

# THE OCTAGON

# Lehigh Valley ACS February Section Meeting → JOINT MEETING WITH AICHE LVL5!

Thursday, February 15th, 5:30-8:30pm

"Knowledge and Skills Expected in Fresh Graduates in Industry" Lafayette College, 730 High St, Easton, PA 18042



5:30 - 6:00pm - Welcome, Appetizers & Drinks in the Clay Ketchum Room (Marquis Hall)

6:00 - 7:00pm - Dinner in the Clay Ketchum Room (Marquis Hall)

7:00 - 7:30pm - Business Meeting in Hugel Science Center (Room 205)

7:30 - 8:30pm - Seminar in Hugel Science Center (Room 205)

**Cost: \$25 / \$15 for students.** 

Register <u>here</u> or email Deb Bastinelli, <u>bastined@lafayette.edu</u>





Speaker: Tom English, Evonik Corporation

Abstract: More than half of doctoral degree holders in STEM work in industry or government (NSF 2020 Science and Engineering Indicators). If choosing not to pursue additional education, most chemistry and chemical engineering undergraduates enter industry. Often there is little interaction between students and industry prior to graduation with the students first experience frequently being the interview process. This can create an uncertain environment for the student unaware of industrial norms and expectations. The seminar will outline some key knowledge and skills expected of fresh graduates in industry at both the undergraduate and graduate level. The skills will be tied to existing accreditation criteria from both ACS and ABET. Several ways students and professors can use the coursework and graduate program to cultivate the needed attributes preparing students for industry will be suggested. Examples of technical problems faced and how fundamental chemical principles can be applied to solving them will be discussed. Resources for additional learning will also be presented.

*Speaker Biographical Information*: Tom is Head of Pilot Operations in the Global Process Research Group with Evonik Industries AG based in Allentown PA. At Evonik, he is responsible for multiple technology transfer, scale-up, and process development projects. In 2021 he took over management of pilot operations at the Allentown site leading a team of PhD chemical engineers and technicians. In addition to his Ph.D., Tom holds a Masters in Systems Engineering and a Masters in Chemical Engineering all from Penn and a Bachelors in Chemical Engineering from the University of Delaware. He resides in Allentown with his wife and two sons.

Share on your SM: <a href="https://lvacs.org/february-2024-section-meeting">https://lvacs.org/february-2024-section-meeting</a>
Directions: <a href="https://www.lafayette.edu/visit/maps-directions/">https://www.lafayette.edu/visit/maps-directions/</a>

Parking: Markle Parking Deck; <a href="https://www.lafayette.edu/visit/parking/">https://www.lafayette.edu/visit/parking/</a>

Please Post this **Flyer**!

MEETING CONTACT: Mike Bertucci, bertuccm@lafayette.edu





## **LVACS Events Calendar**

#### February 2024

### **Section Meeting**

Thursday, February 15th, 5:30-8:30pm

Lafayette College, 730 High St, Easton, PA 18042

Speaker: Tom English, Evonik Corporation "Skills you need to learn for your career"

Program/Registration details

CONTACT: Mike Bertucci, bertuccm@lafavette.edu

#### Pa Junior Academy of Sciences Meeting Saturday, February 24th, 8:00am - 4:00pm

Northampton CC, 3835 Green Pond Rd, Bethlehem, PA 18020 Annual 7-8 and 9-12 grade Region 3 research presentations [Berks, Carbon, Lehigh, Northampton and Schuylkill counties] Information: https://pjasregion3.org/

#### March 2024

### **Section Meeting**

Wednesday, March 27th, 5-9pm

Muhlenberg College, 2400 W Chew St, Allentown, PA 18104 Speaker: Dorothy Phillips, PhD, 2024 ACS President-elect

Program details TBA

co-sponsors: Muhlenberg College WiSTEM

and chemistry and biochemistry clubs

CONTACT: Sherri Young, sherriyoung@muhlenberg.edu

## Reading-Berks Science & Engineering Fair Reading-Berks SCIENCE

Tuesday-Thursday, March 12-14

Albright College, Bollman Gym, N. 13th St. & Richmond St. Reading, PA

ENGINEERING Annual Berks county 6-8 & 9-12 grade science/engineering fair

Information: https://rbsef.com/

#### **April 2024**

## **Section Meeting and Undergraduate Poster Session**



Thursday, April 18th, 4:30-9:00pm

DeSales University, 2755 Station Ave, Center Valley, PA 18034

Speaker: Luke Roberson, NASA

Program details: TBA

CONTACT: Sara Hayik, Sara.Hayik@desales.edu

Stay tuned to <a href="https://www.lvacs.org">www.lvacs.org</a> for all the latest!

