

SciX 2022 Poster Abstract Deadline in August

The deadline for poster abstract submissions is Monday, 1 August 2022 at 11:59pm EDT. https://www.scixconference.org/abstracts/

SAS ECIG SciX 2022 News

The Early Career Interest Group is pleased to announce that we are sponsoring two sessions at SciX 2022. The first session is titled, "Navigating Challenges to Achieve Success as an Early Career Spectroscopist, Part 1", and it is co-chaired by ECIG committee members Andrew Whitley of HORIBA and Fay Nicholson of the Dana-Farber Cancer Institute and Harvard Medical School. The second session, "Navigating Challenges to Achieve Success as an Early Career Spectroscopist, Part 2" will be chaired by Benjamin Manard of Oak Ridge National Laboratory. Because there isn't a single "early career experience" in spectroscopy and analytical chemistry, scientists on different career paths face very different opportunities and challenges. For these two special sessions, early career scientists from academia, industry, and government laboratories will present their research, describe their career journey, and discuss how they navigate career challenges. In each session, four talks will be followed by a panel discussion where attendees will be able to pose questions to any of the speakers.

We hope you will join us for one or both of these special sessions in Cincinnati at SciX 2022!

Meet the Spectroscopists Behind the *Perseverance Rover*

Did you know that SAS has been interviewing the scientists behind the spectroscopy on the Perseverance rover on Mars? We've added a new scientist, Dr. Chris Heirwegh, who leads the PIXL scient team at JPL. Learn more about him and other important spectroscopists at www.spectroscopyonmars.com.



Spectroscopy Conference Grants

The Coblentz Society will be awarding travel grants to eligible Society members for spectroscopy conferences held in fall/winter 2022 to support registration and/or travel expenses. Additionally, childcare grants are also available for parents interested in attending such conferences. **The deadline for submitting applications for either grant for the SciX 2022 meeting is 15 August 2022.** Details can be found here: https://www.coblentz.org/awards/grantsandscholarships/

Gordon F. Kirkbright and Edward Steers Bursary 2023 Awards

The Gordon F. Kirkbright bursary award is a prestigious annual award that assists a promising early career scientist of any nation to attend a recognized scientific meeting or visit a place of learning. The fund for this

bursary was established in 1985 as a memorial to Professor Gordon Kirkbright in recognition of his contributions to analytical spectroscopy and to science in general. Owing to the generosity of one of our former trustees, an eminent atomic spectroscopist, Professor Edward B.M. Steers, we are now able to award an annual Edward Steers bursary, in addition to the long-standing Gordon Kirkbright bursary, to similarly assist a promising early scientist engaged in or utilizing analytical spectroscopic techniques.

The Association of British Spectroscopists Trust (ABS Trust) defines early career as being either a student, or an employee in a non-tenured academic post or in industry, within seven (7) years of the award of a PhD, excluding career breaks. The same conditions apply to each bursary.

Applications are invited for both the 2022 Gordon Kirkbright Bursary and the 2022 Edward Steers Bursary. Although both funds are administered by the ABS Trust, the Kirkbright award is not restricted to spectroscopists, but is open to all involved with or utilizing analytical science-based techniques.

Application Forms can be downloaded via: http://www.abstrust.org/kirkbright-and-steers-bursary-awards

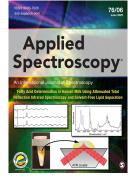
For further information visit: http://www.abstrust.org/ or contact abstrustuk.kirkbright@gmail.com

The closing date for entries is 30 November 2022.

Something new is coming. Something big. Something revolutionary. Follow SAS on social media to hear first and see how SAS is focusing on the future.

June Applied Spectroscopy Cover Highlight

Featured on the June 2022 cover of Applied Spectroscopy is an image from the Rapid Communication by Christopher Karim Akhgar, Vanessa Nürnberger, Marlene Nadvornik, Victoria Ramos-Garcia, Isabel Ten-Doménech, Julia Kuligowski, Andreas Schwaighofer, Erwin Rosenberg, and Bernhard Lendl from TU Vienna, Institute of Chemical Technologies and Analytics, entitled, "Fatty Acid Determination in Human Milk Using Attenuated Total Reflection Infrared Spectroscopy and Solvent-Free Lipid Separation" (DOI: 10.1177/00037028211065502). This paper focuses on a novel method for human milk fatty acid profiling based on mid-infrared spectroscopy. Conventionally, individual fatty acids are quantified using gas chromatography,



offering high accuracy and sensitivity but bearing major drawbacks such as high costs and significant time. Compared to this method, the infrared (IR)-based approach enables significantly less time and a labor-efficient analysis. For sample preparation, a solvent-free two-step centrifugation method was employed to obtain pure lipid fractions that are representative in fatty acid composition for whole human milk samples. Attenuated total reflection Fourier transform IR (ATR FT-IR) absorbance spectra of these fat fractions were acquired. Fatty acid reference concentrations were determined with gas chromatography-mass spectrometry (GC-MS). By relating ATR FT-IR spectra to the reference concentrations, partial least squares (PLS)-based multivariate calibration equations were calculated, showing particularly good results for fatty acid sum parameters as well as for certain individual fatty acids. The obtained results indicate a high potential for future high-throughput routine human milk fatty acid profiling in the lab. Further details about this research can be found on pages 730–736.

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 luisaprofeta@gmail.com.

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