



Newsletter

June 2023

Hello all, welcome to this month's newsletter! Most of you, I'm sure, have heard of the USDA approving the sale of lab grown meat in the United States. This pivotal moment not only opens the US market for the cultured meat companies to sell chicken, but also provides meat choices and is the start to creating a sustainable future. It will be years before we can buy this meat in grocery stores, but steps are being taken for the commercial production of this alternative protein to meet growing demands at reduced costs. What role does spectroscopy have in all of this? Well, scientists have started using Raman in benchtop bioreactors to monitor the cell growth process and metabolite levels to maximize cell yield. The cells grown in large-scale bioreactors later get harvested to form minced meat for consumption. Raman spectroscopy, along with other Process Analytical Technology (PAT) tools, are crucial to ensure the "broth" or media that the cells grow in is kept optimal to ensure healthy cell growth. It suffices to say that without an inline spectroscopic tool to keep an eye on the bioprocess, cell manufacturing would be labor and time intensive, cumbersome, have a greater risk of contamination, have inadequate monitoring, thereby resulting in higher costs and more failed products. These articles will serve as a good source for information:

<https://www.nytimes.com/2023/06/21/us/lab-grown-meat-sale-approval.html>

<https://www.ark-biotech.com/post/raman-spectroscopy-a-promising-tool-for-the-future-of-cultivated-meat>

~Savitha Panikar, Newsletter Editor

President's message

Submitted by Zac Schultz, Society President

As I write this month's message, I am representing the Coblentz Society at ISMS. What a difference a short drive makes, as the dry heat of central Illinois roasts compared to humidity, thunderstorms, and milder temperatures in central Ohio. I am still thankful to be avoiding the heat-dome and hailstorms in Texas. Nonetheless, despite the heat, Dr. L. Robert Baker delivered the 2022 Coblentz award address as pictured below.



I look forward to hearing Wei Xiong present the 2023 Coblentz Award address at SciX later this year. This presentation will be the first time the award has been presented at another venue, an occurrence precipitated by the COVID pandemic and necessary to get the award presentation back on schedule. Perhaps a little change is a good thing.

SciX marks an important phase in the Coblentz Society Calendar. In addition to the Coblentz Award, we will present the Craver Award and the Lippincott Award. As our official annual meeting, we will have our regular members' breakfast, where I invite all our members to attend and learn about current happenings within the Society. In addition, we have arranged to continue the well-received members event on Wednesday evening.

A quick reminder, this fall marks the 50th conference in the FACSS-SciX series. The FACSS governing board is looking to feature historical items that have contributed to the conference. If you have ideas or items that you think might contribute to this display, please let us know.

This coming SciX also marks the transition of the Coblentz Presidency, as **Luisa Profeta** will take the reins from me. As my presidency begins to come to an end, I find myself reflecting on where the Society is and where we can go in the future. One thing that I have found to be true is our Society is as strong as the members we have. The ideas from members at all stages of their career are valuable and needed to keep our Society relevant in the coming years. Last month, past-president Ellen Miseo and I joined Jerry Workman to record an upcoming episode of the Analytically Speaking podcast (episode 15, <https://www.chromatographyonline.com/analytically-speaking-podcast>). We discuss the role of professional societies, like the Coblentz Society, in careers today. I encourage you to check it out when it is released.

To grow the vibrational spectroscopy community, we need to hear and have representation from all the various groups. One way to increase the voice of your group is to run for election to our Board of Managers, which elects two new members to 4-year terms every year. We also welcome members to serve on award selection committees and to serve the Society in a multitude of different activities. The Society leadership is interested in the ideas of our members and how you want to shape our community. If you have ideas that might increase the Society's impact, or know of areas where we are falling short, please let us know.

There are still more events this summer for Coblentz members, including the webinar Molecular Spectroscopy in Practice coming July 25-26, in conjunction with *Spectroscopy* magazine. More information on this webinar should be coming soon.

