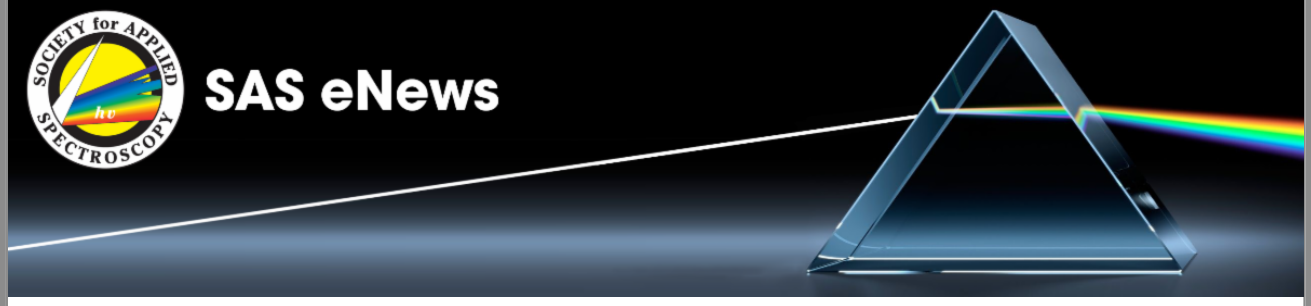
March 2021

SAS eNews



PITTCON 2021 SAS-Relevant Talks

For readers searching through the PITTCON 2021 technical program in hopes of finding applied spectroscopy talks and posters, look no further. Check out the dedicated SAS talks and posters here which lists many of the talks given by SAS members upcoming next week (8-12 March 2021).

In addition to SAS member talks listed above, our technical affiliate, The Coblentz Society, kindly reminds the SAS membership that our own SAS Secretary Ian R. Lewis will be receiving the Williams Wright Award at Pittcon, and there is a dedicated symposium in his honor on Thursday, 11 March at 8:30am EST (). The talks, with several SAS member contributions, are listed below for those interested

A Journey with Raman: Research in theLab and Control of a Manufacturing Process
Session Number: A09-01
Ian R. Lewis, former SAS president, current secretary, DSA awardee etc.
Thursday, 11 March, 8:40 AM-9:15 AM

Vibrational Spectroscopy and PAT: What's Changed in 30 Years?
Session Number: A09-02
Talk split into two parts
Neil Everall, Former Associate Editor for Applied Spec, Fellow Mike George, SAS At-Large Delegate, Applied Spectroscopy Editorial Board member, SAS Fellow
Thursday, 11 March, 9:15 AM-9:50 AM

Raman Spectroscopy in Pharma: The Application List that Keeps on Growing
Session Number: A09-03
John Wasylyk, Former Parliamentarian, Chair New York/New Jersey Section
Thursday, 11 March, 9:50 AM-10:25 AM

Raman Spectroscopy in Upstream Bioprocessing: Optimizing Process Development and Implementation
Session Number: A09-04
Noble Vale
Thursday, 11 March, 10:40 AM-11:15 AM

Modern Raman Imaging: From Single Cell to Whole Animal Session Number: A09-05
Andrew Whitley, Former Marketing Chair, President-Elect.
Thursday, 11 March, 11:15 AM-11:50 AM

Society for Applied Spectroscopy Presents

Virtual Student Event At Pittcon 2021

Date: Thursday, March 11, 2021
Time: 6:00 pm EST

Cheers from a distance!

- **ALL students are welcome!**
- **Join us to network together, interact in a relaxed environment, and compete in virtual games**
- **Join via Zoom:**
  https://us02web.zoom.us/j/81322303049?pwd=YVh3MTVaeldYVkxlRzhkN0Z4RjZMdz09

  Meeting ID: 813 2230 3049, Password: 693430
- **RSVP by 3/10/2021 with your name and phone number to Ewelina at emistek-morabito@albany.edu or Stephanie at +1 (301) 674-1458**

Editor's Note: Leaving a Legacy

Our readership will note that the remainder of our primary Newsletter content for March is dedicated to remembering two men, Jack Koenig and Bob Hannah, each of whom left a significant mark on the domain of applied spectroscopy. I never had the pleasure of meeting either Jack or Bob myself, however after reading these tributes from friends and loved ones, it is apparent to me that these men not only contributed to the community with their scientific aptitude, but more importantly, they left their ethics and humor in the hearts of the friends and colleagues they worked that which is carried on to future generations of spectroscopists.

