



SPECIAL  
POINTS OF  
INTEREST:

- [Reservations](#) for  
March 24  
Monthly Meeting;  
Chemist and  
Technologist of  
the Year
- [Reservations](#) for  
March 3 Organic  
Discussion  
Group meeting
- [Reservations](#) for  
March 18  
Analytical  
Chemistry  
Discussion  
Group

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## March Section Meeting

*March Monthly Meeting*  
**Wednesday, March 24, 2021**

Virtual via ZOOM

*Featured Speaker*

**Hairong Guan**

Professor of Chemistry, University of Cincinnati

**Program:**

6:45 – 7:00	Social interactions or Zoom help for new users
7:00—7:30	Business meeting and Awards Presentations
7:30 – 8:30	Featured Speaker, <b>Hairong Guan</b> “Catalysts with Earth-Abundant Metals: From CO <sub>2</sub> Utilization to Fatty Alcohol Synthesis”



One of the rapidly growing areas of research involves the development of earth-abundant metal based catalysts for chemical transformations. The need for such efforts is driven by the fact that precious metals, which are widely used today for synthesizing commodity and specialty chemicals, are expensive, limited in supply, and sometimes difficult to remove from organic products. This talk will focus on our fundamental studies of hydride complexes based on earth-abundant metals such as nickel, iron, and copper. The mechanistic insights have guided us to design catalysts for various reduction processes including the conversion of CO<sub>2</sub> to value-added products and the hydrogenation of fatty acid methyl esters to fatty alcohols. Some of these projects involve collaborations with P&G for sustainable synthesis of detergent and plastics precursors and for a better understanding of the hair-coloring process.

**Reservations: Register in advance for this meeting:**  
<https://american-chemical-society.zoom.com/meeting/register/tZEtcOmtqzkuH9OLIVRCNg7T5kXEJmNlChED>

After registering, you will receive a confirmation email containing information about joining the meeting.

**The CINTACS Newsletter**  
**Volume 55, No. 3**  
**March, 2021**

CINTACS is published nine times per year (September through May) by the Cincinnati Section of the American Chemical Society.

Guest Editor for March: Susan Marine

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



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## From the Chair:

March is upon us with its wild swings in temperature, precipitation, and winds. In spite of physical isolation due to the pandemic, there is hope in the air. This is the time of year when we celebrate excellence. At our monthly meeting on February 25, Dr. Hong Zhang received the 2021 Cincinnati Outreach Volunteer of the Year Award in recognition of her significant contributions to local National Chemistry Week and Chemists Celebrate Earth Week outreach. She has been employed by ATL for 18 years and is currently a Chemistry Lead. (See more at [www.acs.org/voty](http://www.acs.org/voty))


This month we will honor two of our peers for their scientific research and contributions to the field of chemistry. Dr. Hairong Guan, UC, has been selected as the 2021 Cincinnati Chemist of the Year in recognition of his significant contributions in organometallic chemistry and catalysis as well as his dedication to teaching and mentoring. Ms. Maria Jennifer Luna, P&G, has been selected as the 2021 Cincinnati Research Assistant/Chemical Technologist of the Year in recognition of her technical mastery in inductively coupled plasma with optical emission spectroscopy (ICP-OES), tandem mass spectrometry (ICP-MS/MS), and their applications to solving challenging technical and business problems in the design and manufacture of consumer products. Congratulations to both!

During March two Discussion Groups will hold virtual meetings: Plans for a Colloid Discussion Group are starting.

In spite of the COVID-19 uncertainties, the Cincinnati Local Section is actively engaging virtually via Zoom. Next month chemists celebrate Earth Week April 18-24. I look forward to seeing the outreach activities our chemists will do in a virtual environment. The national ACS website is providing ideas and guidance. (To anyone who is still reading, March 10 is my birthday.) — Susan Marine

## Shout Out:

### 2021 CINCINNATI OUTREACH VOLUNTEER OF THE YEAR



Dr. Hong Zhang has been named the 2021 Cincinnati Outreach Volunteer of the Year! This award recognizes Hong's significant contributions to National Chemistry Week outreach since 2009. As co-chair of NCW planning for the past 8 years, she has contributed her leadership and organizational skills. She led Earth Day and NCW events at multiple venues as the Museum Center in Cincinnati. By engaging local section members to share their respect and devotion to the practice of chemistry, Hong has emphasized how chemistry can be a pivotal component to the understanding of everyday life.

This award was presented at the February meeting of the Cincinnati Section of the American Chemical Society on Thursday, February 25, 2021. Congratulations, Dr. Zhang!