Octagon CONTACT: Nigel Sanders, LVACS secretary and newsletter editor, <a href="mailto:nigel53.sanders@gmail.com">nigel53.sanders@gmail.com</a>

## Also In This Issue...

- 3-4. January 25<sup>th</sup> Section Meeting Report: Al use in Chem Education.
- 5. Brief Overview: LLMs and **ChatGPT in Chemical Research and** Education.
- 6. March 27th Meeting Flyer: Hear **ACS President-elect Dorothy Phillips** talk about "Crossing Roads: Risk and Opportunities."
- 7. New ACS WCC Chair Lorena Tribe looks toward challenges and opportunities; Nominate ACS Fellows.
- 8. LVACS Chemistry Olympiad Competition gears up; ACS Leadership Institute Report.
- 9. Spring Science Fairs will soon be here: Volunteer your time to support our young scientists.
- 10. MARM 2024 Call for Abstracts.
- 11. LVACS Awards 2024: Call for **Applicants and Nominees!**
- 12. Career Page: Improve your LinkedIn Profile March 7th.
- 13. Lunar New Year Networking **Event in Philly February 15th!**
- 14. 2024 Executive Committee.



# January 2024 Section Meeting: AI in Chemistry

Our January 25th Section Meeting at Moravian University attracted 30 LVACS members to hear about how Artificial Intelligence ("LLMs" or Large Language Models) and recent advances in programs employing it such as ChatGPT ("Generative Pretrained Transformer") and the Wolfram plug-ins are impacting chemistry research and education. After a social hour and dinner hosted by Moravian University's Chemistry Department, Jason Sonnenberg of Wolfram|Alpha joined the group by Zoom to demonstrate How these models respond to posed chemical problems, what the limitations can be and routes to overcoming some of those difficulties. In his talk, Chemical Superpowers with ChatGPT + Wolfram, Jason told us the key thing to remember is that any result from a query is a probabilistic determination based on a search of text fragments (lots of them!). To improve results from this process of creating a 'token vocabulary,' users must optimize their choice of prompts to the program. Asking for chain-of-thought and supplying illustrative examples can be crucial, as well as some rather unexpected observations such as informing the 'bot' that it is an expert at these things and that this is an important problem you are



Jason Sonnenberg

asking it to solve for you. But don't get too mushy: ask for details and comprehensive results. For more info see: https://www.wolframalpha.com/examples/science-and-technology/chemistry





# **January 2024 Section Meeting: AI in Chemistry**



Many thanks to June Thompson, Carl Salter and Stephen Dunham of Moravian University for hosting this fascinating and enjoyable meeting and June Thompson for providing the photos! For more information on the Wolfram plug-in and products available from Wolfram|Alpha, see https://www.wolframalpha.com/examples/science-and-technology/chemistry



### Brief Overview: LLMs and ChatGPT in Chemical Research and Education

By Jason Sonnenberg, Wolfram/Alpha

Chemical Superpowers with ChatGPT + Wolfram was delivered by Jason Sonnenberg from the Wolfram|Alpha chemistry team at the January Section Meeting. A brief overview of large language models (LLMs) and ChatGPT were provided in the context of chemical research and education.

For chemical education, the hopes for artificial intelligence (AI) tools such as ChatGPT are personalized learning with real-time feedback that overcomes language barriers for students. As will all new technology for education and research there are concerns that one can't ignore. Is their equitable accessibility to the AI tool? How does one assess results generated by or in collaboration with AI? Are probabilistic tools as helpful and productive as deterministic ones in the long run? Regarding ChatGPT in particular, what do STEM fields do with the fact that it is hopeless at math and makes things up? Evidence is accumulating that ChatGPT, like many humans, needs a chemistry tutor too!

