



SAS New York/New Jersey Calendar of Events

The New York and New Jersey SAS section has planned out several exciting Zoom meeting conference topics for the next several months. Below is a copy of the tentative schedule of dates and speakers who will be presenting to this SAS section. While we hope to be meeting together in person sooner than later, it is the officer's hope that members will be able to enjoy and engage together during these talks. If there are any questions, please do not hesitate to reach out to one of the officers. Details related to our next meeting on 12 November 2020 follow the table.

| Date | Time | Speaker | Title | Affiliation |
|------------------|----------|--|---|------------------------------|
| 12 November 2020 | 12:00 PM | Richard Hark | Scientific Investigation of Works of Art: Allowing the Objects to Speak for Themselves | Yale University |
| 10 December 2020 | 12:00 PM | Jenni Briggs | | |
| 14 January 2021 | 12:00 PM | Debbie Peru John Wasyluk | FUNDamentals of Vibrational Spectroscopy? | |
| 18 February 2021 | 12:00 PM | Karen Faulds | | Strathclyde University |
| 18 March 2021 | 12:00 PM | ¹ Heinz Siesler ² Marina de Gea Neves | ¹ Food Authentication and Classification Using Vibrational Spectroscopy in Tandem with Chemometrics Tools ² Handheld Near-Infrared Spectrometers: On-Site Quality Control and Protection Against Product Tampering | University of Duisberg-Essen |

Webinar Title: Scientific Investigation of Works of Art: Allowing the Objects Speak for Themselves

Speaker: Dr. Richard R. Hark, Institute for the Preservation of Cultural Heritage, Yale University

Time: 12:00–1:00 pm EST (Log-in: 11:45 am)

Abstract: The application of scientific tools for the study of medieval manuscripts enhances our understanding and appreciation of these precious objects, complements the work of the archivists, conservators, curators, historians, and librarians who interact with them, and aids in dating, authentication, and conservation efforts. Spectroscopic techniques, imaging methods, and a variety of other analytical protocols, which are minimally invasive or completely non-destructive, have been applied to study the materials used to make paintings, manuscripts, and maps. Using examples drawn from the analysis of objects from the collections at Yale and the Victoria and Albert Museum, this presentation will briefly review some of the analytical tools that can be utilized to study parchment, paper, ink, and pigments. To illustrate what technical analysis can reveal, short vignettes will be shared about objects such as the Vinland Map and its sister manuscripts, William Henry Fox Talbot's The Pencil of Nature, the Reformation to Restoration portrait project, late medieval portolan charts, 15th century tarot cards, and works by the so-called Spanish Forger.

Biographical Sketch: Dr. Richard Hark is a conservation scientist at Yale's Institute for the Preservation of Cultural Heritage (IPCH) where he works principally with the collections of the Yale Center for British Art and the Beinecke Rare Books and Manuscripts Library. After earning his Ph.D. at the University of Pennsylvania, he

spent 25 years as a chemistry professor before joining IPCH. He has worked on projects ranging from the synthesis of complex natural products to the development of novel reagents for visualizing latent fingerprints, a project conducted in conjunction with the US Secret Service. During his career Dr. Hark's research focused principally on the application of analytical and imaging techniques to the study of cultural heritage objects, the analysis of geomaterials and items of forensic interest using laser-induced breakdown spectroscopy (LIBS), and the design and synthesis of small organic compounds. He spent a sabbatical leave in London at the Victoria and Albert Museum and has worked with Winterthur Museum in Delaware. Dr. Hark also taught a multidisciplinary course called "The Chemistry of Art" for many years, often in conjunction with an art historian.

To access the meeting: [click here](#)

Or call in (audio only)

+1 908-409-1059, 467979235# United States
(833) 733-5876, 467979235# United States (Toll-free)

Phone Conference ID: 467 979 235#

Audio for this meeting can be heard in the Microsoft Teams client. Please check your audio device settings before you join the call. If you see phone numbers above, you can use them to join the meeting's audio if necessary.