## Dr. Hairong Guan



Born in May 1978, Hairong Guan grew up in Qidong, China, a coastal city near Shanghai. He attended Peking University in Beijing from 1996 to 2000, where he started doing research as a freshman. In his senior year, he became interested in organometallic chemistry, joined Professor Zhenfeng Xi's lab as one of his early undergrads, and completed his thesis research there on organolithium reagents. In 2000, he was lucky enough to attend Columbia University to pursue his doctoral study of ruthenium-catalyzed ionic hydrogenation reactions under the tutelage of Professor Jack R. Norton. After receiving his Ph.D. degree in 2005, he joined the research group of Professor Charles P. Casey at the University of Wisconsin-Madison as one of Casey's last postdocs. In searching for methods of making cyclopentadienones, Hairong stumbled on the Knölker complex and studied it as a hydrogenation catalyst. In 2007, the University of Cincinnati trusted him by hiring him as an Assistant Professor, and then witnessed him rising through the ranks, thanks to his talented and hardworking students. Hairong was appointed Stella and Hoke S. Greene Chair in Catalytic Chemistry for 2017-2020, and currently he is a Professor of Chemistry. His research interests are broad, covering homogeneous catalysis, mainly with first-row transition metals, catalysis on metal surface, oxidative dye intermediates, and biomass conversion. He was an Alfred P. Sloan research fellow, a Humboldt research fellow, and a recipient of an NSF CAREER award. He has served as an advisory board member of Inorganic Chemistry Frontiers (RSC) and a local coordinator for the ACS Project SEED program.

### Reminder: Organic Chemistry Discussion Group

For the first organic chemistry discussion group this year (and in many years), come hear Emily Kerr, graduate of Xavier University and current Ph.D. student at Harvard University, discuss her work on developing organic electrolytes for aqueous redox flow batteries. This topic, spanning multiple disciplines of chemistry, should offer something for all. The discussion group will take place via Zoom on **Wednesday, March 3 at 7 pm**. Two links are provided below for papers to read prior to the discussion group. Reading the papers is, of course, not mandatory, but it will make for a better discussion. Hope to see everyone there. Please feel free to invite students and colleagues, even if not ACS members, to attend.

**Register here to receive the Zoom meeting link:**

<https://american-chemical-society.zoom.com/meeting/register/tZEsfu2prjwsH9a3TJEup7L3eykq0CazUAvU>

It is our intention to continue discussion groups that highlight the work of local or once-local chemists. If you know of someone who has done interesting work that you think would make for a good focus group, please let Rick Mullins know by emailing at [mullinsr@xavier.edu](mailto:mullinsr@xavier.edu).

Recommended (not required) reading prior to the March 3 Organic Discussion Group meeting:

**[Alkaline Quinone Flow Battery with Long Lifetime at pH 12 \(cell.com\)](https://www.cell.com/joule/pdf/S2542-4351(18)30291-5.pdf)**

**[\(https://www.cell.com/joule/pdf/S2542-4351\(18\)30291-5.pdf\)](https://www.cell.com/joule/pdf/S2542-4351(18)30291-5.pdf)**

**[Molecular Engineering of an Alkaline Naphthoquinone Flow Battery | ACS Energy Letters](https://pubs.acs.org/doi/pdf/10.1021/acsenergylett.9b01321)**

**[\(https://pubs.acs.org/doi/pdf/10.1021/acsenergylett.9b01321\)](https://pubs.acs.org/doi/pdf/10.1021/acsenergylett.9b01321)**

## 2021 CINCINNATI RESEARCH ASSISTANT/CHEMICAL TECHNOLOGIST OF THE YEAR



Ms. Maria Jennifer Luna has been named the 2021 Cincinnati Research Assistant/Chemical Technologist of the Year! This award recognizes Jenny's technical mastery in inductively coupled plasma with optical emission spectroscopy (ICP-OES), tandem mass spectrometry (ICP-MS/MS), and their applications to solving challenging technical and business problems in the design and manufacture of consumer products. The award will be presented at the March meeting of the Cincinnati Section of the American Chemical Society on Wednesday March 24, 2021. Congratulations, Ms. Luna!

## 2021 CINCINNATI CHEMIST OF THE YEAR

Dr. Hairong Guan has been named the 2021 Cincinnati Chemist of the Year! This award recognizes Dr. Guan's significant contributions in organometallic chemistry and catalysis as well as his dedication to teaching and mentoring. The award will be presented at the March meeting of the Cincinnati Section of the American Chemical Society on Wednesday March 24, 2021. Congratulations, Dr. Guan!