Wolfram believes that it is the chemistry tutor that ChatGPT needs. Wolfram Alpha can solve and provide Step-by-Step explanations for a wide range of chemistry problems across the curriculum. The natural language input is easy for both humans and ChatGPT to generate while facilitating error propagation, (5 +- 0.01) grams, and dimensional analysis. Additionally, Wolfram Alpha has an ever growing collection of chemical calculators for routine laboratory computations. Wolfram Language is a high-level, symbolic programming language with chemistry built right in. With functions supporting chemical formulas, molecular structure, chemical reactions, chemical informatics and much more, every Wolfram notebook is a powerful tool for chemistry.

Providing ChatGPT with access to Wolfram|Alpha and Wolfram Language resulted in the Wolfram GPT. With good prompting, Wolfram GPT is a much smarter "chemistry assistant" than ChatGPT 3.5 or ChatGPT 4. Particularly notable is the ability of Wolfram GPT to generate chemical structures in two- and three-dimensions and its ability to utilized expert-curated chemical data rather values it "recalls". Examples ranging from chemical plotting and chemical conversions to test bank generation and code writing were presented. Nontrivial, chemistry problems can be successfully tackled by ChatGPT with Wolfram tools. Wolfram|Alpha & ChatGPT 3.5 are both free resources, while Wolfram GPT & ChatGPT 4 require a subscription from OpenAI.



Display the space filling, ball and stick, tubes and wireframe plots for allicin next to each other. It may be helpful to look up the syntax for the chemistry functions that you plan to use before executing code. You don't need to report out what you learn from looking up the syntax.

#### Tools for Chemical Education & Research











Wolfram

Talked to chatgpt.wolframcloud.com >

Talked to chatgpt.wolframcloud.com ~

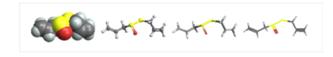
Talked to chatgpt.wolframcloud.com ~

Here are the space filling, ball and stick, tubes, and wireframe plots for allicin, displayed next to each other:











# LVACS March Meeting welcomes ACS President-elect Talk at Muhlenberg will address "Crossing Roads: Risk and Opportunities"





Dorothy J. Phillips, elected 2024 American Chemical Society president-elect, will visit the Lehigh Valley on Wednesday, March 27th to address our March Section Meeting at Muhlenberg College with her thoughts on career challenges faced by chemists. The meeting is co-sponsored by Muhlenberg College WiSTEM and chemistry and biochemistry clubs. Dorothy, retired from the role of director of strategic marketing at Waters in 2013, last visited us in 2016 to speak at a Women Chemists Committee event. Phillips plans to use her new influence to advance chemistry careers for all those interested in pursuing STEM professions as she states in this November 6th 2023 Chemical & Engineering News article:

"Excited, blessed, happy, thankful. This is really a blessing for me to achieve this milestone," Phillips says. "The things that I have done in ACS and otherwise, they were leadership roles and they put me out in front of people—I hope I am inspiring the next generation . . . especially people of color and women." Phillips has served more than 25 years in ACS offices, including 9 years on its board. "I've watched and worked with ACS presidents, and I'm always amazed at how much they can achieve and how well everybody works together. Nobody's standing alone," Phillips says.

During her presidential year, Phillips hopes to have the most impact on building chemistry careers—for both students, through science, technology, engineering, and mathematics (STEM) education, and those already working in the chemistry enterprise. She hopes to ensure that ACS remains well positioned to help those interested in pursuing STEM professions, including industrial chemistry careers. She cites Project SEED, which gives high school students an opportunity to explore what they can do in STEM, as an example of ACS's ability to help. She believes ACS has a unique ability to train and encourage everyone with an interest in the field to have not just a place but a budding career. Other areas of focus from Phillips's candidate statement include "retaining and growing an inclusive ACS membership worldwide," "expanding the reach of ACS's investments in chemistry education," and "embracing diversity, equity, inclusion, and respect." "This is a really great time to be in leadership in ACS because we are partnering with important organizations to help us achieve the mission and vision of the society," Phillips says. "There are some key challenges that touch the field of chemistry and chemical engineering, and I think it's just a great time to be in leadership at ACS—and I'm ready." by Sara Cottle, C&EN, November 6, 2023 | A version of this story appeared in Volume 101, Issue 37.

