

# CINTACS

POINTS OF

Newsletter of the Cincinnati Section of the American Chemical Society
INTEREST:

SEPTEMBER 2021

# • Reservations for Sept 19 Family

and Friends Picnic

**SPECIAL** 

- Member Survey due Sunday
   September 12
- Oesper
   Symposium
   Poster Deadline
   October 8 (p.13)

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### **September 2021 Section Meeting**

September Monthly Meeting

**ACS Family and Friends Picnic** 

Sunday, September 19, 2021 In Person!

CHEMISTRY FUN AT GERMANIA PARK SUNDAY, SEPTEMBER 19 1 - 6 PM

### **REGISTER NOW FOR THE PICNIC!**

Ask family and friends to join you as summer comes to an end and we start up a new school year. Re-connect with ACS friends and make new ones in a relaxed and casual atmosphere. This is a joint event for the Cincinnati and Dayton ACS Sections. At this event, we will have family friendly Chemistry Demos, a Bounce House, games, and a DJ. In addition, there will be Resume Review session provided by ACS Career Consultants and newly hired industry representatives along with a Networking Event with local chemists in industry, agencies, universities, and colleges that will provide opportunities to learn what chemists do and ask about graduate school. (Details on page 3.)

### Registration Deadline:

Sunday, September 12

#### Location:

Germania Park, 3529 West Kemper Road, Cincinnati, OH 45251



### The CINTACS Newsletter Volume 55, No. 6 September, 2021

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Guest Editor: Susan Marine

A permanent editor is needed. In the meantime, send submissions to Susan Marine (mariness@miamioh.edu).



# traditionally been a Family and Friends Picnic to celebrate the end of summer. This picnic is possible thanks to the efforts of Jackie Thomas (for spearheading its organization), Gloria Story (for organizing the chemistry demos), John Glaser

The September Cincinnati ACS meeting has

From the Chair:

(for arranging the DJ, Rockin' Ron), Brant Center (for contacting/inviting all the colleges and universities in the Cincinnati area).

We have invited the Dayton Section to join in our outdoor celebration. Not only did they agree to come, but the Dayton Section chair, Davide Simone, immediately mobilized his officers to supply additional resume reviewers, local company representatives for networking, and inviting the Dayton area colleges and universities. Look forward to a great picnic!

The **Oesper Symposium** will be October 22. See page 13 for the **Call for Posters!** 

Welcome back to our regularly-scheduled

events! — Susan Marine

### ACS Cincinnati Section Officers

Chair:

Susan Marine mariness@miamioh.edu

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<u>Secretary:</u>
Allison Edwards
allison.edwards@protonmail.com

<u>Treasurer:</u> Sam Glover sam.e.glover@icloud.com

### **Shout Out:**

### **JACQUELINE THOMAS**

Jacqueline Thomas organized and planned most of the Family and Friends Picnic. As she has done in the past, she reserved the date with Germania Park, arranged for the caterer, supplied the headcount, and finalized the menu. In addition, Jackie rented the Bounce House, looked into several other possible activities, designed the picnic flyer, and wrote the announcement for the website.

This picnic would not be the same wonderful annual event without Jackie. Kudos and thanks!



### September 2021 Cincinnati ACS Annual Family and Friends Picnic Joint with the Dayton ACS Section!

### Location:

Germania Park, 3529 West Kemper Road, Cincinnati, OH 45251

### **Activities:**

Children's swings, playground, and Bounce House open 1-6 PM. Snacks, beverages, and desserts available throughout. DJ providing music 1-5 PM.

### Schedule:

- I 2 PM: Resume Review by ACS Career Consultants and Newly Hired Industry Representatives Learn how to make your resume stand out.
- 2 3 PM: Networking Event *Meet people from local chemical industry, agencies, universities, and colleges., including P&G, ThermoFisher, Shepherd Color, FDA, EPA, NIOSH, Learn what working chemists do; ask about grad school.*
- 3 4 PM: Food and Drinks (Included in the cost of registration)
- 4 4:30 PM: Chemistry Demonstrations
- 4:30 6 PM: DI and Outdoor Activities

### We'd love to have you bring a dessert to share!

If you do bring a dessert, please have it portioned out to minimize touchpoints. Individually wrapped portions would be appreciated.

### Cost:

\$15 for regular members (\$20 for regular members with their family or friends); \$10 for retired members and K-12 teachers (\$15 retired members and K-12 teachers with their family or friends); and \$5 for unemployed and student affiliates.

