Meet Our Mentors…..

David W. Schiering

1. I am currently co-founder, Managing Partner, and Chief Technology Officer of RedWave Technology. RedWave develops, manufactures, and markets in-field spectroscopy products for defense and security applications.
2. Ask me about almost anything about expectations, contributions, and advancement in private or public companies engaged in the analytical instrumentation business.
3. Brief Bio: Dr. David W. Schiering is a founder and partner of RedWave Technology, a small company dedicated to the development and marketing of vibrational spectroscopy products. He has more than thirty (35) years of experience in the business of instrumentation for chemical measurements. Prior to RedWave, Dr. Schiering has held numerous roles in management, science and technology, product development, and product management at Smiths Detection, SensIR Technologies, Thermo Electron Corp., and Perkin Elmer. Dr. Schiering has authored numerous publications on various aspects of vibrational spectroscopy and holds a PhD in analytical chemistry from Miami University, where he is also an adjunct Assistant Professor of Chemistry. Dr. Schiering has served the Coblentz Society as a member of the Board of Managers and as secretary from 1991 to 2010. In 2011, Dr. Schiering was made an Honorary Member of the Coblentz Society and in 2018 received a Society of Applied Spectroscopy Fellows award.

Alex Scheeline

1. I am currently Professor Emeritus of Chemistry, Department of Chemistry, University of Illinois at Urbana-Champaign, President and Co-founder of Spectroclick, Inc., and Vice President and Treasurer of Anchor Science LLC.
2. Ask me about how academia, national labs, the instrumentation industry, and startups compare and contrast.
3. Brief Bio: I'm a jack of many analytical trades. My training was in optical instrumentation, chemical kinetics, and atomic spectroscopy. I later added work in nonlinear dynamics, oscillating chemical reactions, ultrasonically levitated drops, amperometric sensors, and active learning. I got my degrees at Michigan State University and the University of Wisconsin-Madison, post-doced at the National Institute for Standards and Technology, taught at the University of Iowa and the University of Illinois at Urbana-Champaign, did sabbaticals at Purdue University and the University of Otago, Christchurch, New Zealand, was a program officer at the National Science Foundation for a year, and am now a principal in two startups. In my "spare time," I have been an apparatchik in FACSS/SciX, SAS, the Analytical Sciences Digital Library, and to a lesser extent in the Coblentz Society and ACS Analytical Division.

Gloria Story

1. I am currently a Senior Scientist at P&G
2. Ask me about career opportunities in industry and being active in professional societies
3. Brief Bio: I specialize in research applying vibrational spectroscopy. I have worked for P&G for over 36 years and Hercules Aerospace for 3 years. I started my career with an AS in Science Technology as a "technician" for separations, infrared spectroscopy, atomic and x-ray fluorescence/diffraction. As a vibrational spectroscopist, I've been promoted from "technician" to "Senior Researcher" to "Principal Researcher" and finally to "Senior Scientist". My project areas focus on solid/liquid interface studies, mid-, near, and thermal-infrared imaging for manufacturing support, product development/innovation, and marketing. I spend a lot of time training others in these areas and am considered a technical expert in the area of infrared spectral interpretation. Recently, I've been working more in governance – for export controls specifically, because of my expertise in working with infrared cameras (government-controlled items).

Brandye Smith-Goettler

1. I am currently a Principal Scientist, Merck and Co., Inc. Manufacturing Analytics – Center for Mathematical Sciences.
2. Ask me about pharmaceutical manufacturing; chemometrics data science (AI/ML)
3. Brief Bio: I have a Ph.D. in Analytical Chemistry with a concentration in Vibrational Spectroscopy from North Carolina State University. I began my post graduate career working as a chemometrician at a small biotechnology company in Research Triangle Park, NC followed by a chemometrician role in the Process Analytical Technologies (PAT) group at GlaxoSmithKline in King of Prussia, PA. I have been at Merck and Co., Inc., in our West Point, PA location, for 13 years. I worked in a Process Analytical Technology focused group for 10 years and in the Center for Mathematical Science - Manufacturing Analytics group for 3 years. I specialize in data science, chemometrics, process analytics, and spectroscopy. I use multivariate data analysis to develop and optimize methods and to monitor and understand, and possibly predict or control, manufacturing events/processes. I am involved in multiple innovation teams, volunteer for a couple of professional societies and some other awesome stuff and adore everything related to data science!