'Crossing Roads' is a favorite metaphor for Dorothy. She grew up in Nashville at a time when racial segregation was the norm in many parts of the American South. This excerpt from a Waters<sup>TM</sup> retrospective blog <u>article</u> perhaps explains the source of the metaphor: "Dorothy's family owned their home in Nashville, which was not the norm for many Black families at that time, and they played a key role in integrating their neighborhood. In 1956, 19th Avenue North was the defining crossroad for segregation, with Black families living on one side and white families on the other. Dorothy's family was among the first to purchase a home on 22nd Avenue and Murphy Avenue, crossing those lines to the other side of 19th Ave. They were not welcomed by their neighbors, and in fact one family continued to call the police every time Dorothy and her siblings were outside without their parents, claiming they were disturbing the peace as they were playing. Eventually, more Black families moved in, some of the white families moved out, and the neighborhood was integrated – with a tremendous bond among the Black families that still endures 65 years later."



Dorothy's high school was segregated. She graduated with the class of 1963.



# ACS WCC looks toward challenges and opportunities with New Chair Lorena Tribe; Spring 2024 Meeting Events

The ACS Women Chemists Committee (WCC) started the year with an announcement of its new 2024 chair, our very own Lorena Tribe, Professor of Chemistry at Penn State/Berks. Lorena recently attended the ACS Leadership Institute in Atlanta to learn more about ACS Committees, which advise the ACS Board of Directors on governance policies and sponsor activities globally to advance ACS strategy in their areas of influence. WCC will be presenting a new award during the ACS Spring 2024, the Pfizer Emergent Leader Award. The winners of the WCC Rising Star Award and the Eli Lilly Travel Award will also be recognized. On March 18, WCC will host its Women in the Chemical Enterprise Breakfast featuring Amy Prieto, Professor of Chemistry at Colorado State University and the Founder & Chief Technical Officer of Prieto Battery and the Women Chemists of Color "Sweet Treats" networking event featuring Raychelle Burks, Associate Professor of Analytical Chemistry at American University, Science Communicator, and recipient of the 2020 ACS Grady-Stack Award for Interpreting Chemistry for the Public. On March 19, the WCC Luncheon will feature the 2024 Garvan-Olin Medal Winner, Donna Huryn. All events will be held at the Hilton New Orleans Riverside Hotel. The WCC breakfast and luncheon are ticketed events. Update your registration here to attend.

Amy Prieto



Raychelle Burks



Donna Huryn



## **ACS Fellows Nominations Open Thursday!**

Recognize an ACS member's outstanding contributions to science and the profession, as well as their exemplary service to ACS, by **nominating them to be an ACS Fellow!**The ACS Fellows Program recognizes members of the ACS for excellence and leadership in both of two areas: (1) science, the profession, education, and/or management, and (2) volunteer service in the ACS community. National Committees, Local Sections, Technical Divisions, International Chemical Sciences Chapters, and individual members may all submit nominations for ACS Fellows.



Visit the ACS Fellows web page for complete nomination details, and please email any questions to **fellows@acs.org**. **Nominate a fellow before Monday**, **April 1** >>>



## Chemistry Olympiad in Lehigh Valley Gears up for 2024



LVACS is once again sponsoring a local section Chemistry Olympiad competition challenging our 15 high school student registrants to demonstrate their mastery of the subject and, possibly, continue on to the National Competition and then the World! Gail Marsella, Chemistry Olympiad Coordinator, is in the process of finalizing dates for the two rounds of testing, Local and National exams, in March and April to be held at Muhlenberg and Lafayette Colleges, respectively. The National exam includes both a written exam and a laboratory section.

https://www.acs.org/education/students/highschool/olympiad.html

## LVACS members attend ACS Leadership Institute in Atlanta



Lorena Tribe, ACS WCC Chair Jeanne Berk, LVACS Councilor

Jeanne Berk, Cedar Crest College/LVACS Councilor, Lorena Tribe, PSU/Berks/ACS WCC Chair and Chester Crane, Mussel Polymers/LVACS Chair-elect traveled to Atlanta for the ACS Leadership Development Institute (LDI) the weekend of January 26-28, 2024. Some of their reactions follow.