### Beer Tasting!

Our local beer chemist, Dr. Michael Weaver, will tell us about German beers! Germania Park will provide two German beers for our picnic.

### We want your ideas and opinions!

Cincinnati ACS Member Survey Due Sunday September 12, 2021

Please share your opinions concerning the Cincinnati Local Section of the American Chemical Society in this 7-9 minute survey. We value your feedback and will use it to create future events and activities that best serve your needs. All responses will be kept confidential and used only for research purposes.

Click on the link below, or copy and paste into your browser:

https://americanchemical.co1.gualtrics.com/jfe/form/SV 5clJbcsfO3j3GYK

Please complete the evaluation by September 12<sup>th</sup>, 2021.

Thank you!

### **ACS Bridge Project**

Let ACS help you transition successfully into the workforce!

Apply today to attend the FREE Genentech-sponsored virtual ACS Bridge Career Kick-Starter Workshop, held November 12-14, 2021. Graduate students and postdoctoral scholars will experience five interactive learning modules, stimulating discussions from a diverse panel of professionals, one-on-one career consultations with a career consultant, and opportunities for creating meaningful professional connections. Only a few half-day seats are left; apply today!

### **ACS Career Day**

ACS Career Day: Inspiring Women in Chemistry with Pfizer

Want to make chemistry more supportive for women? Join ACS and Pfizer on September 28 for a FREE ACS Virtual Career Day for undergraduate and graduate students featuring keynote and panel discussions on career planning, breakthrough science, and advocating for a healthy work-life balance. Learn More!

### Cincinnati Local Section Virtual Strategic Planning Retreat (VSPR) November 11, 13, and 14, 2021

CINTACS wants to move the local section forward and reinvigorate the section. We hope to increase the engagement of our members and to involve more members in the activities of the section. The retreat outcomes include

- Stakeholder Analysis,
- Mission and Vision Statements,
- ♦ 3-5 year Roadmap with Goals,
- ◆ Portfolio of prioritized 6-12 month strategies (with identified champions) ready to implement,
- ♦ Development of Project Plans and Implementation Plan, and
- ◆ Written final Strategic Plan Report with a slide deck for plan presentation and dissemination.

### Where do you come in?

- 1. Complete the Member Survey! The composite information will be used by the Strategic Planning Team.
- 2. Participate in the VSPR. Contact Susan Marine (mariness@miamioh.edu) if you are interested.
- 3. Even if you cannot attend the VSPR, participate in the Pre-Work. We need input on the Cincinnati Section as seen by the members, not just the executive committee! If you are willing to fill out evaluation and information forms in late September or early October, please contact Susan Marine to volunteer. This is crucial for the success of the Strategic Planning Retreat.

There are usually 10-15 VSPR participants. They must be available to be present throughout the entire Strategic Planning Retreat. No one is permitted to attend just a portion of the scheduled 12 hours. The individuals should be committed to the section and willing to be involved in moving the section forward. We need more than just the current officers to make this successful!

The virtual Strategic Planning Retreat is scheduled for Thursday evening November 11, Saturday morning and afternoon November 13, and Sunday afternoon November 14. It will be conducted via Zoom.

Sessions are 2.5 hours long; there is homework before and after each session. This is intense but will greatly benefit the Cincinnati local section. *Please consider* participating in some form. (more on page 9)



# CCC:Chemistry and Chemists from around Cincinnati

CCC covers news from the chemical community around Cincinnati. Do you have a piece of news that you would like to see covered? Contact <a href="mailto:news@acscincinnati.org">news@acscincinnati.org</a>.

The Jiang group (University of Cincinnati) has secured financial support from the National Science Foundation to develop metal-free catalysts to facilitate the conversion of poly- and per-fluoroalkyl substances (PFAS) to small, environmentally friendly, non-fluorinated compounds.

PFAS are a family of over 3000 man-made compounds that have been widely used due to their unique properties, such as thermal stability and ease of production. PFAS have been detected in food, commercial household products, workplace, drinking water, and even living organisms. The toxicity, persistence, and ubiquity of PFAS necessitate the exploration of simple yet efficient ways for the complete remediation of this family of compounds. The structures of the molecular catalysts will be modified to tune the physio- and electrochemical properties to achieve optimal systems for PFAS remediation. This project will engage a variety of students and the general public in the activities that promote their understanding of chemistry for sustainability using the findings from the proposed catalysis research.