A Group Tribute to Jack Koenig: Six Decades of Polymer Science and Spectroscopy Pioneering

Pioneer. Mentor. Practical Joker. Friend. Just a few of many words used to describe Jack Koenig. Jack was instrumental in planting seeds and growing the fields of polymer science and polymer structure characterization over a six-decade career, five decades of which were spent on faculty at Case Western Reserve University. He was actually profiled in a SAS article back in 1988. Even at that time, his list of accomplishments read like a full career of activity, but he had barely broken mid-career status. He worked tirelessly until his retirement in 2004, continuing to blaze trails and move forward the industry he was so passionate about. While a complete list of accomplishments and publications would fill many pages, 67 to be precise, I felt it is most fitting to share stories from those that new him well. For those of you that knew Jack, may these stories spark a memory or add new dimensions to your remembrance. For those of you who did not have a chance to meet him, may this be an opportunity to get a sense of the dynamic, larger than life man that he was.

Paul Painter 1972-1976
Mike Coleman 1970-1973

It is hard to know where to start when talking about Jack. You knew when he was around—his personality seemed to fill a room. Jack taught us a lot of things, but what stuck with me (Paul) most is that you not only had to produce good and interesting work, but you also had to sell it. And Jack was a master of that. I mean that in a positive way. He brought in grants and made sure that we had the resources to do our work.

When I first arrived at Case [Western Reserve University] in 1972, Jack had one of the first commercial Raman spectrometers in a polymer lab. Mike arrived couple of years before me and can remember when they had put together their own laser, which would constantly break down. Jack also had the first FT-IR in an academic polymer lab (~1973) and his group pioneered and wrote a lot of the software that made the technique groundbreaking. Stuff we take for granted today. It is mind boggling to recall the size of the instrument, the fact that the computer memory was something of the order of 4 KB and it took an hour to do a Fourier transform. We thought it was great and at the time it was.

Back in the early 1970s there was also a lot of focus on normal coordinate analysis. Jack's group had written their own program to perform the calculations. The data had to be submitted to a central computer facility on punch cards. You got the results the next morning. If you screwed up a card, you had to start over! We even co-authored a book with Jack on the theory.

But those were the days. We were on the cutting edge of polymer spectroscopy. Other leaders in the field like Sam Krimm and Gus Zerbi would visit Jack's lab and Jack made sure that they would talk to us students—great exposure for young scientists. We were also working for a big guy with a big personality and a great sense of humor. He was much in demand as an after-dinner speaker at various conferences. He enjoyed life and I remember him taking the group to lunch in Little Italy on numerous occasions. Working for Jack was great. It is no exaggeration to say that he changed our lives, and we would not go back and change a thing.

Brian Perry 1985-1988

In 1983, when Dr. Ted Williams from the College of Wooster recommended that I pursue my graduate education with Dr. Jack Koenig in the unfamiliar world of polymer engineering at Case Western Reserve University, little did I know that it would be a life-changing decision. I joined Dr. Koenig's group with much trepidation since I had no formal training in polymers. The Koenig group of graduate students and post-docs were very welcoming and supportive.

Dr. Koenig provided us with state-of-the art spectrometers, and he had confidence that you would learn the techniques. He also prepared us well for life after graduate school. In particular, he taught us the importance of good communication skills. He gave this very introverted student the opportunity to hone his verbal communication by speaking at many conferences. And the many iterations of drafting papers for publication with his red pen helped refine our writing skills.

I fell in love with molecular spectroscopy, especially FT-NMR, which has led to a very rewarding career of over 31 years at Parker Lord Corporation. Many alumni of the Koenig group have become close friends and maintained contact through the years. Foremost, it was as a Koenig student that I met my wife, Dr. Ka-Pi Hoh, when I volunteered to help her set up her experiment on the FT-NMR. We have been happily married for 31 years.

After graduating from Koenig's group, he requested that you did not address him as "Dr. Koenig" but as "Jack": and you became a part of the Koenig family. I will miss our annual dinner meetings with Jack, Jeanus, and the

Koenig alumni in Cleveland. I will forever be indebted to Jack for taking a chance on someone from a small college with no polymer experience.

Regan Silvestri 1989-1994

In the summer of '86, the sky shone big and blue over the many lakes of Minnesota. Having just completed my sophomore undergraduate year (and inched past organic chemistry), I had been fortunate enough to land a summer internship at the famed 3M Company in St. Paul [Minnesota].

That summer, the much-anticipated Professor Jack Koenig visited from Case Western Reserve's Macromolecular Science and Engineering department. The entire division of the company scurried to prepare for their opportunity to meet with such a preeminent scientist and gather his advice on their work. Having never met the man I was unbiased, and frankly did not understand what all the fuss was about. We were all given 15 minutes to talk with Professor Koenig in private, show him our work on our research, and gain his advice. Even the summer intern was given 15 minutes with him. Fifteen minutes later I knew that I wanted to go to graduate school and study polymer science, and that I wanted to be his student. Enter that worn old adage: good teachers teach, great teachers inspire.