Chester: "We were able to meet and share our successes and plans with the ACS National Leadership Team. I attended leadership, funding, and event planning seminars with other local section leaders from across the country to help with the local chapter program in the upcoming year."

Lorena: "I attended the New Committee Chairs track as the Women

Chemists Committee chair, with several very informative workshops and presentations. The Leadership Institute was an excellent opportunity to network with colleagues and meet new ones. Highlights included being in sessions where our own Jeanne Berk was part of the organizing team, discussing MARM 2024 programming for WCC with Joe Houck from the Central PA local section, and checking in with Dan Miller from DOW about programming for the New Orleans and Denver meetings. Our neighboring section, Philadelphia, is hosting a networking event for the Lunar New Year! ACS President Mary Carroll and the members of the board of directors made themselves available for conversations in and out of the formal sessions, as did Chair-Elect Dorothy Phillips."

**Jeanne:** "It was a wonderful weekend of networking and seeing how ACS helps provide resources to members in new leadership roles. Having helped run the local section leader track moving over to work with new committee chairs was a great way for new volunteers to learn about their roles and responsibilities, as well as share best practices."



Chester Crane, LVACS Chair-elect

All of our LVACS attendees took pride in displaying the poster showcasing the two ChemLuminary Awards we received at the 2023 Fall Meeting for 2022 activities.

For more information on ACS LDI visit: https://www.acs.org/careers/leadership/leadership-institute.html



LVACS asks for a few hours of your time to encourage our Local Student Researchers by being a ...

# Science Fair Judge

Pennsylvania Junior Academy of Sciences

Information: Region 3

## Saturday, February 24, 2024

Northampton Community College 3835 Green Pond Road Bethlehem, PA 18020

Morning session starts 8 am; afternoon session at noon.

Free breakfast and lunch if you judge both!

No prior experience necessary!

Register

(enter: Region 3)

Lehigh Valley Science & Engineering Research Fair

**Information** 

## Saturday, March 16, 2024

Lehigh University, Goodman Campus Rauch Field House,123 Goodman Drive Bethlehem, PA 18015

Register



Reading-Berks Science Engineering Fair

SCIENCE OLONG
ENGINEERING
Fair

<u>Information</u>

## Tuesday, March 12, 2024

Albright College, Bollman Gymnasium Schumo Center for Fitness and Well-Being N. 13th St. and Richmond St. Reading, PA Judging from 7:45 am to 4:15 pm with breakfast/lunch

<u>Register</u>



## Middle Atlantic Regional Meeting

June 5 - 8 | State College, PA

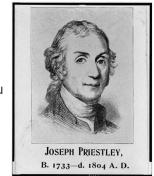


## **Now Accepting Abstracts**

Abstracts are now being accepted for the **2024 Middle Atlantic Regional Meeting (MARM)**. The theme, **Celebrating Discovery**, will be at the core of programming for the event. The Central Pennsylvania Section of the American Chemical Society welcomes you to beautiful Happy Valley, home of the Penn State Nittany Lions, for the 52nd MARM from June 5 - 8!.

As scientists, discovery is at the forefront of everything we do. We build upon the discoveries of other scientists, make new discoveries ourselves, and publish those discoveries to complete the cycle. In recognition of the quarter-millenial anniversary of one of the most important discoveries of our time, the meeting's theme is "Celebrating Discovery." Through this theme, we will honor and celebrate the groundbreaking work of Joseph Priestley on the discovery of oxygen in 1774, including a screening of Roald Hoffman's play, *Oxygen*, with the author in attendance. We hope that MARM 2024 inspires you to make brand new discoveries and foster professional connections with scientists from all over the Mid-Atlantic!