#### (CCC continued from page 6)

♦ Ann Hagerman (Miami University Department of Chemistry & Biochemistry) and her collaborators at Colorado State University have discovered that the complex polyphenols known as tannins are decomposed by the soil microbiome even under anoxic conditions. This upends the dogma that tannins and other polyphenols are carbon traps and opens the door to further study of the detailed pathways for decomposition. Initial results indicate that different strategies might be used by the soil microbiome as compared to the gut microbiome, with unique steps for the initial breakdown of the complex polymeric polyphenol. In humans, the microbiome releases smaller phenolics that may contribute to the healthful consequences of consuming tannin-rich foods and beverages such as tea, red wine, chocolate and fruit. The potential effects of lower molecular weight phenolic products on ecosystem function are unknown, but could be manifested in trophic levels beyond the soil via bioactivities such as metal binding, redox cycling, and protein modifications. Next steps include identifying soil enzymes required for tannin decomposition and establishing pure cultures of the responsible microbes. Our work is described in a paper in Nature Communications.

Figure caption: Bridget McGivern, PhD candidate in Kelly Wrighton's lab at Colorado State University, is a key participant in our studies. She is shown with soil cultures inoculated with the high molecular weight tannins prepared in Hagerman's lab at Miami University.



Keep the local news coming!





### Calling all CINTACS members!

Do you want to have a tangible impact on the lives of kids in our community? Are you willing to share your passion for Chemistry? Do you have a few hours to spare in October? I invite you to join us to celebrate National Chemistry Week at your favorite library!

NCW is an annual community outreach program the ACS has hosted since 1987. It's designed to show how chemistry supports everyone and contributes to our quality of life and the nation's economy. This year, during the week of October 17-23, we will match up willing volunteers with local libraries hosting an event to demonstrate real-life chemistry, and maybe even get the kids involved in an experiment or two.

This year's theme is "Fast or Slow, Chemistry Makes It Go!" and we will be highlighting the important role that chemistry plays in our lives. In early October, volunteers will be invited to a I-hour demonstration showcasing possible experiments that could be done with the kids. The final selection of programming is at the discretion of the volunteer, so the program can be tailored to your interests and capabilities. It is recommended to plan 30-45 minutes of experiments or demonstrations that could hold the interest, and spark the excitement, of the kids in attendance. The local library will advertise the date and time to draw any kids that are interested. Age range of the children in attendance is usually between 8-12 years old.

As the world's largest scientific society, with a membership of nearly 157,000 chemists and engineers and 185 local sections, the ACS has the ability to have a profound impact on the chemists of tomorrow. What better way to bring opportunity to a child near you than to share your interest in the wonders of chemistry. Please consider volunteering just a few hours of your time and effort to an event that can reach a dozen or more children and spark interest in chemistry as a career.

For more information, please go to <a href="www.acs.org/ncw">www.acs.org/ncw</a> You can also reach out to our 2021 Cincinnati NCW Chair, Hong Zhang, or any of our ACS Elected Officers or Committee Chairs, or respond with your interest to <a href="mailto:ncw@acscincinnati.org">ncw@acscincinnati.org</a> Thank you!

(cont'd from page 5)

# Virtual Strategic Planning Retreat: Typical 3-Day VSPR Schedule

All participants will receive a series of emails prior to and during the VSPR to deliver outcomes from each of the VSPR Modules, new

Preparatory Modules, and directions for Homework completion necessary for the next VSPR Module. All session will be held via Zoom.

Preparation for Module I (homework).

### Module I, Nov II evening (2.5 hr)

Developing a Strategic Plan

- 1) Stakeholder Analysis
- 2) Develop Mission and Vision Statements

Preparation for Module 2 (homework)

Module 2, Nov 13 Morning (2.5 hr)

Environment Scan; Change Drivers; TOWS Analysis; Identifying Barriers and Critical Success Factors, Challenges and Opportunities

Develop a 3-5 year roadmap with SMART Goals

Preparation for Module 3 and Homework

### Module 3, Nov 13 Afternoon (2.5 hr)

Strategies Portfolio of prioritized 6-18 month strategies with identified champions, ready to implement

Monitoring the Strategic Plan – Measures and Measurement

Importance of Project Plans

Preparation for Module 4 and Homework

### Module 4, Nov 14 Afternoon (2.5 hr)

Presentation/Discussion of Project Plans Next Steps for Implementation Plan

# SOCIAL MEDIA Re-invigorating our Facebook Page

Did you know that the Cincinnati Section of the American Chemical Society has a Facebook page? Check it out: <a href="https://www.facebook.com/acscincinnati/">https://www.facebook.com/acscincinnati/</a> Kendra Denlinger has volunteered to oversee this mode of communication for the Section. Join our page to follow new posts and receive reminders.