## Government Affairs: Have Your Voice Heard! Here's How!

### Act4Chemistry Legislative Action Network—Join Today!

ACS Member Advocacy Volunteer Program

If you want to stay informed and weigh in on high-priority issues that may impact the chemical enterprise, Act4Chemistry is the place to get started.

What is Act4Chemistry?

- ACS' legislative network with 15,000+ members.
  - Suite of tools and programs that provides support to individual members, local sections, state committees, and other groups.
  - An **easy** way to advocate for chemistry and takes only **minutes to join!**
- A great way to stay informed and **support** current legislation relevant to ACS members.

### ACS Chemistry Advocacy Workshop

The ACS Chemistry Advocacy Program is designed to help ACS members passionate about science and chemistry advocacy maximize Society resources through in-person workshops or this on-demand course. This workshop includes four modules covering skills, resources, logistics, and communication for the purposes of advocating for chemistry on the federal level.

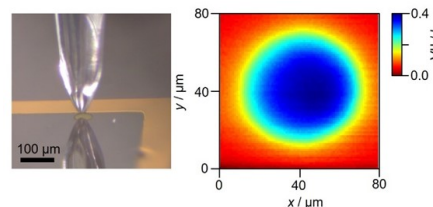
Learn more at <https://www.acs.org/content/acs/en/policy/memberadvocacy.html>

Contact: Cincinnati Section Government Affairs Chair, Mark Laskovics at [mark.laskovics@gmail.com](mailto:mark.laskovics@gmail.com)

## Analytical Discussion Group Announcement

The Analytical Discussion Group will meet at **5:30PM on Thursday, March 18**, providing a great opportunity to ACS members to come together as a community and discuss important topics in the field of analytical chemistry. Dr. Vasileia Vogiazzi will be leading this discussion group.

Dr. Robert Lazenby, an analytical electrochemist at Florida State University, will be the main speaker. He pursued a Ph.D. in Chemistry at the University of Warwick, England, where he developed electrochemical microscopy techniques. His post-doctoral work used biosensing platforms, including ion channels and electrochemical, aptamer-based sensors. Dr. Robert Lazenby will present and discuss challenges in scanned probe electrochemical microscopy for analytical applications in imaging and chemical sensing. It is hoped that presenting the technical considerations involved when performing imaging experiments will generate useful discussion for those interested in using and applying these techniques.



Following Dr. Lazenby's presentation and discussion, local members will present their "Challenges in Analytical Chemistry". Dr. Peng Zhang (University of Cincinnati) and Dr. Neil Danielson (Miami University) will each share one slide (2–3-minute presentations) followed by discussion of the challenge presented. Dr. Zhang has been working on development of nanoparticle-assisted sensing techniques mostly based on a number of spectroscopies (fluorescence, upconversion, Raman, and NMR relaxometry). Dr. Danielson has been working on the detection of different volatile organic compounds using tin oxide electrochemical sensors.

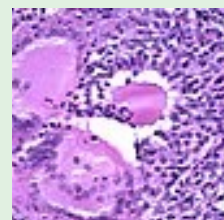
Dr. Vasileia Vogiazzi's goal as the discussion group leader is "to raise awareness of unpredictable obstacles during the development of analytical methodologies. It is normal to come across many challenges and our job in analytical research is to tackle the issues and overcome those challenges. We are here to solve hard things; the easy ones are already solved."

**Register in advance for this meeting:** <https://american-chemical-society.zoom.com/meeting/register/tZcodOugqD4sGdA2cI FzbonkYGYOAjlp9HcQ>

After registering, you will receive a confirmation email containing information about joining the meeting.

## Colloid Discussion Group

A Colloid/Polymer Discussion Group is being organized. If interested in helping define a format and possible topics, please contact Dr. Zhiwei Shi (shi.z.2@pg.com).



## Chemistry Olympiad Status in Cincinnati!

Each spring, the Cincinnati section administers the Local Chemistry Olympiad Exam to area high school students. This multiple-choice exam covers a broad range of topics, including descriptive chemistry, laboratory techniques, stoichiometry, gases/liquids/solids, thermodynamics, kinetics, equilibrium, electrochemistry, electronic structure and periodic trends, bonding theories, and organic chemistry.

This exam is open to all high school students, including those in a first-year Chemistry course. Students are competing to qualify for the ACS National Exam. Based on exam scores as well as other parameters, 11 students are selected to sit for the National Exam with students across the country. Top scorers can earn an invitation to the ACS Study Camp and could be selected to represent the U.S. at the International Chemistry Olympiad.

