MARCH MEETING
Thursday, March 16, 2023
THE EDGAR FAHS SMITH MEMORIAL LECTURE
Reception at 5:00 PM
Lecture at 6:00 PM
Speaker to be announced in the March issue of the Catalyst
Chemistry Building, University of Pennsylvania 34th and Spruce Streets Philadelphia, PA

See the MARCH issue of the Catalyst for details, call the Section Office at (267) 485-1792 or email PhilaACS@gmail.com.
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Advertising: Victor Tortorelli, vtortorelli@ursinus.edu
A heartfelt “Thank You!” goes to all the members that completed the Strategic Planning survey. This month’s Strategic Planning Retreat will have Section leadership use this member input in determining a set of goals for our Section. With a strategy for meeting these goals, the executive committee and the Board can ensure that the Section is serving our membership as effectively as possible. I’m very much looking forward to sharing the results of this strategic planning process with you. Thanks to Immediate Past Chair Ivona Sasimovich for her leadership in initiating the strategic planning.

For this month’s meeting, the Section will host a virtual seminar by Stefan Kilyanek. Stefan has been a professor at the University of Arkansas since 2014; he previously trained at the University of Chicago and MIT in organometallic chemistry and electrochemistry. He has also been legally blind since birth and serves as a member of the national ACS Committee on Chemists with Disabilities. I am excited for Prof. Kilyanek to share his experiences with the Section as a legally blind synthetic chemist.

A reminder that the Awards for Excellence in Pre-College Teaching and Undergraduate Teaching are due to the Section this month – February 15th. Please consider nominating an outstanding full-time educator in our Section! Winners will be honored at our April Section meeting.

As always, please reach out with any suggestions, ideas for programming, or questions about getting involved in our work. Thanks, and looking forward to seeing you at our events!

**NEWS ATOMS—Alan Warren**

**DEATH**

**Harry Ladenheim**, retired catalysis chemist at age 90. He entered the work force at Esso Research and Engineering in the area of solid-phase catalysts for petroleum processing. He then moved to Air Products where he enjoyed a 30-year career in amine synthesis, process improvements, upgrading unit operations, plant safety, and environmental facilities. Following retirement he was a computer instructor at junior colleges and private high schools. Ladenheim was a 50+ years member of ACS.
February 2023 Meeting

Stefan Kilyanek

University of Arkansas

Feb 16, 2023 | 7:00 PM EST on Zoom

**Free:** Registration requested

**URL for registration (or use QR code above):**

Prof. Kilyanek will discuss his experiences conducting organometallic chemistry as a legally blind synthetic chemist.
About the Speaker:

**Prof. Stefan Kilyanek** is an organometallic electrochemist working on biomass up-conversion catalyzed by Mo 6+ complexes. Prof. Kilyanek has been legally blind since birth and is currently a member of the national ACS Committee on Chemists with Disabilities. In addition to his lab's wet chemistry, he works as a member of the world wide web standards committee community subgroup on chemistry publication to develop open-source standards for the description of chemical notation to the blind and visually impaired.
747th ACS Philadelphia Section Board of Directors Meeting

Call for Agenda

The 747th Meeting of the Board of Directors of the ACS Philadelphia Section will be held from 7:00 PM to 8:00 PM on Thursday, February 9, 2023 virtually.

- Those interested in being added to the agenda are kindly asked to send a request to the Chair (dob@temple.edu) by Wednesday, February 8, 2023 for inclusion in the agenda.
- All Officers will be included on the agenda to verbally report by default.
- Please Note: If a written report or notice of a verbal report is not submitted to the Chair by the specified deadline, then all such reports will be relegated for discussion as “Other Business.” Please note that the Chair cannot guarantee sufficient time for discussion in these cases.
- All Board of Directors meetings will be open to the public. Public access information for this teleconference will be released through the Section’s website and by the Section’s email blast.

