIXAR director of photography and STEM advocacy advocate https://www.ted.com/speakers/danielle_feinberg

The other speaker in April is world-renowned National Geographic and LIFE magazine photographer Joe McNally (https://en.wikipedia.org/wiki/Joe_McNally).

For more updates about chapter activities, please connect to us via:

Facebook: <https://www.facebook.com/pg/PurdueSAS/>

Instagram: https://www.instagram.com/purdue_sas/

Twitter: https://twitter.com/Purdue_SAS

Contributed by Praseon Kumar Diwakar
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Memorial Tribute to Marvin Margoshes, Former SAS President and Distinguished Service Awardee

Marvin Margoshes (1925–2018) was born and raised in New York, New York. The focus of his scientific work was on the leading edge of spectroscopy and integration of laboratory and medical diagnostic instruments with computers. After returning from serving in the 96th Army Infantry Division in the Pacific during WWII, Margoshes finished his B.S. degree in Chemistry at Brooklyn Polytechnic Institute, then pursued graduate studies at Iowa State (Ames Laboratory) under Velmer Fassel, focusing on infrared spectroscopy. He received a Ph.D. in Physical Chemistry in 1953. His career spanned a postdoctoral fellowship at the new Biophysics Research Lab at the Peter Bent Brigham Hospital, Harvard Medical School, followed by the Spectrochemical Analysis Section at the National Bureau of Standards Division of Analytical Chemistry (working with B.F. Scribner in developing the plasma jet, and Stan Rasberry setting up the first time-sharing computer terminal (resulting in faster analysis computations with improved accuracy and precision), Block Engineering (performing Fourier transform analysis with Tomas Hirschfeld), and Technicon Instruments (as Research Director working with Morris Shamos). Other projects included development of a novel multichannel flame spectrophotometer and the Coenzometer, using computers to automate analyses (including automating background corrections). His work resulted in over 150 publications and several patents.

He was an active member of the American Society for Applied Spectroscopy (SAS), including organizing their first international meeting with Leopold May in 1962, serving as President, Treasurer and on the governing board. He was editor of *Spectrochimica Acta, Part B* and *Applied Spectroscopy*. He served on American Chemical Society Analytical Chemistry committees. He was also active in community organizations.

After retirement in 1990, he volunteered at the Sarah Lawrence College chemistry department and served on committees at the Chemical Heritage Foundation. He is survived by his wife, four children, and their families.

Contributed by Bethia Margoshes (Marvin's daughter)
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**Do you have something spectroscopy-related you want to discuss in the newsletter?
Or something that will help our membership such as career tips or application tips?
Please let us know by emailing xchen4@dow.com.**

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