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TRIAD CHEMICAL TIMES



Central North Carolina Section American Chemical Society

Upcoming Events



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Stream Cleanup, Greensboro, Saturday, April 2, 2022 (8:30am-noon): see page 4 for details

April Section Meeting (Virtual): Thursday, April 7, 2022 (see page 2 for details;

Dr. Amber Wise, Science Director at Medicine Creek Analytics: "Cannabis Chemistry Overview and Career Opportunities for a Growing Industry"

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ACS Chemistry for Life*

CNC-ACS Website: Newsletter Editor: Bill Eberle

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CNC-ACS April 2022 Section Meeting

Title: Cannabis Chemistry Overview and Career Opportunities for a Growing Industry

Abstract: A growing number of states and countries are legalizing cannabis for medicinal and adult recreational use. There are a number of areas of chemistry that are relevant to the cannabis and hemp industries; agricultural and plant genetics, analytical techniques, botanical extractions and large-scale engineering, pharmaceutical and medicinal formulations, among others. This presentation will give a brief overview of some of these chemistry aspects as well as the history and changing legal and policy landscape. Additionally, the cannabis industry has a number of opportunities for career paths at various levels of entry which will be highlighted as well as an introduction to the CANN subdivision of ACS.

Speaker Bio: Dr. Amber Wise has a Bachelor's and PhD in chemistry, and additional 8 years of research and teaching experience at universities in San Francisco, Bangladesh and Chicago. She transitioned to the cannabis industry in 2016 and has worked for a large producer/ processor in 2 legal states focused on process optimization and terpene collection. She has been the Science Director at Medicine Creek Analytics, an analytical testing lab outside of Tacoma, WA for over 3 years and recently published two peer-reviewed papers on detecting metals in cannabis vaporizer aerosols.



Date / Time: April 7 @ 07:00 PM Eastern Time (US and Canada)

Join Zoom Meeting https://american-chemical-society.zoom.com/j/83632824700?pwd=K2RQVjlmNDREYmFyZy9iQit2Qk9pUT09 Meeting ID: 836 3282 4700

Password: 442110 Dial-in by your location +1 646 558 8656 US (New York)

<u>Robert Yokley Appointed Chair of the National ACS Senior</u> <u>Chemists Committee (SCC) by the ACS President</u>

Robert A. Yokley, Chair of the local section (LS) Senior Chemists Group (SCG) during 2014-2021, was appointed Chair of the National ACS Senior Chemists Committee (SCC) by the ACS President and the Board of Directors, effective January 1, 2022. This is a 3-year commitment that will certainly occupy a lot of Robert's time.

The National SCC is comprised of 18-20 members plus about 10 associate members, primarily from the U.S., but also including 1-2 international members. The SCC serves two constituencies: seniors \geq 50 years of age who are still actively employed and those already retired but wish to remain connected to the ACS and its spectrum of activities; and younger members and students who have questions about a chemistry-based career and seek guidance. The mission is to address community needs and ambitions utilizing senior chemists' knowledge and experience. More than 35% of ACS membership (>150,000) is \geq 50 years old. The SCC oversees, among many other responsibilities, the awarding of numerous grants in support of local section activities that involve senior chemists as well as diversity, equity, inclusion, and respect (DEIR) grants. It also provides financial support to other worthy educational endeavors (e.g., science coaches, ACS Scholars, etc.).

Thus, the Central North Carolina (CNC) LS is seeking a volunteer(s) to chair or co-chair the SCG. Robert will remain as a consultant and actively participate in the SCG. If you are age \geq 50, please contact any of the CNC officers to express your interest or contact Robert directly at <u>yokleyrob-ert@gmail.com</u> if you have questions and/or wish to learn more about the SCG Chair position. This position requires only a few hours of your time per month but it is educational, fun, and rewarding.

US National Chemistry Olympiad

I wanted to keep you updated on the progress of the USNCO. There are currently 15 students registered to take the local exam and they will be doing so this afternoon and Monday; recall that we were able to give this test remotely and proctored by the teachers. In the future we should be able to generate more interested as there will be time to get contact information on chemistry teachers and allow them time to promote the test or incorporate it into their curriculum. I plan on promoting the local test as a chance to prepare for AP, Honors, IB, or other similar end of year tests, or even the chance to have someone else write and score a test that they could use in their course.

Christopher J. Fowler, Ph.D. High Point University Associate Professor of Chemistry

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Stream Cleanup, Saturday, April 2, 2022 (8:30am-noon)

The CNC-ACS will be participating in the Great American Cleanup. For on-site group participation (meet at Lake Daniel Park @ 8:30 am for coffee/doughnuts, stream clean 9-11am) If you are interested in volunteering, please contact:

TJ Mayer (tjmayer@carringers.com).

The park address is 410 Mimosa Dr, Greensboro, NC 27403



Central North Carolina Local Section Senior Chemists Group Virtual Meeting

The Senior Chemists Group (SCG) Virtual meeting was held Monday evening, March 7, 2022. Attending were Cynthia Williard, Bob Patsiga, Bruce and Carol McKillican, Dennis Tabor, Cliff Bell, Dan Rabinovich, Kent Kabler, Sarah Adjei-Fremah, Debbie Pritchard, Dave Mac-Innes, Robert and Phyllis Yokley, and guest speaker Professor Rafael Loureiro.

Dr. Loureiro, a Botany Professor at Winston Salem State University, presented a very interesting talk entitled, "Hacking Agriculture - The Creation of Sustainable Methods for Off-World Crop Cultivation and Evaluating Their Transferability to Earth-Based Systems". This astrobotany research effort focused on the challenges encountered when trying to grow plants in Moon and Mars regolith (a region of loose unconsolidated rock and dust that sits atop a layer of bedrock). One of the goals was to grow crops that produce a large edible portion of the total biomass. Tomatoes, wheat, and lettuce were grown in various lunar regolith types (silica dust, volatile-rich, Highlands, and Mare) to evaluate water and oxygen flow, physiology and development of the tested crops, viability of regolith grown seeds, and microbial recipe pilot tests. The lunar Mare and Highlands regolith showed potential. Regolith inadvertently contaminated with microbiome resulted in better plant growth. Thus, can a specific, nonpathogenic, microbiome be safely taken to the Moon without inadvertently contaminating the regolith for future crop growth? Dr. Loureiro's research may answer this and many other questions as well.

The presentation was well received and generated numerous interesting questions, comments, and recommendations from our membership. All of us learned a lot about this topic but I believe Dr. Loureiro also found the interaction with our members to be fruitful and inciteful (old chemists can still contribute!).

I wish to thank Professor Loureiro for speaking at our meeting and a special thanks to Cynthia Williard for inviting the guest speaker and introducing him at the meeting.

The next SCG meeting is scheduled for May 2. Hopefully, it will be safe enough for us to meet in-person but we will wait another month before making a decision. If in-person, we will likely have a potluck dinner and maybe another interesting speaker. Your recommendations for topics and speakers are much appreciated (send to Robert at <u>vokleyrobert@gmail.com</u>).

Robert Chair, CNC SCG Chair, National SCC

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