*Contributed by Howard Mark and John Wasylyk
Officers of NY/NJ SAS, hmark@nearinfrared.com*

Section on Advancing Diversity and Inclusion in Spectroscopy Seeks (ADIS) Members and Leaders

The Society for Applied Spectroscopy is forming a new special interest section to help improve our Society and increase membership through attracting and retaining spectroscopists from under-represented groups in STEM. The Executive Committee is financially supporting this effort, enabling the committee to engage targeted projects, such as initiating a Summer Research Fellowship award for graduate students. We envision that ADIS will work synergistically with the SAS Membership Committee and a new section for early career spectroscopists. Consequently, we are looking for a core of four to five energetic, team oriented, committee members to help jump-start ADIS and participation from anybody else interested. If you are interested in joining ADIS, please contact Karl Booksh at kbooksh@udel.edu.

Contributed by Karl Booksh, 2021 SAS President

Job Opportunity: SAS and *Applied Spectroscopy* are seeking to fill the role of Managing Editor for the journal

The Managing Editor is responsible for overseeing all phases of the production process, ensuring production of twelve issues annually in a timely manner, reporting directly to the Editor-in-Chief and biannually to the Publications Committee, as well as staying abreast of important developments in scientific publishing in order to provide strategic guidance to the Journal Editors and boards. [Click here](#) for the *Applied Spectroscopy* Managing Editor Job Description.

Editor's Note: Deep Thoughts From Donut Shop

Lest our readership get complacent about the ongoing COVID-19 spread, I just got an email two minutes ago from my children's school stating that a staff member had just tested positive for COVID-19 who had "CDC close contact" with at least 11 other staff members at the school, and thus the entire school (a small K through 8th grade charter school) is shifting to virtual learning effective immediately until the first full week of October. Rest assured, the stressors and disjointed nature of our pandemic lifestyle will not be going away anytime soon! This makes me grateful that our virtual 2020 SciX meeting helped bring some semblance of normalcy and connection to colleagues that I haven't heard from since either Pittcon 2020 (which barely happened as we've remarked before in the Newsletter) or SciX 2019 in Palm Springs. Stay tuned for the next Newsletter to highlight some of the SAS sponsored talks and events from our virtual 2020 SciX meeting!

For those who know me beyond the pages of this Newsletter, many of you know that in mid-July of this year, just as the extra federal level stimulus unemployment benefits came to an end, I was effectively laid off from my previous place of employment. As I came to find out nearly a month after applying for unemployment, in the

state of Florida, I still made "too much" money to qualify for unemployment of any sort, at the state or federal level. The "problem solver" side of me came out after that information came to light, and I decided to find a part-time position that would allow me time to continue to job hunt and interview during normal business hours, and that wouldn't horribly interfere with my responsibilities as a mother of three school-aged kids. In the end, I ended up hired into an overnight shift at a donut shop as a donut decorator!

As the readership might imagine, my boss came to find that my education far exceeded that of the typical donut decorator, but she was happy to have me onboard for whatever period of time she could harness my skills. Overnight shifts tend to give us analytical types plenty of time to think and ponder without interruption (because who else is up at 3:00am?), which is the inspiration for this month's editor's note. I asked myself the following questions in consideration for any of our readership that might find themselves in a similar boat, currently, unemployed and looking for a new position (although those just looking for a job in general might find some sagely advice here too!). Additionally, some of my thoughts were inspired by the eerily timed "Layoffs on the Mind" article from Chemjobber at ACS originally published on 18 November 2019 in C&ENews, predicting that layoffs would be on the rise again in the near future (little did he know at that time of COVID-19's massive impact on layoffs world-wide, not just chemistry).

Q1: Did you see this layoff coming? If you did, what actions did you take then?