Tentative Agenda

I. Roll Call
II. Approval of Meeting Minutes
III. Officers’ Reports
IV. Committee Reports
V. Other Business

For those participating by teleconference: All Officers and Directors should have received a Google Calendar invitation with a Zoom Link. For those who have not received this information as well as for your convenience, please use the following information to access the teleconference:

By Internet: register by following this link:
https://american-chemical-society.zoom.com/meeting/register/tZEkce6urTgqGdwsNlaLSUOwH5YoR2ovE8jI
Zoom Meeting ID: 859 6763 3038

By Phone:
Phone Number: +1 646 558 8656 or +1 301 715 8592
Access Code: 859 6763 3038

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Chair  
dob@temple.edu

Sister Rose B. Mulligan  
Secretary  
mulligan@immaculata.edu

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PhilaACS@gmail.com

Cc: Officers & Directors  
Councilors & Alternate Councilors  
Committee & Group Chairs

American Chemical Society – Philadelphia Section  
231 South 34th Street, Office – 6th Floor, Philadelphia, PA 19104-6323  
phillyacs.org
The Philadelphia, Lehigh Valley, Princeton and Trenton local sections collaborated to host the first regional Delaware Valley Leadership Development Institute on Saturday, November 5, 2022 at St. Joseph’s University, Hawk Hill Campus. The event was modeled after the Leadership Development Institute held in January for new Local Section and Committee Chairs. Each participant was able to take two in-person leadership development classes and participate in a networking lunch. Participants were also offered the opportunity for a post-event happy hour. The organizing team consisted of 13 volunteers from the 4 local sections. The goals of the event were multifold: 1) offer a taste of the valuable leadership development courses locally; 2) attract chemists who were not currently participating in ACS events and show them the value of an ACS membership; 3) provide opportunities for students and industrial members to get to know each other, offering opportunities for recruiting talented students and learning about life in industry, and 4) provide opportunities for industrial chemists to meet peers from a variety of companies. The organizing team was able to work with the ACS National membership team to offer discounted membership to all registered non-members. Participants were very engaged in the courses and were excited to meet peers in the region.

Due to grants from Corporation Associates and the Innovative Program Grant from LSAC, as well as a discounted rate for facilitators, the local sections were able to cover the cost of facilitators for the event. Additional funds of $500 per local section helped to cover room expenses, food, and section photographer. The remaining funds were collected from charging participants a fee to attend. Students were charged $20, members were charged $50, and non-members were charged $75. We also had two non-members join at a late fee of $100 each. Lunches were served as boxed lunches for simplicity and to reduce impact from COVID restrictions.

Approximately 48 participants enjoyed the event. One facilitator was unable to make the event last minute due to a weather delay of her flight.

While the event was a great success, there were some learnings that are important to keep in mind. The event was conceived prior to the pandemic with an acknowledgement that many local young professionals were unable to receive the professional development training that had been offered in the past. In that time, young professionals would have been very willing to spend a Saturday to attend such an event; in fact, a Saturday would have been preferable as they would not have had to miss work or ask for permission to attend in an increasingly lean work environment. As the event was held after the pandemic, the attitudes toward work culture had shifted greatly. Even though several local companies were willing to sponsor young professionals to attend, it was hard to find the young professionals willing to attend on their day off. The good thing about the event as it was held was that there was a mix of students and early career industrial chemists. We had hoped for some young academic faculty, but none were able to join. We had also reached out to the staff of local scientific outreach groups such as the Franklin Institute, but they were also unable to send anyone. If the target group was limited to
working early career professionals, holding the event during the work day might increase attendance.

Photos from the Event:

*Whole Team including participants, organizers, and facilitators*

*Team from IFF*
Students from Temple

Students from St. Joseph’s University (formerly University of the Sciences)
OPPORTUNITIES TO VOLUNTEER

Younger Chemists Committee Program and Event Planning Volunteers: The Younger Chemists Committee (YCC) is a committee of the Philadelphia Local Section focusing on the needs of undergraduate, graduate, postdoc, and early career chemists under 35 years old. The committee is looking for volunteers to help with program planning for the annual poster session to be held this Fall. Many hands make light work, so several volunteers are needed in this capacity! This is an excellent opportunity for students and early career chemists to assume leadership roles and network with likeminded scientists within the ACS community. The estimated time commitment would be less than 1 hour per week.

All interested individuals can reach out to Isabella Goodenough at:

igoodenough.acs@gmail.com
CALL FOR NOMINATIONS
2023 ACS PHILADELPHIA SECTION
AWARDS FOR EXCELLENCE IN PRE-COLLEGE TEACHING

Notice is hereby given that the ACS Philadelphia Section invites its members to nominate candidates for the 2023 ACS Philadelphia Section Awards for Excellence in Pre-College Teaching.