## News from the Fall ACS Council Meeting

—By electronic ballot, the Council elected **Donna G. Friedman, Matthew Grandbois, Fran K. Kravitz,** and **Louise M. Lawter** for a three-year term (2022-2024) on the Council Policy Committee (CPC).

—By electronic ballot, the Council elected Mary K. Engelman, Malika Jeffries-El, Brian M. Mathes, Susan V. Olesik, and Susan M. Schelble for a three-year term (2022-2024) on the Committee on Committees (ConC).

—By electronic ballot, the Council elected Allison Aldridge, Holly L. Davis, Peter K. Dorhout, Silvia Ronco, and Martin D. Rudd for a three-year term (2022-2024) on the Committee on Nominations and Elections (N&E).

### Council Special Discussion

President Cheng introduced and led a special discussion on ideas to increase involvement and membership from business and industry. For the last 5 years there has been a steady decrease in industry members. This can be attributed to a variety of factors, but there have been ongoing efforts to decrease the cost-related attrition while increasing member value. To address value, ACS has a variety of offerings available to members to advance, discover, connect, and share. To address cost, actions were taken by the Council this past spring in the schedule of membership for 2022 that will provide industry members with flexibility as to membership options. Councilor input was then requested on the following two questions:

1. How can we improve the value that ACS provides to its industrial and business members?

2. How can we encourage academic inventors and entrepreneurs and support start-ups?

#### Nominations and Elections

The Committee on Nominations and Elections solicits Councilors' input regarding qualified individuals for President-Elect and/or Directors for future consideration. Suggestions may be sent to our section councilors (Rick Mullins, Susan Hershberger, Kathy Gibboney).

### Meetings & Expositions

The Fall 2021 Meeting was held live from August 22-26, and on-demand from August 30 – September 30. As of August 25th, there were 8,205 registrations (1,895 hybrid and 6,310 virtual). Of the approximately 1,200 oral sessions held, 71 were only in-person, 244 were hybrid, and 855 were held virtually.

On the recommendation of the Committee on Budget and Finance, the Board approved the ACS 2022 Spring and Fall Meetings in-person/hybrid member registration fee at \$199, both within a range of +/- 15%.

# NOMINATIONS SOUGHT GUSTAVUS JOHN ESSELEN AWARD FOR CHEMISTRY IN THE PUBLIC INTEREST



The Esselen Award for Chemistry in the public interest is a very prestigious honor provided by the Northeastern Section of the American Chemical Society. The award annually recognizes a chemist whose scientific and technical work has contributed to the public well-being, and has thereby communicated positive values of the chemical profession. The Awardee should be a living resident of the United States or Canada at the time of nomination, and the significance of this work should have become apparent within the five years preceding nomination.

The Esselen Award has no limitations with respect to the chemical field in which the nominees are active. It differs from many other awards in that it is for chemical activities whose importance to the public has been demonstrated. A list of the most recent awardees appears below; a complete list is available at http://www.nesacs.org/awards/esselen/awards esselen recipients.html.

THE AWARD CONSISTS OF A MEDAL AND A CHECK FOR \$5,000. Travel expenses incidental to the conferring of this award will be reimbursed. The award is usually presented at the April meeting of the Northeastern Section in Cambridge, Massachusetts. The Awardee will deliver an address on the subject of the work for which the honor is being conferred, or for work in progress which is also directed to chemistry in the public interest. The award address should be at a level where it would be of interest to an audience that does not have knowledge of the specific field.

Nominations shall include: 1) a letter signed by the primary sponsor with a description of the nominee's work recognized as making a major contribution to the public welfare and as communicating positive values of the chemical profession, plus the names of two cosponsors;

2) short supporting co-sponsor statements; 3) the nominee's professional biography including a list of no more than ten of the nominee's publications selected for their pertinence to the work nominated for recognition; and 4) copies of popular and technical press news or feature articles indicative of public benefit and interest. Inquiries should be directed to Dr. Karen Allen, c/o Jeananne Piper Grady, 11 Thaxter Street, Hingham, MA 02043. All nomination material must be consolidated into a single electronic pdf file and emailed to drkallen@bu.edu with a copy to JPiperGrady@gmail.com. The due date is Oct. 15, 2021. Joint nominations are acceptable. The Committee will review the nominations and the award recipient will be notified by the first of February.