A1: For the most part, I foresaw that this layoff coming. Between our company structure and difficulties relating to COVID-19, as has been the case for many small businesses in 2020, the writing was on the wall by the end of May that something was going to have to give within the organization to alleviate the financial tensions. At that point I did a few things, which I attribute to helping me keep the hunt for a new career position to a completely not insane length of time, even though the final "chop" didn't come for another month after the conclusions of my position longevity were clear. I name them here, in no particular order:

(I) **I kept active.** That may sound a bit odd to some folks, but keeping a routine of exercise and moving my body every day was critical for keeping my mind clear, my emotions in check (if you're stuffing your emotions during the job hunting process, you need to revisit how healthy this is!), and gave me something I was in control over. Having a modicum of control of something after you have been laid off (the pinnacle of no control) from a position does wonders for mental health and stability. As I told numerous folks during my months of searching, I might not be able to control if an HR person keeps or disposes of my resume, but I can control how much weight I throw on my barbell at the gym, or control how many miles I opt to run on a given day by the beach. When jobs had reached out in interest as well, these times of keeping active allowed me to home in and focus on the pros and cons of each, doing some comparative analysis in my mind before heading home to write it all down on paper to see.

(II) **I reached out.** Before most folks knew I was looking for another position, I had confided in a few key colleagues (most of whom are active SAS members!) about my job insecurity. All of them responded in sympathy, empathy, and of course, wise advice! Several folks gave me a few avenues to explore in terms of known position openings and even unadvertised openings. Oddly enough none of those panned out despite several interviews with various agents, it gave me objectives to work toward each day, week and month that theoretically could have become a new career position for me. In short, working my network that I have been diligently been building via SAS, the Coblenz Society and FACSS really helped give me some legitimate leads during times that nothing from the "major job websites" seemed like viable options. Beyond colleagues, I did reach out to other people I trust to lean on for support during difficult trials. Not isolating is key in this action—keep open and communicate with those you trust. Leaning on the right people will help keep the burden of job searching bearable over the long-term.

(III) **I made it a job.** While I was still dutifully employed, I was not using company time for this purpose, but I did make sure that I carved out dedicated time each evening to apply for jobs. Once the layoff occurred, this was my primary job. I scheduled specific hours each day to specific tasks relating to job hunting. I allocated time to reviewing, re-reviewing, and modifying my resume and CV. As I compared jobs, I even had a few meetings with a colleague who was kind enough to help me process a pro/con list I had collected about three jobs that I had interviewed with at one point in time. I allowed myself time off from my "job" to help prevent complete burnout and frustration over a situation that I had little control over (see point A above). As a chemist, I realize for many of us, we cannot just turn off our brains from ruminating about situations such as a layoff once we've turned our attentions elsewhere. But I permitted myself to have some fun as I was able (like throwing my kids into the pool—both fun and therapeutic) during this time too.

(IV) **I got sleep.** Unemployment will affect your sleep, no doubt. Prioritize getting sleep when you need it, and perhaps even a bit more than you think you need. Staying sharp is necessary for the arduous process of job hunting. Make hay while you have time to sleep in an extra hour and get that rest for your mind and body.

(V) **I reviewed finances.** One would hope this is common sense and probably one of the most important tasks when a pending layoff is on the horizon, but this is extremely critical. Knowing where you are financially will make or break your sanity during the duration of unemployment,

especially if you have the crucial role of breadwinner in your household (as I do). This is clearly going to be significantly different depending on what life stage you are at; but start planning now before the lack of income hits. Some financial concepts I tackled included:

(A) Figure out if you can defer a mortgage payment (or five)—thankfully in light of COVID-19's world-wide impact, many banks are allowing for deferred mortgage payments without any major credit dings to you as the account holder

(B) Figure out childcare arrangements as necessary; evaluate if it is worth keeping kids home from daycare (or school-care) to help save on costs, or whether or not that alone time is critical for your job search (see point III above). Can you arrange for part time care or pay-as-you-go care instead if full-time care is not practical?

(1) Evaluate how much your savings will get you through depending on the length of your unemployment

(2) See if your bank has penalties if your direct deposits drop below a certain threshold (not uncommon for any higher-yielding savings-based checking accounts)

(3) Figure out which expenses are needs vs wants and cull the wants as best as possible except for in cases there are contractual penalties which exceed the financial benefits.

(4) Decide to re-arrange finances, as necessary. If you need to find a cheaper place to live, search now. If having a roommate would help offset costs, figure out if you can get someone in now so the burden of less income will be offset by the roommate's contribution. If you need to go as far as selling a home, consult with a realtor about the housing market in your area.

Q2: You did a lot of the job search legwork before you even got the call from your boss, what did you do after you got the call?