The Awards honor two outstanding science teachers. One Award will be given to a full-time educator involved in teaching science in grades K-8. The second Award will be given to a full-time educator at the secondary level (grades 9-12) who teaches chemistry. Nominees must teach in the geographic territory of the ACS Philadelphia Section (Philadelphia, Bucks, Chester, Delaware and Montgomery counties in Pennsylvania; and Burlington and Camden counties in New Jersey).

PLEASE NOTE! Nominations for 2023 will be accepted until February 15, 2023.

INSTRUCTIONS FOR SUBMITTING NOMINATIONS

1) A Nominator Recommendation of not more than 750 words submitted by the nominator.
2) A current curriculum vitae or resume that includes a list of the nominee’s honors, professional activities, and additional evidence of service to the profession. This must be limited to no more than two pages, and the activities listed must have occurred within the past five years.
3) A statement by the nominees of not more than 500 words that describes the nominee’s teaching philosophy or commitment to the profession.
4) At least one, but not more than three, letters of support. One letter, of no more than 400 words must be from the teacher’s current principal or supervisor. Additional letters of support, of no more than 400 words, may be sent by colleagues, members of the ACS who are familiar with the nominee’s achievements, or former students and parents of former students.
5) The total nomination package should not exceed 30 pages.

The nomination package may be e-mailed or sent to:
ACS Philadelphia Section
Department of Chemistry
University of Pennsylvania
Philadelphia, PA 19104-6323
(267) 485-1792; email PhilaACS@gmail.com

The Award Recipient will be honored at our April Section meeting with a plaque and an honorarium.
CALL FOR NOMINATIONS
2023 ACS PHILADELPHIA SECTION
AWARD FOR EXCELLENCE IN UNDERGRADUATE TEACHING IN THE CHEMICAL SCIENCES

Notice is hereby given that the ACS Philadelphia Section invites its members to nominate candidates for the 2023 ACS Philadelphia Section Award for Excellence in Undergraduate Teaching in the Chemical Sciences.

This award will honor an outstanding, full-time educator involved in teaching an undergraduate course in the chemical sciences (i.e., chemistry, biochemistry). Nominees must teach in an institution that is within the geographical territory of the ACS Philadelphia Section (Philadelphia, Bucks, Chester, Delaware and Montgomery counties in Pennsylvania; and Burlington and Camden counties in New Jersey).

**PLEASE NOTE!** Nominations for 2023 will be accepted until February 15, 2023.

Nominations should consist of the following:

1) A letter of nomination.
2) The nominee’s resume.
3) Two letters of recommendation.
4) The total nomination package should not exceed 30 pages.

The nomination package may be e-mailed or sent to the Chair of the Awards Committee at:

ACS Philadelphia Section  
Department of Chemistry  
University of Pennsylvania  
Philadelphia, PA 19104-6323  
(267) 485-1792; email PhilaACS@gmail.com

The Award Recipient will be honored during the April Section meeting with a plaque and an honorarium.
MOLE DAY AT THE PLEASE TOUCH MUSEUM

The Section’s Education & Outreach Committee sponsored a Mole Day event at the Please Touch Museum in Philadelphia on October 23 from 12 PM to 4 PM. Volunteers from Villanova University and Temple University carried out safe and age-appropriate hands-on demonstrations with hundreds of children. Participants dissected diapers to discover how the polyacrylate powder inside forms a gel when exposed to water, explored how the strength of cotton fibers depends on how they are woven, compared the ability of various fabrics to be dyed, and tested how different materials absorb water (or not).

Thanks to Villanova undergraduates Clif Giannini, Meghan Youngren, Madison Harth, Hailey Bierling, Daniel White, Zach Boyer, and Anabelle McGinley; Temple undergraduates Sarah Chung, Logan Meyers, Zeshawn Rahman, Tyler Rayne-Nero, Marcelina Welgarz, Rachel Spurr, Eileen Fisher, Alaina Peeler, Rolando Oropeza, and Istvan Tamas; and Villanova professors Matt O’Reilly and Jess Stuart! Special thanks to Jenn Scarborough, Manager of Educational Programming at the Please Touch Museum for helping make this event happen!

