SAS SPECTRUM eNEWS

SAS Election Winners 2020 Officers

President-Elect:
Karl Booksh

Treasurer:
Diane Parry

Governing Board Delegates

Karin Balss

Matthieu Baudelet

Peter Harrington

Luisa Profeta

Gloria Story

New SAS Student Representative: Ewelina Mistek

I am a Ph.D. student in Chemistry at the University at Albany, State University of New York, and a National Institute of Justice (NIJ) Graduate Research Fellow. I am originally from Bukowno, a small village in Poland. I obtained an Academy Profession Degree in Chemical and Biotechnical Science from the Business Academy Aarhus, University of Applied Sciences, Denmark. During that program, I pursued a one-year internship in a forensic science laboratory in the United States with the Lednev Research Group at the University at Albany. After returning to Europe, I continued my undergraduate program in Forensic and Analytical Science at the Robert Gordon University, earning my Bachelor of Science with Distinction. In 2016, I returned to the University at Albany to pursue my doctorate degree under the mentorship of Professor Igor Lednev.

I always wanted to work in the field of forensic sciences. Therefore, it was a dream come true when I received the NIJ Graduate Research Fellowship. This opens up great opportunities to work on projects that are essential to the innovation of forensic practices. I work on the application of vibrational spectroscopy and statistical data analysis for the development of new forensic methods with a focus on the identification and characterization of body fluid traces. Not only am I passionate about my work but also my successful results lead to publications which started in the second year of my undergraduate program. My research has been recognized by a number of local, national, and international awards, as well as highlighted in the press. I was also interviewed by local TV stations and for the University's podcast series.

One of my biggest passions is traveling. It was my life goal to obtain the best education and have a chance to live in different countries. In my opinion, this is the best way to experience different cultures and people, learn new languages, and have a real understanding of each country. This also helped me to become completely independent at a young age. As for now, I still have a couple of continents to visit which I hope to do soon. I am also an active person and always willing to explore nature and go for a hike. As a part of my Polish soul, I like to host people and cook/bake for them. However, I also enjoy cozy evenings with a cup of tea (or hot chocolate) and a book.

I am very excited to accept this Student Representative position and I look forward to working with the Society for Applied Spectroscopy. My goal is to make sure that the students voices continue to be heard and that the students remain an important part of the Society. One of the biggest questions for students is about their future: "what will happen after I graduate, what will happen next". I believe that the scientists from the Society can be very helpful just by educating through their own experiences. Besides being a representative of all students, I will try to help international students. Just from my own perspective, I see how many additional questions international students can have. The transition between a graduate career and a professional career is very stressful by itself. Being an international student in the United States poses even more challenges and more uncertainties about the future. I believe that the Society, with all experienced scientists, can be helpful in

answering at least some of these questions. I also look forward to helping organize the activities that the Society holds during conferences. I am very excited to work closely with the top scientists and great people who make up the Society for Applied Spectroscopy.

Contributed by Ewelina M. Mistek
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SAS Honorary Member's Invention Used to Produce Marine- and Soil-Biodegradable Straws

There is some exciting sustainable science news to share with members from SAS Honorary Member Isao Noda. Dr. Noda not only developed two-dimensional infrared (2D IR) correlation spectroscopy, his innovative work in polyhydroxyalkanoate (PHA) materials are leading to some real-world solutions. More details can be found in the press release here: https://www.prnewswire.com/news-releases/wincup-first-in-us-to-produce-marine-and-soil-biodegradable-straws-300918788.html

SciX Speed Mentoring

The Coblentz Society and the Society for Applied Spectroscopy are once again hosting a speed mentoring event at SciX 2019. This will be a fun, fast-paced event where you can interact one-on-one with other scientists, potentially form a mentor/mentee relationship, and expand your professional network. Registration is free and will include lunch. Please register either as a Mentor or a Mentee at https://members.coblentz.org/event-3355333

Contributed by Jim Rydzak
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Travel Grants and Scholarships

The Coblentz Society is committed to fostering the understanding and application of vibrational spectroscopy and the professional development of scientists practicing in this area. The society is pleased to announce the creation of an award designed to assist young career professionals who have also started families of their own.

The **Childcare Award** is designed to assist parents, especially when both parents are involved in the scientific community, to defray childcare costs either provided through a conference or provided at the applicant's home to allow parents to attend one of the designated conferences. This award can be used to bring out-of-home assistance into the home for childcare while the professional is attending a conference, or if childcare is available at the conference, the award can be used to pay for that as well.