A2: One of the most significant things I did was let myself grieve. I refer to grieving beyond the fact I was laid off the day before my birthday (ouch!). That might sound odd to grieve over a job, but it probably helps that a therapist pointed out a few things to me about grieving related to my position. She mentioned that unlike a job at McDonalds or Burger King or a donut shop, positions that PhD chemists generally seek out are true career positions. These are positions that we spend the better part of nearly 30 years of our lives preparing and training for, with the intent to stay in that position as long as possible. As Chemjobber adequately states, these are positions within

"a career that gives so many people meaning and purpose[.] Chemistry gives chemists fascinating, intricate problems to solve, a chance to try and do good in the world and an opportunity to create something useful and interesting. Often... these positions are well paid, have generous benefits, and help chemists support themselves and their loved ones. How can you control the fear of losing so much of your life?"

Grief comes when we have loss, and Chemjobber's thought here concisely captures the losses that come with a layoff. My therapist also reminded me that on a personal level, my position at my previous company allowed me to weather a very difficult season of my life that lasted about two years, so over the majority of my tenure at that company, and the support of my boss (the CEO) during that time is without measure in my mind. I grieved over the loss of support that position provided during that time of a lot of personal turmoil. In some ways, I even grieved on behalf of my boss' difficult decision which I know was extremely difficult for him. When I got the call, I could tell that he was trying to hold back his emotions, and I told him that I didn't begrudge his decision, and that he needed to give himself grace for having to cut me loose. It probably took him by surprise that I replied that way, but I believe that by responding with respect and compassion, it made the conversation easier than I could have been.

Q3: Job hunting can be very demoralizing at times, what helped you weather that storm?

A3: I would be lying if I said I survived that storm perfectly intact. As I mentioned above, I had reached out to people before the official layoff came, but I kept in contact with those throughout the official unemployment period as well. Staying active helped when my moods dipped too. Although much like the grief, when I had about a two-week period in August that I felt exceptionally glum, I let myself feel the emotions. As I have learned in therapy, I named my emotions and told myself that those emotions were normal, not bizarre, nor anything to be ashamed of to be feeling during such a time. One vital aspect is to rely on friends and colleagues who understand the nuances of finding a new career position with significant educational expectations for emotional support. Far too many friends will tell you that "the perfect job is just around the corner" and spew well-intended but rubbish cliches around. That's fine for perhaps the first two weeks of job searching, but after then, it's not

happening unless your perfect job is working as a donut decorator! I became very selective about who I vented to about my job searching within a short amount of time, especially relating to the nuances and complications of job hunting in today's COVID-19 environment.

Once I got the job at the donut shop that did help too—it provided me with a task beyond job searching to focus on, brought in a tiny bit more income, gave me something to physically get involved with (hefting 50 lb. tubs of icing is no joke), and gave me a creative outlet that was very therapeutic at the time.

Q4: Do you have any further deep thoughts from the donut shop?

A4: Persevere. Unemployment does not last forever. Even annoying financial situations will change once you get a new position. If you opt to take on a part time job in the meantime to make ends meet, don't snub jobs that demand a lot of physical labor and few breaks. These are often exactly what we need as scientists as a bit of a "break" from the mundane of hunting for highly technical positions. These jobs also remind us that everyone else who isn't making \$100 an hour are human too and need to be treated with compassion and kindness as well. While it was not expected for my position as a donut decorator, from time to time, someone gave me a tip, and the joy and happiness it brought to my day was astounding, so be kind!

Be willing to think outside the box for your next job. I'm grateful to say that as I'm finishing this piece to be sent out to our readership in early November, I've finally landed a position as a R&D Program Manager for a local company that specializes in Window Films. My primary job will be managing and organizing projects within the company, not doing the actual testing and evaluation of products. That wasn't my intended outcome when I started my job search, but I after a lot of soul searching and leveling with myself, I became open to opportunities that leveraged my anal-retentive organizational style in a non-traditional way! Think about how your strengths can be leveraged beyond just the laboratory too!



Some of the final sweet treats I created before I left the donut shop in late October.

*Contributed by Luisa Profeta,
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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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