NCW 2022 Mole Day Outreach
Submitted by Tom Umile, Education & Outreach Chair
ANNUAL ILLUSTRATED POEM CONTEST

Submitted by Tom Umile, Education & Outreach Chair

The Philadelphia section once again hosted an illustrated poem contest for K – 12 grade students, receiving 101 entries! Submissions were judged by members of the Education & Outreach Committee, and winners were awarded in four grade categories. Winners each receive a $50 prize and advance to the ACS National Illustrated Poem Contest. All participants received a certificate of participation. Special thanks to the grade school educators who encouraged their students to participate in this event!

Grade K–2 Winner
Kaitlin Savage
Afton Elementary

Grade 3-5 Winner
Julia Dunn
Schule Homeschooling Group
Would you like to speak to a local ACS Career Consultant? The Philadelphia Section career consultants can provide one-on-one career advice, resume reviews, or mock interviews. Please send an email request to acsphillycareerservices@gmail.com to set up an appointment.
Abstract: Over the past 60 years, there have been incredible feats of science – putting a person on the moon, eradicating smallpox, unraveling the structure of DNA, decoding the human genome, and discovering elements of the periodic table up to 118, to name only several. During this time – and, even, before this time, computational chemistry has evolved from addressing atoms and small molecules to proteins, based on principals of quantum mechanics, molecular dynamics, and statistical mechanics. With the advent of artificial intelligence/machine learning and quantum computing, the future possibilities are endless. However, even with these newer dimensions of computational chemistry, the Schrödinger equation – the fundamental equation of quantum mechanics, and so much of computational chemistry – has not been solved exactly (except for a species like H), yet is vital in areas such as developing new catalysts, designing more sustainable solar cells (spin trapping), addressing environmental contaminants (PFAS – “zombie” molecules), and discovering new drugs. The need for energy data spans the periodic table from small molecules to proteins. In the first part of this talk, the challenges in obtaining energetic (thermodynamic) properties of transition metal species and heavy element (lanthanide and actinide) species will be overviewed, including approaches developed by our group.

The second part of this talk will overview some of the activities of the American Chemical Society.

Biography: Angela K. Wilson is the John A. Hannah Distinguished Professor of Chemistry at Michigan State University. She is also the Associate Dean for Strategic Initiatives in the MSU College of Natural Sciences and the Director of the MSU Center for Quantum Computing, Science, and Engineering. From 2016-2018, she was the Director (head) of the Division of Chemistry at the US National Science Foundation (NSF). At NSF, she led the strategic direction and national funding priorities in chemistry for NSF, determining research projects at universities.
across the country that would be funded, responsible for nearly $1B in research investments. Prior to this, she served as Regents Professor and the Associate Vice Provost for Faculty and head of the Office of Faculty Success at the University of North Texas (UNT) with its 42,000 students and >2,400 faculty. She was the founder and director of the Texas Center for Advanced Scientific Computing and Modeling (CASCaM).

Dr. Wilson earned her PhD in chemical physics from the University of Minnesota and BS in chemistry from Eastern Washington University. She was postdoctoral fellow at Pacific Northwest National Laboratory. Among Dr. Wilson’s honors are Fellow of the American Chemical Society, Fellow of the American Physical Society, Fellow of the American Association for the Advancement of Science, Francis P. Garvan-John M. Olin Medal, IUPAC Distinguished Woman in Chemistry, and the 2023 Iota Sigma Pi National Honorary Award. In 2018, she was inducted into the Michigan Women’s Hall of Fame. She is on the editorial advisory board of The Journal of Physical Chemistry and Cell Reports Physical Chemistry, as well as on the editorial board of Scientific Reports. She has ~200 publications, has given over 400 invited lectures, and has edited 6 books including Pioneers of Quantum Chemistry. She has recently spun off a non-profit company, QuSTEAM, focusing on quantum computing training for the future workforce. She was recently named one of the 5 most influential women in chemistry in the world and one of the 40 most influential women in science in the world over the past decade.

Dr. Wilson has served as President of the Division of Physical and Biophysical Chemistry of the International Union of Pure and Applied Chemistry (IUPAC), Chair of the Chemistry Section of the American Association for the Advancement of Science (AAAS), and as the 2022 President and is presently serving as the Past-President of the American Chemical Society (ACS), the world’s largest scientific society, with more than 171,000 members and ~2,000 staff. As a part of these ACS roles, she serves on the Board of Directors of ACS, with fiduciary responsibilities for an annual operating budget of ~$700M.

