

# **CINTACS**

Cincinnati Section of the American Chemical Society

Celebrating Over 125 Years of Chemistry in Cincinnati!

### Message from the Chair: Traditions



"We've kept our balance for many, many years.

Here in Anatevka we have traditions for everything..."

Fiddler on the Roof, lyrics by Sheldon Harnick

March and April mark several of our Cincinnati Section's traditional events. In the opening scene of Fiddler of the roof, the dairy man *Tevye* reflects on the value of tradition which results in the opening number Tradition.

Our traditional events in March and April reflect on the different stages and values of learning, practicing, and teaching our central science. Like in Anatevka, the setting of Fiddler on the Roof, a whole village is participating in this effort. We need help to identify and foster some of the heroes in our community, both fledgling scientists and those who lead the path forward.

We celebrate the accomplishments of students showcasing their interest and talents in chemistry by participating and excelling in the Chemistry Olympiad. Jill Page orchestrates the exams for our local section. We had 116 students from 8 local high schools participate in the ACS Olympiad Local Exam. 11 top scorers are selected to represent our section and take the ACS Olympiad National Exam (at the end of April). This year we will also offer the First Year Exam again for students in a first year high school Chemistry course. Top scorers and Oesper award winners will be recognized. I recall buying my first real chemistry textbook in high school (Organic chemistry). I didn't make it too far into the competition but I sure had my share of fun, and it played its role in cementing my fascination with the subject.

Our section also has a special prize for regional science fair winners in the category of chemistry. Mark Laskovics is in charge of selecting the winners when he participates in the annual science fairs as a judge.

Many of us fondly remember teachers who made a difference in our lives. To honor the teachers who go the extra mile to raise the next generation of scientists and chemists, we honor the Cincinnati Educators of the Year with separate awards for Elementary School Science teachers, Middle School Science teachers, as well as High School Chemistry teachers. Lynn Hogue chairs this awards committee. I had the privilege to peek behind the scenes last year and read the inspirational stories about the work of local educators.

Our Cincinnati Chemist of the Year award and Chemical Technologist of the Year award committee is led by Jay Eylem, which weighs the nominations received for these professionals in the chemistry enterprise. Our winners this year represent two individuals who-in addition to contributions to research and technology-play a critical role in teaching and mentoring others in the community.

April also marks the time when we celebrate the service anniversaries of long-term American Chemical Society members in the larger Cincinnati Area. We celebrate those Chemistry "for-Lifers" who have had a full career of contributing to chemistry and fostering the careers of the next generation of chemists.

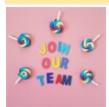
Please join us on April 28th at Northern Kentucky University as we celebrate some of these Chemistry Highlights. Our demo team, led by Gloria Story, will share some spectacular chemistry demonstrations at this family friendly event.

Sometimes, people take on different roles over the course of a career. If you want to read a great story about a non-traditional career, take a look at the story of Kat Day, a chemist turned teacher turned writer turned editor from the March 6th edition of Chemical and Engineering News.

Another April tradition are our outreach events for Earth Day. Donna Wiedeman's committee is organizing demonstrations at Summit Park and in the Cincinnati Museum Center (see more details below).

Peter Koenig, PhD Chair of the Cincinnati Section of the America Chemical Society

# **Help Wanted**



Our survey in October suggested that many of you are interested in volunteer and mentoring opportunities. Please contact <u>Peter Koenig</u> if you are interested:

We are looking for a volunteer to help Jill Page coordinate the Chemistry Olympiad exams.

If you are interested in helping out with science fairs, our current liaison intends to step down after this year.

# **Chemistry Highlights**



April 28th Northern Kentucky University Ball Room, Student Union

Join us for an exciting evening recognizing a range of achievements and fun chemical demonstrations. We will recognize Greater Cincinnati students who excelled in the Chemistry Olympiad and Science Fairs with Chemistry related projects, Cincinnati Science and Chemistry K-12 Educators, and local long term ACS members.

You will have a chance to see demonstrations from this year's Chemists Celebrate Earth Week Event: "The Buzz about Bugs" (see below).

For more information and to register for in person or remote (Zoom) attendance, please click <u>here</u>.

#### **Chemists Celebrate Earth Week**



The theme of this year's Chemists Celebrate Earth week event is "The Buzz Around Bugs: Insect Chemistry."

Our local Section will be present with chemical demonstrations at the <u>Greater Cincinnati Earth Day Celebration</u> at Summit Park in Blue Ash on April 23rd from 12pm-5pm.

You will also have an opportunity to see these chemical demonstrations in the on April 22nd from 10am-4pm at the STEM lab of the Natural History and Science Museum of the Cincinnati Museum Center.

You can find additional educational resources including activities for kids and general interest resources for college students and adults at the <u>ACS Chemists Celebrate Earth Week page</u>.

# **Analytical Discussion Group**



Dr. Yao Wu, Johns Hopkins University: "Advances in Real-time Molecular Monitoring" Wednesday, April 20th, 12-1pm on Zoom

Join us for a Discussion Group in Analytical Chemistry Discussion Group focusing on "Advances in Real-time Molecular Monitoring". The ability to continuously monitor the concentration of specific molecules in the body is a long-sought goal of biomedical research. For this purpose, interstitial fluid (ISF) was proposed as the ideal target biofluid because its composition can rapidly equilibrate with that of systemic blood, allowing the assessment of molecular concentrations that reflect full-body physiology. In the past, continuous monitoring in ISF was enabled by microneedle sensor arrays. Yet, benchmark microneedle sensors can only detect molecules that undergo redox reactions, which limits the ability to sense metabolites, biomarkers, and therapeutics that are not redox active.

Our speaker, Dr. Yao Wu will present recent research efforts towards the first use of microneedle-supported electrochemical, aptamer-based (E-AB) sensors. Dr. Wu joined Dr. Netz Arroyo's group as a postdoctoral fellow in the Department of Pharmacology and Molecular Sciences at Johns Hopkins University School of Medicine, where she has been working on the development of DNA-based electrochemical sensors to monitoring wound healing and chemotherapeutic-driven tumor shrinkage, as well as microneedle aptamer-based sensors for continuous, real-time molecular monitoring.

Please feel free to invite students and colleagues, even if they are not ACS members, to attend. Register for attending via Zoom <u>here</u>.

#### **Chemists from around Cincinnati**



Gerard Baillely (Senior Vice President of R&D, Procter and Gamble) was featured in ACS' Industry Matters newletter. In his One Minute Mentor column, he provides advice on how to Make the Most of Your Presentations to Senior Leaders.

# **At a Glance: Upcoming Events**

March 31	Cincinnati Chemist & Chemical Technologist of the Year The Marcum Hotel and Conference Center, Room 108/110 Miami University 6:00 pm in person (registration closed) 8:00 pm on Zoom (register)
April 20	Analytical Discussion Group 12 PM via Zoom ( <u>register</u> )
April 22	Chemists Celebrate Earth Week: The Buzz about Bugs Chem Demo 10AM - 4PM at STEM Lab of the Natural History and Science Museum, Cincinnati Museum Center
April 23	Chemists Celebrate Earth Week: The Buzz about Bugs Chem Demo 12PM - 5PM at Summit Park in Blue Ash, part of the Greater Cincinnati Earth Day Celebration
April 28	Chemistry Highlights Northern Kentucky University (more info)