Some years later, I had my first meeting with Professor Koenig as one of his new graduate students. He ended our meeting with "I'm here if you need me". And in a single moment I understood what graduate school was all about: it was expected that I would figure out for myself how to do my job. Professor Koenig taught me a lot more than polymer science. He taught me how to be the person that I am today. Among the lessons I learned from Professor Koenig: (1) Integrity is presumed, unquestioningly. (2) You're gonna have to learn to do that yourself! (3) Its people that matter. (4) Invest in your team. (5) Decisions become easy to make viewed from: you just have to always do the right thing.

Many remember him as a man whose astonishing skills transformed polymer spectroscopy. I remember him as a man who was astonishingly skilled at transforming the lives of people.

Carrie Lendon 1999-2003

I had the distinct honor of being one of Jack's last students. But to be clear, I'm sure I experienced just as much passion, presence, and mentorship as those that have come before me. The sustained success of his research group and procurement of funding meant I had access to and eventually head "mechanic" for the latest and greatest spectroscopy instrumentation. Not only a really fun way to do research, but Jack had also developed strong relationships with the talented spectroscopists and engineers who built that cutting-edge equipment. It was through these this network, and nudges from Jack, that I had access to an even larger circle of mentors, which eventually led to my first job and current company. I echo Paul's words in learning early on from Jack the value of storytelling (with a side of humor) as a key tool for creating interest in my work. He signed me up for my first talk much earlier than I felt I was ready. It was pretty terrible. His solution was to push me for better experimental design, better data, and better delivery of my work product. The practice helped immensely and to this day I think about him as I prep for big presentations. It is a skill that has served me well in the corporate world.

Jack was a man of high expectations and quality work and was keen for each of his students to individually shape what that meant. He had a propensity to waltz in unannounced to our student offices, usually picking one of us out and escorting him/her back to his office for a consult. It was an adrenaline-charged walk wondering what he was going to ask about. Especially early on, I found this part to be nerve wracking and intimidating, but things fell into a groove where I was able to see how he was challenging me to think on my feet and realize the value in a problem-solving partner. Sometimes, he simply invited me to lunch. And, while he pushed me to find my own path, paved with quality work, he was generous with his time and resources to support my growth and development. I became close with his family and our local "Koenig Group" alumni and staff. We remained close years after my path took from Cleveland to Memphis and then on to Minneapolis. I always looked forward to meeting up at conferences and sharing stories, old and new, over dinner and a good bottle of wine. Goodspeed Jack.

At the Pittsburgh Spectroscopy Conference 1984. Top: Mike Coleman, Jim Boerio, Bill Fateley, Bottom: Jenny Grasselli, Jack Koenig, and Paul Painter

Jim Boerio was one of Jack's first students and taught at the University of Cincinnati. Bill Fateley was the editor of Applied

Spectroscopy and Jenny Grasselli was in charge of the analytical group at what was then Sohio. Photo provided by Chris and Mike Coleman.

Jack's formal obituary can be found here.

SAS thanks Carrie Lendon for her instrumental help in assembling this tribute. The contributors of this piece do encourage others that have stories and pictures of Jack Koenig to share them with the SAS Newsletter Editor via email (luisaprofeta@gmail.com) in order to assemble a collection to be published for Jack's family. Thank you for your help in documenting Jack's legacy!

In Memorium: Robert Wesley Hannah (1931-2021)

E*llen Miseo, Coblentz Society President*

I first met Bob at one of the IRCourses at Bowdoin College and would like to add my thoughts to what Bob's daughter has crafted. Bob was a practicing industrial spectroscopist. It was immediately obvious that he knew every trick, in and out of the book, to get the best spectrum possible and the once he had the spectrum he was one of the few still in our industry who could interpret the spectrum from the ground up. In my opinion, the two chapters in Course Notes on the Interpretation of Infrared and Raman Spectra, by Dana W. Mayo, Foil A. Miller, and Robert W. Hannah that he wrote on sample handling and infrared spectra of mixtures contain more useful information on practical infrared spectroscopy, in one place than any other resource I have ever seen. Bob was also a wonderful person who talked about the early years of our scientific area and got me interested in the history of commercial industrial infrared spectroscopy history. Bob was interviewed last year by the Coblentz Society for SciX 2020 discussing the early days of the industry and the Society. It was serendipitous that the Society was able to get this interview not long before his passing as we recognize that this generation of spectroscopists like Bob are slowly dwindling. I know that Bob will be missed by his colleagues.

His complete obituary, kindly provided by his daughter, follows:

Robert Wesley Hannah, age 89, of Naples, Florida, passed away on Saturday, January 16, 2021 in the comfort of his home.