#### RECENT AWARDEES AND TITLES OF AWARD ADDRESSES

2010: **Stephen L. Buchwald**, Massachusetts Institute of Technology. *Palladium- and Copper-Catalyzed Processes for the Synthesis of Pharmaceutically-Relevant Molecules*.

2011: **Arthur J. Nozik**, National Renewable Energy Laboratory. *Prospects and Novel Approaches for the Low Cost Power Conversion of Solar Photons to Electricity and Solar Fuels*.

2012: **Bruce Ganem**, Cornell University. *Lost (Sometimes) in Translation: Advancing Chemical Discoveries Beyond the Laboratory.* 

2013: Michael H. Gelb and František Tureček, University of Washington. The Chemistry of Next Generation Newborn Screening.

2014: David R. Walt, Tufts University. Microwell Arrays: From Genetic Analysis to Ultra-High Sensitivity Diagnostic.

2015: Eric N. Jacobsen, Harvard University. Catalysis: A Frontier at the Center of Chemistry.

2016: **Timothy M. Swager**, Massachusetts Institute of Technology. *Chemical/Biological Sensing: Science and Real World Applications.* 

2017: **Neil M. Donahue**, Carnegie Mellon University. *Atmospheric Ozonolysis: From Collisional Energy Transfer to Particle Physics and Everything in Between.* 

2018: Jennifer A. Doudna, University of California, Berkeley. Re-writing the Code of Life: The Impacts and Ethics of Genome Editing.

2019: Carolyn R. Bertozzi, Stanford University. Chemical Approaches to Problems in Global Health.

2020: Geoffrey W. Coates, Cornell University. Presentation delayed to October 14, 2021.

### How Can You Help?

Planning Ahead: We need your ideas and input to plan future meetings and activities for the Cincinnati ACS Section. Your comments will help us. Please take the Member Survey before September 12! Help us grow and improve. At the least, tell us what is not working for you. <a href="https://americanchemical.co1.qualtrics.com/jfe/form/SV">https://americanchemical.co1.qualtrics.com/jfe/form/SV</a> 5clJbcsfO3j3GYK

### **Upcoming Webinars**

Go to <a href="https://www.acs.org/content/acs/en/acs-webinars.html">https://www.acs.org/content/acs/en/acs-webinars.html</a> for more information and to register for these free Zoom webinars.

Sept 8	2:00-3:00 ET	Skydiving into Retirement
Sept 9	11:00-12:00 ET	The Green Evolution
Sept 15	2:00-3:30 ET	Advancing Polymer Science with Organic Catalysts
Sept 17	2:00-3:15 ET	Designing Around Structural Alerts in Drug Discovery
Sept 22	2:00-3:00 ET	Service Dogs in Your Chemistry Lab
Sept 23	2:00-3:15 ET	Molecules to Manufacturing to Marketplace













# Oesper Symposium — coming October 22, 2021 —

### Hold the Date: October 22, 2021

### **October Meeting**

The 2021 Oesper Symposium will be held on Friday October 22 at the University of Cincinnati. We plan on meeting in-person. Save the date; the reservation link will be coming in the October CINTACS! The Symposium Schedule is <a href="https://example.com/heres

**Submissions for the Poster Session are** now being accepted. A Poster Session will be held from 5 to 7 PM at the Oesper Symposium prior to the banquet. (It is open to all students.) Those wishing to present a poster should submit the title, authors (underline presenting author), and affiliation to <a href="mailto:oespersymposium2019@gmail.com">oespersymposium2019@gmail.com</a>. A confirmation email will be sent once the title information is received.

<u>The Poster submission deadline is Friday, October 8, 2021.</u> For any questions regarding the poster session, please contact Connor Rahm or Md Abdul Hoque at <a href="mailto:oespersymposium2019@gmail.com">oespersymposium2019@gmail.com</a>.

### **Deadlines and Scheduled Events**

Sept 19	Family and Friends Picnic; Germania Park
Oct 22	Oesper Symposium; Poster Session; ACS Dinner Meeting
Oct 20	Midwest Regional Meeting in Springfield, MO