Applications for these awards can be obtained from Mary Carrabba at mary.carrabba@coblentz.org. **We encourage those who are interested to apply ASAP for SciX consideration.** *Applications will be reviewed starting October 1.*

2020 Next-Generation Spectroscopic Technologies at 2020 SPIE.DCS

On behalf of SAS members, and Co-Chairs Steve Barnett, Richard Crocombe and myself, we extend a warm and hopeful invitation for SAS members to thoughtfully consider submitting an abstract for the 2020 SPIE.DCS (Defense and Commercial Sensing) Next-Generation Spectroscopic Technologies Conference. Abstracts are due 16 October 2019. This meeting traditionally has a large number of attendees from government, industry and academia, as well as other engineering groups. However, as SAS members, we believe that a strong SAS presence at the meeting can only help to strengthen and broaden scientific and engineering connections in the domain of applied spectroscopy.

The overall emphasis in this conference is on advanced technologies for spectroscopic instrumentation, particularly for miniature and portable instruments, but also including novel spectroscopic sources used in the laboratory and process applications (e.g., terahertz, QCL, ICL, supercontinuum). The scope focuses on the optical region: UV-visible, infrared, near-infrared, terahertz, and Raman molecular techniques. However, it also includes advances in miniature and portable spectrometers across the electromagnetic spectrum, including X-ray fluorescence, laser-induced fluorescence (LIF), laser-induced breakdown spectroscopy (LIBS), nuclear magnetic resonance (NMR), and mass spectrometry. The conference includes papers describing breakthrough and novel, recently-introduced, commercial instrumentation, and the rapidly emerging fields of portable hyperspectral imaging, "smartphone spectroscopy", "citizen spectroscopy", terahertz spectroscopy, with cloud-based collection and processing of data from those instruments.

Papers focusing on the spectroscopic application areas of CBRNE topics and micro- and nanotechnology sensors are welcomed and will be incorporated into two new joint sessions with Micro- and Nanotechnology Sensors, Systems, and Applications and Chemical, Biological, Radiological, Nuclear, and Explosives (CBRNE) Sensing, respectively, in an effort to reach more researchers and scientists. The 2020 meeting is in Anaheim, CA, and will take place between 26–30 April, 2020. To submit an abstract, please follow this link to the submission portal: https://spie.org/SI/conferencedetails/next-generation-spectroscopic-technologies

If potential authors have any questions regarding the conference, they can direct those questions to the Next-Generation Spectroscopic Technologies Conference Chair, Luisa Profeta at lprofeta@fieldforensics.com.

Submitted by Luisa Profeta, 2020 Next-Generation
Spectroscopic Technologies Conference Chair

SAS New York Section Gold Medal Award Announcement 2019

The Society for Applied Spectroscopy New York Section announcing the Gold medal Award recipient for 2019 is Professor John R. Lombardi, Center for Analysis of Structures and Interfaces (CASI), Department of Chemistry, The City College of New York. Professor Lombardy is a world-renowned laser spectroscopist whose expertise in the fundamental theory of surface-enhanced Raman spectroscopy (SERS) has been applied to critical forensic problems in art and criminal justice. He has authored 255 publications that garnered over 5400 citations and is the recipient of numerous awards.

The award will be presented at the Eastern Analytical Symposium (18–20 November 2019, Princeton, New Jersey) on Tuesday, 19 November from 8:30–11:30am. We hope to see our members attend this prestigious award session.

Gold Medal Award Session, organized by Dana Garcia

Symposium Speakers:

Ronald Birke, The City College of NY: Ag and semiconductor nanoclusters in modeling SERS enhancement.

Thomas Kubic, John Jay College of Criminal Justice: Fiber optic light micro-spectrophotometry and confocal Raman micro-spectrometry (with SERS) applied to the analyses of traces of forensic import.

Marco Leona, Metropolitan Museum of Art: Surface-enhanced Raman spectroscopy in art and archaeology.

John R. Lombardi, The City College of NY: Interaction of theory with applications in surface-enhanced Raman spectroscopy (SERS). How to optimize the performance of molecular SERS sensors.

The Gold medal Award was established in 1952 to recognize outstanding contributions to the field of Applied Spectroscopy. For more details, please visit www.easinc.org.

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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