Robert "Bob" Hannah lived an extraordinary life guided by his vast intellect, insatiable curiosity, humor, love of travel, and his unwavering faith in God. He was a world-renowned scientist, a world traveler, and a sharp-eyed bird watcher. But of all Bob's many notable achievements, he'd be the first to tell you that his greatest achievement of all was marrying the love of his life, Barbara May Richter, and being a loving father to the couples' six children, Matt, Becky, John, Stephen, Clare, and Rick. He adored his grandchildren as well, and was quick to share his bright smile, his sharp sense of humor, and all his amazing stories with them. There was seldom a dull moment when Grandpa Bob was around.

Born on May 10, 1931 in Youngstown, NY, to his late parents, John and Alice Hannah, Bob was the oldest of the couple's three children. In 1949 Bob attended Niagara University where he earned his Bachelor of Science degree in Chemistry, then headed off to Purdue University where he earned a PhD in Inorganic Chemistry. It was while attending Purdue that Bob met the love of his life, Barbara May Richter. The couple got married in 1957 and moved to Pittsburg, PA, where Bob joined Alcoa Research as manager of the infrared laboratory. In 1962, the couple moved to Newtown, CT, where Bob joined the Perkin-Elmer Corporation. While there, Bob honed his specialty in infrared spectroscopy, lecturing around the world, authoring over 100 Perkin-Elmer publications, and becoming the Director of Research for the Instrument Group, with laboratories in Connecticut, England, and Germany. Bob's other professional accolades included being a representative for 13 years on the Industrial Advisory Board for the Center for Process Analytical Chemistry at the University of Washington; he served as chair for one year. Bob was an Honorary member of the Coblentz Society, where he served as secretary for 20 years. Bob received the Williams-Wright Award, presented to an industrial chemist who has made a significant contribution to vibrational spectroscopy. He was an active consultant, lecturer, and had taught at the Bowdoin Infrared Course ever since 1963 until the summer of 2020 when it was cancelled due to the pandemic. After spending many wonderful years in Newtown, Connecticut, and summers on Frye Island, Maine, Bob, and Barbara moved to Naples, Florida, upon Bob's retirement in 1992, where the couple split their time between Florida and Maine. Bob was an active member of the Frye Island community as well as serving as a nature guide at the Corkscrew Swamp Sanctuary in Florida.

Bob is preceded in death by his loving wife of 50 years, Barbara, and Bob's second wife of 5 years, Jeannie Landi, and his sister, Mary Joan Hannah.

Bob is survived by his brother, Arthur Hannah and sister-in-law Judy, son, Matthew Hannah and daughter-in-law Monica, daughter Rebecca Specht and son-in-law Scott Specht, son, John Hannah and daughter-in-law Darci, son, Stephen Hannah, daughter Claire Krabill and son-in-law Merrill Krabill, son Robert (Rick) Hannah and daughter-in-law Meredith as well as grandchildren, Zachery Hannah, Christopher Hannah, Andrew Hannah, Alexander Hannah, Mishel Hannah, Alicia Lamere, Jackie Specht, Alexandra Specht, James Hannah, Daniel Hannah, Matthew Hannah, Sophie Pak-Hannah, Cassie Sessa, Christi Sessa, Bobby Sessa, Chloe Hannah, and Robby Hannah. He is also survived by his dear friend and companion, Judy Betsworth.

In lieu of flowers the family asks that all donations be made in memory of Robert Hannah to Corkscrew Swamp Sanctuary here.

S-A-S is Looking for Volunteers!

Newsletter Committee
The Newsletter Committee puts together the monthly newsletter, which is our long-form member communication. Typical investment is two to four hours per month, writing short articles, and getting important information to our members.

Social Media Committee
The Social Media committee is in charge of our social media initiatives, e.g., LinkedIn, Facebook, Twitter, etc. Typical investment is two to four hours per month and is a great way to build your brand in the sciences.

Early Career Interest Group
The newly formed Early Career Interest Group supports the professional development of early career scientists through award schemes, travel grants, as well as opportunities in leadership, outreach, networking, volunteering, and employment. We are seeking four to six volunteers of all career experience levels willing to help implement new and innovative programming.

Interested in any of these opportunities? Please email exdir@s-a-s.org or go to https://s-a-s.org/volunteer to learn more.

Spreading the Art and Science of Spectroscopy Through Virtual Conferences

In the past two months, SAS has partnered with two third parties, Photonics Spectra and Spectroscopy Magazine to deliver invaluable educational content on molecular and atomic spectroscopy over three different days of virtual events. Both the Photonics Spectra Conference and the Atomic Spectroscopy in Practice event were very successful, reaching well over 1000 attendees!

Thank you to the Training Committee for all your hard work in making these events successful!

We partner with outside groups for these events because their reach is greater than ours, enabling us to spread knowledge of spectroscopy and its practices beyond the pure spectroscopy community to those for whom spectroscopy is another tool.

The Training Committee partners with these organizations to develop the concepts and identify the speakers. If you'd like to help with upcoming educational events, please email exdir@s-a-s.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 luisaprofeta@gmail.com.