Dr. Wilson’s physical (computational and theoretical) chemistry research spans quantum mechanical and quantum dynamical method development, transition metal and heavy element chemistry, drug discovery, environmental chemistry, catalysis, thermodynamics, and sustainability. Her computational chemistry methodologies are utilized worldwide. She has mentored >150 students and postdoctoral fellows in her research group.

Reservations: For more information and to register (required) for the virtual meeting register here.
REGULATORY TRENDS IN THE PHARMACEUTICAL INDUSTRY

Michael Casner, Ph.D.
(Interdisciplinary Scientist, Food & Drug Administration)

DATE & TIME: Wednesday, February 08, 2023, 6:00 PM
Anthony's Ristorante, Springfield, PA
Cash Bar Networking, then Talk and Business Session

Click here to register

Location: Anthony's Ristorante, 865 W Springfield Road | Springfield, PA 19064.

Biography: Michael Casner is an Interdisciplinary Scientist – Investigator at the Food and Drug Administration. He earned his B.Sc. in Pharmacy at the University of Kansas and his Ph.D. in Pharmaceutical Chemistry at the University of Arizona. Before his nearly 10-year career at the FDA, Mike worked as a Senior Chemist at Merck, a manager at Mallinckrodt, a Senior Research Chemist at Covidien, and a Principal Scientist Process Chemist at Johnson Matthey. In addition, his career has intertwined with academia, including Assistant Professorships at Duquesne, the University of Pittsburgh, and Rowan. He has won numerous professional accolades in various chemical and pharmaceutical fields.

Abstract: The pharmaceutical industry has faced many challenges during the Covid and post-Covid world, including manufacturing and supply chain bottlenecks, growing demand for faster delivery of drugs, and new legal and regulatory schemes. Among the regulatory trends are the use of patient-reported outcomes in the drug-approval process, evolution in the medical device regulations, changes in the biopharma approval process, harmonization, high volumes of unstructured data, natural language processing, AI, cloud computing, and data integrity. Mike will discuss his experiences in China, India, and other countries that supply ingredients to pharma clients in the US.

Click here to register to attend the event (Virtual access is available for distance members)
Attendee - $40 including dinner and non-alcoholic beverages.
Cancellation deadline: Friday, February 3, 2023.

CONSULTANTS - OPPORTUNITY HERE!

Are You Getting the Benefits of CCN Membership or Event Participation?

THE CHEMICAL CONSULTANTS NETWORK PROVIDES VALUABLE TOOLS FOR MEMBERS BEYOND THE MEETINGS AND NETWORKING. CHECK OUT OUR:

- Valuable past presentations – Consultants' Directory – Blogs – Resources
- Join! Most valuable – post your consulting practice information – and have greater visibility!
- If you’d like to speak with one of our members, come to a CCN meeting
CAREER DEVELOPMENT

Being a part of one of our teams can help you develop organizational and meeting skills as well as help you network with people from the largest area companies. Public Relations, such as sending out meeting notices and press releases, can help you develop a network and help you get noticed!

All committees are looking for new members and several are looking for “take charge” chairs. Some, like the Teller’s Committee, involve minimal work—one night per year and pizza provided. Others, like positions on Communications or Social Committees, involve one or two hours per month.

Committee details can be found at:
www.membership.acs.org/p/philadelphia
or by calling the Philadelphia office.

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The Catalyst readership is greater Philadelphia’s largest source for chemical and biochemical buyers. The Catalyst reaches more than 5,400 readers each month. It has been estimated that these buyers annually purchase more than $150,000,000 of:

- EQUIPMENT
- SUPPLIES
- CONSULTING SERVICES

Placing an advertisement in The Catalyst is the lowest cost method of reaching this select audience.

Contact the Section Office at PhilaACS@gmail.com or (267) 485-1792
Put “Volunteer” in the subject line or leave a message including contact information.

S U R P R I S E

Our editor by calling and saying you appreciate the quality and content of our newsletter. Our editor works hard to maintain a publication of interest to our membership. Oh, and by the way you could also give credit to our advertisers who financially support us.

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