#### \*\*\*Call for MARM Award Nominations\*\*\*

Stanley C. Israel Regional Award for Advancing Diversity in the Chemical Sciences recognizes individuals and/or institutions who have advanced diversity in the chemical sciences and significantly stimulated or fostered activities that promote inclusiveness within the region. The ACS Committee on Minority Affairs sponsors this award.

ACS Division of Chemical Education Region Awards for Excellence in High School Teaching recognizes, encourages, and stimulates outstanding high school chemistry teachers in the Middle Atlantic Region.

E. Emmet Reid Award in Chemistry Teaching at Small Colleges in the ACS Middle Atlantic Region celebrates outstanding achievements in teaching chemical sciences at small colleges within the Middle Atlantic Region.

E. Ann Nalley Middle Atlantic Region Award for Volunteer Service to the American Chemical Society recognizes the volunteer efforts of individuals who have served the American Chemical Society, contributing significantly to the goals and objectives of the Society through their Regional Activities.

### →→→NOMINATE YOUR COLLEAGUES TODAY!



## LVACS Annual Competitions and Awards: Call for Nominations

John Freeman, jcf2@rcn.com, LVACS Awards Committee Chair, along with the Section's Executive Committee invite members and the local community to recognize outstanding achievements in chemistry and chemical education by our colleagues. More on these awards, including past winners and forms can be found on our website, https://www.lvacs.org/education-and-student-awards.

#### **Chemagination Competition**

Chemagination is a great learning experience for students. In addition to increasing their knowledge of science and chemistry, they can improve their creative, teamwork and public speaking skills. High school students are asked to imagine that they are living 25 years in the future and are writing for ChemMatters, a magazine for high school students that focuses on the role of chemistry in everyday life. The editor chooses them to them to write the cover article for the next issue of the magazine describing a recent breakthrough or innovation in chemistry and its applications that improve the lives of those living in 2049 and design the magazine's cover. The article must be written to fit in one of four categories: Alternative Energy, Environment, Medicine/Health, or New Materials. The winners of the LVACS local section competition will advance to the MARM 2024.

#### Foundation in Chemistry Scholarship Award

The Lehigh Valley Section of the American Chemical Society (LVACS) is delighted to announce the 2024 Foundation in Chemistry Award. The award, designed to promote the chemical sciences at the college level, will be given to a high school senior who will be majoring in chemistry, biochemistry, or chemical engineering and attending a college or university in the Lehigh Valley Section. This scholarship award consists of \$1000 and a plague, which will be presented to the winner at the Awards meeting of the Lehigh Valley Section of the American Chemical Society.

#### **Excellence in High School Teaching Award**

The award is designed to promote excellence in Chemistry instruction at the high school level within the membership boundaries of the LVACS (Lehigh, Northampton, Berks, Monroe, Schuylkill, and Carbon Counties in PA, and Warren County in NJ. The award consists of \$500 and a certificate of recognition. We hope that members will identify an outstanding teacher at their school and support them for the award. Additionally, we hope that members will share this with your neighborhood schools to increase awareness of the award. Winners of this award will be nominated by the Section for the ACS Division of Chemical Education Middle Atlantic Region Award for Excellence in High School Teaching.

#### Outstanding Achievement in Teaching Chemical Sciences at Small Colleges

You are cordially invited to nominate a colleague to be recognized at the annual awards program of the Lehigh Valley Section of the American Chemical Society (LVACS). We are seeking to recognize, encourage, and stimulate high quality teaching and research at small colleges. Please send the nominee's short curriculum vitae, list of publications, and evaluation of the nominee's achievements as a teacher in a small college. This document should clearly demonstrate the candidate's attributes: the quality of the candidate's teaching; organization and efficiency of lab work; research and/or development work; ability to challenge and inspire students; extra-curricular work in chemistry; courses, meetings, presentations, awards, etc. Winners of this award will be nominated by the Section for the Mid-Atlantic region's E. Emmet Reid Award.