Jim Rydzak, Panel Moderator

1. I am currently doing consulting on Process Analytical Technology, Spectroscopy applications and mentoring for my company Specere Consulting.
2. Ask me about starting Process Analytical Technology efforts in Consumer products, Pharmaceutical and Bio-Pharmaceutical industries, applying vibrational spectroscopy to solve R&D and industrial problems and about mentoring.
3. Brief Bio: I started the Speed Mentoring effort at SciX in 2015 and more recently at EAS and PITTCON to provide young professionals and students a chance to get a glimpse of what it is like to be an Analytical Chemist in various professional setting by talking to professionals. I was active in the mentoring effort at GlaxoSmithKline Pharmaceutical as both a mentee and mentor. I started PAT groups at both Colgate Palmolive and GlaxoSmithKline. I have taught short courses in Industrial Spectroscopy for the Center for Professional Advancement and Process Analytical Technology at SciX, EAS and PITTCON.

Ellen Miseo

1. I am currently the Chief Scientist, Teak Origin and President of the Coblentz Society.
2. Ask me about:
   - Working in Industry
   - How each of the environments I have worked in are different and similar
   - How you survive the "2 body problem"
   - Things I might need to think about on relocating to a new job.
   - Transitioning from grad school to industry and what you need to be aware of.
   - Why networking and mentoring are incredibly important.
3. Brief Bio: I have been involved in vibrational spectroscopy and instrument development my entire career. I have worked for a technical consulting firm where my position involved solving major problems for both commercial and government clients. In this role, I wrote proposals, managed case teams, ran the vibrational spectroscopy efforts and did the reporting. For the instrument companies, I held positions such as product manager, senior R&D scientist, and business manager. When I worked for a component vendor my title was Technology Development Manager, but the job actually entailed figuring out if the potential applications the sales team were addressing were viable and understanding where the market was going. In the testing lab environment, I was titled a senior scientist and I worked directly, usually face to face, with clients who had a problem and needed it solved yesterday. Currently I am the Chief Scientist for TeakOrigin, Inc. whose mission is to use spectroscopy in the food supply chain to determine quality and authenticity. I am actively involved in several professional societies related to spectroscopy. I am currently the president of the Coblentz Society and served as the President-elect, President and Past-President of the Society for Applied Spectroscopy between 2015 and 2017. I currently am the education coordinator for SAS.

Alicia Strange Fessler

1. I am currently a Senior Scientist A at Savannah River National Laboratory in the Analytical Development and R&D division.
2. Ask me about government labs, early career, science interests, or anything else!
3. Brief Bio: My analytical specialization is instrumentation development/design, Raman spectroscopy, IR spectroscopy, and laser-based spectroscopies. I worked for Dr. Mike Angel in graduate school and started my post-graduate career with a postdoc position at Savannah River National Laboratory (SRNL). After a year, I transitioned to a full-time position at SRNL. Job titles have been Postdoctoral Researcher, Senior Scientist, and Senior Scientist A. My projects have included development of IR instrument for detection of uranium isotopes in uranium hexafluoride gas, development of SHS for gas phase Raman spectroscopy measurements of hydrogen and ammonia, application/method development of InfiToF mass spectrometer for low m/z analytes, and development of a new method using ultrafast laser IR spectroscopy for analysis of reaction kinetics for uranium hexafluoride hydrolysis.

Sara Kern

1. I am currently an analyst at the US Food and Drug Administration's Forensic Chemistry Center.
2. Ask me about my cats, being a woman in science, mass spectrometry, the Beatles, ambient ionization sources, art, music, dancing, separation science…no topic is off limits!
3. Brief Bio: Dr. Kern has been employed with U.S. FDA since 2008, specializing in LC-MS analysis of food, drugs, and dietary supplements. She has also utilized various atmospheric ionization techniques coupled to ion trap or high-resolution accurate-mass mass spectrometers to determine identity of unknowns. Other areas of expertise include method development for difficult analyte/matrix combinations, including surface analysis of produce for pesticides and the analysis of tablets and powders for synthetic opioids, and evaluation and implementation of screening technology in non-laboratory settings such as International Mail Facilities.
   Prior to joining the Forensic Chemistry Center, Dr. Kern spent four years at Momentive Chemicals, (formerly Hexion Specialty Chemicals) as a technical sales specialist and formulator, developing UV curable inks and adhesives for industrial ink jet printers.

   Dr. Kern's graduate research consisted of synthesis and characterization of nickel (II) oximate complexes capable of catalytically reacting with molecular oxygen to form nickel (III) and nickel (IV) complexes plus oxidized substrates, including methanol and benzaldehyde.