As always, please let me know how the Society is doing or if you would like to be more involved. I continue to invite anyone interested in becoming more involved in the Society to reach out to me or one of our board members. I look forward to representing our Society and keeping everyone informed about the Society's activities in the coming months.

Welcome to our new members - we're glad you're here!

Regular:

Janina Kneipp (Humboldt-Universität zu Berlin, Department of Chemistry)

Oleg Ryabchykov (Leibniz Institute of Photonic Technology (IPHT))

Nicholas Sitaras (Cornell University)

Yusuf Sulub (SABIC)

Last Call for Nominations – 2024 Coblentz Award

Nominations are still being accepted for the 2024 Coblentz Award. This award is given annually to an outstanding young molecular spectroscopist under the age of 40. This award is the Society's original award (first awarded in 1964), and is the complement of the 'Craver Award' that recognizes young spectroscopists for efforts in applied analytical vibrational spectroscopy. Nominations will close July 15th, so hurry and submit your nominations to the Society's Nominations Committee: office@coblentz.org. Additional details can be found on the Society's website awards [page](#).

Travel Grants for SciX 2023

SciX is coming up fast! Don't forget that the Coblentz Society awards Travel and Childcare Grants for early-career professionals to assist in defraying the cost of travel to SciX and other conferences. The application deadline is August 15 for fall and winter conferences and January 15 for spring and summer conferences. For more details, see the Society website's [Grants & Scholarships](#) page.

SciX Short Courses Reminder

Our Society's immediate past-president, Ellen Miseo, has put together an extensive catalog of short course offerings for SciX this October in Sparks, NV. Most of the instructors are Coblentz Society members! Of course, in order to hold a course, there will have to be registrants. Please consider signing up for a course

and sharing the course list with your friends and colleagues. The **Coblentz-produced** course list is below. For a **complete list of courses**, please visit the SciX website.

- **Searching Infrared and Raman Spectra**, ½ day, James de Haseth
- **Problems with FT-IR Spectra and How to Avoid Them**, 1 day, Ellen Miseo /Jenni Briggs/ Jeff D'agostino
- **Modern Raman Microscopy for Applications in the Material and Life Sciences**, 1 day, Alexander Rzhetskii
- **Process Analytical Technology: Out of the Lab and Into the Line**, 1 day, James Rydzak
- **Introduction to Quantitative Spectroscopy for Near Infrared and Raman Instrumentation**, 1 day, Debbie Peru
- **The Role, Function, and Proper Use of the Microscope in Microspectroscopy**, ½ day, Dale Purcell
- **Spectral Interpretation of Vibrational Spectra**, 2 days, Peter Larkin / Mary Carrabba
- **ABC to PMP: A Project Management Crash Course**, ½ day, Luisa Profeta
- **Laser Fundamentals for Spectroscopy**, ½ day, Rob Chimenti
- **Technologies and Applications for Miniature Optical Spectrometers and Spectroscopic Sensors**, ½ day, Richard Crocombe
- **How to Make Connections: Networking at Conferences and in Higher Education**, ½ day, Alexis Weber
- **Bioanalytical Methods for Biopharma: Fluorescence**, 1 day, Linda Kidder / Alan Ryder
- **Practical Raman Spectroscopy**, 1 day, Tim Prusnick / Sarah Shidler
- **Multivariate Analysis for Beginners: Pre-processing and Data Analysis of Raman/IR Spectra in the MATLAB Environment**, ½ day, Cassio Lima

News from the Society Office

Two items are of note this month. Due to a glitch in our email system, emails sent to our Coblentz.org addresses have not been coming through. If you have not received an expected response from the office, please reach out again. Secondly, our mailing address has recently changed. You may now reach us by snail mail at 1467 Siskiyou Blvd. #2086, Ashland, OR 97520.

Looking forward to seeing everyone at SciX in October! Enjoy your summer!

~ Mary Carrabba and Savitha Panikar