#### George Ruger Student Travel Award

Any college or university student in the Lehigh Valley Local Section presenting at an ACS National or Regional meeting is eligible. Preference will be given to first-time attendees. Award is based on merit as judged by the local section Executive Committee.



#### **LEHIGH VALLEY ACS CAREER PAGE**

Check out the Career page on our website <a href="lvacs.org/careers">lvacs.org/careers</a> for a wealth of information on the services provided by LVACS and ACS to chemists at all stages of their careers. Online courses, 1-on-1 consulting, professional development grants and the <a href="ACS Career Navigator™">ACS Career Navigator™</a> package are some of the benefits offered to ACS members to assist in planning and executing your career. Greglynn Gibbs, our local section ACS Career Consultant, would be happy to assist any member seeking more information at <a href="mailto:greglgibbs@gmail.com">greglgibbs@gmail.com</a>

## ACS Virtual Office Hour – LinkedIn Profiles for Chemists





Chemists: Thinking about your web 'footprint' and 'brand?' ACS is offering a FREE virtual career guidance session, titled 'LinkedIn Profiles for Chemists' **Thursday, March 7th 2024** at 12pm EST. Open to ACS members and non-members, this session will be led by an ACS Career Consultant and offers participants **personalized career advice** and **small group networking sessions.** This event is free and open to ACS members and non-members, but you must **register** to save your seat. Register for 'LinkedIn Profiles for Chemists' and get your message out there to prospective employers! Please pass this email along to friends and colleagues in your network who would be interested.

# Advance Your Skills with Upcoming ACS Institute Courses

Gain the skills you need to excel in your career or polish up on old ones with <u>online and in-</u> <u>person courses from the ACS Institute</u>. Course discounts are available for ACS members with a Premium package. See details below for courses starting soon and register today!

Regulatory Toxicology for Chemists (Thursdays, Feb. 29 - April 4, Online Live) Investigate chemical properties and exposure factors linked to adverse health conditions ranging from eye/skin irritation to allergic responses, birth defects, or cancer. Register for Regulatory Toxicology for Chemists >>>

Polymer Chemistry: Principles and Practice (March 10-15, In Person; Blacksburg, Va.) Receive hands-on training in diagnosing and solving your polymer research and development problems! Taught by Virginia Tech's renowned faculty of polymer field experts, this course will teach you everything you need to know about polymer chemistry through a novel combination of lectures and labs. Register for Polymer Chemistry >>>

Polymer Chemistry Principles and Prac

ACS Institute

Register Now



## The Philadelphia Local Section invites LYACS members to...



#### **Presenting Associations:**

American Chemical Society - Philadelphia Local Section (ACS Philly)
Chinese American Chemical Society (CACS) East Chapter (e-CACS)
Chinese American Chromatograph Association (CACA)

Association of Chinese Professionals in PA (ACP)





## Philadelphia Local Section

American Chemical Society - Philadelphia Local Section



### LEHIGH VALLEY SECTION OF THE AMERICAN CHEMICAL SOCIETY **2024 EXECUTIVE COMMITTEE**

#### **OFFICERS**

Chair: Philip Elias philipjelias@gmail.com



#### **COUNCILORS**

Jeanne Berk (term ends 12/31/24) irberk@cedarcrest.edu



Chair Elect: Chester Crane crane@musselpolymers.com



Matt Sonntag (term ends 12/31/26) msonntag@albright.edu



Immediate Past Chair: Steve Boyer sbover11@esu.edu



**ALTERNATE COUNCILOR** 

Ned Corcoran (term ends 12/31/24) ewc777@gmail.com

Secretary: Nigel Sanders nigel53.sanders@gmail.com



Treasurer: Sherman Cox shermdc51@gmail.com



The Octagon Newsletter is published by the Lehigh Valley Section of the American Chemical Society to provide information to section members and the public about activities and programs which support the section mission "To elevate the chemical sciences in the Lehigh Valley section for the benefit of our members and our community." Send all queries to the editor at: <a href="mailto:nigel53.sanders@gmail.com">nigel53.sanders@gmail.com</a>