Within our section, students taking the Local Olympiad Exam are also competing for an Oesper Award. The Ralph E. Oesper Chemistry Awards honor the late Professor Oesper's long and distinguished career as a teacher, scientist, scholar, historian, and member of the Cincinnati section. Award winners are selected for both first year students and second year students.

Last year, over 150 local high school students took the local exam, and we have over 160 registered for this year's exam in March. The exam will be administered digitally this year, and National Exam qualifiers will be selected in April. Those qualifiers, as well as the Oesper Award winners, will be recognized at our Awards Meeting in April.



**GLRM 2021**

*Elevating the Importance of Diversity and Inclusion in Chemistry*

**JUNE 6-9 | VIRTUAL**

*Hosted by the Minnesota Local Section*

ACS  
Chemistry for Life®  
MEETINGS & EVENTS

The banner features a dark blue background with a faint world map. On the left, there is a small image of a bird in flight. The text is primarily in white and yellow, with the title 'GLRM 2021' in large white letters. The subtitle 'Elevating the Importance of Diversity and Inclusion in Chemistry' is in a yellow, italicized font. The dates 'JUNE 6-9 | VIRTUAL' are in white on a yellow rectangular background. The host information 'Hosted by the Minnesota Local Section' is in white italicized font. The ACS logo and tagline 'ACS Chemistry for Life® MEETINGS & EVENTS' are in the bottom right corner.

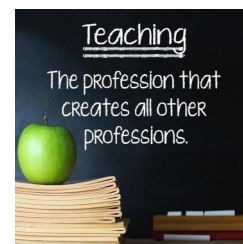
The Cincinnati Local Section is one of 25 local sections that comprise the Central Region of ACS. Last year the Central Regional Meeting of ACS (CERMACS) was cancelled due to the pandemic. This year the Central Region has joined with the Great Lakes Region to hold a joint Regional Meeting virtually in June. Consider attending the papers or workshops that are being offered. [About GLRM 2021](#)

Flash talks will be offered in lieu of poster sessions. These live talks will be 7 minutes in length and grouped in pods. They usually consist of 3-4 slides. Once 4-6 flash talks are complete there will be a Q&A for all presenters in the pod. Graduate student and postdoc talks will usually be 15 minutes in length. Other presentations will be 25 minutes in length. Symposia chairs may allocate longer speaker times to symposia keynote presentations.

## CALL FOR CERM AWARD NOMINATIONS

Help recognize a member and partner in the chemical enterprise by nominating a colleague for one of the following awards.

**Regional Award for Excellence in High School Teaching** recognizes, encourages, and stimulates outstanding teachers of high school chemistry. **Deadline: April 1**



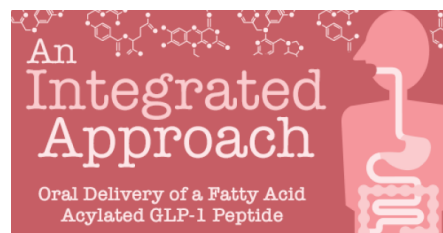
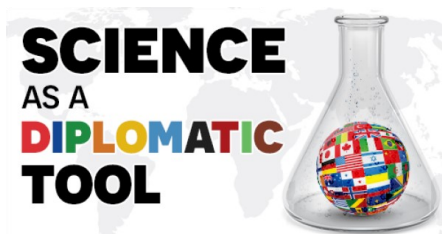
**E. Ann Nalley Regional Award for Volunteer Service to the American Chemical Society** recognizes the volunteer efforts of individuals who have served the American Chemical Society, contributing significantly to the goals and objectives of the Society through their regional activities. **Deadline April 1**

For more information about nominations click here: **CERM 2021 Nominations**

## Upcoming Webinars

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

March 10	11:00-12:00 ET	Science as a Diplomatic Tool
March 11	1:00-2:00 ET	Neither Fish nor Fowl: Alternatives to Animal-derived Food (Joseph Priestley Society Series; 2021 Ralph Connor Memorial lecture)
March 17	2:00-3:30 ET	Chemists Make the Best Homebrewers
March 25	2:00-3:30 ET	The resilience of Women in Chemistry
March 30	1:00-2:00 ET	How to Embrace the New Norm and what that might look like



## NSF LISTENING SESSION MARCH 5

BROADENING PARTICIPATION, DIVERSITY, INCLUSION, AND EQUITY IN CHEMISTRY

Join the National Science Foundation Division of Chemistry for the listening session, "**Broadening Participation, Diversity, Inclusion, and Equity in Chemistry**" on **Friday, March 5, 2021** at 4:00 PM ET

Guest Hosts Miguel García-Garibay of UCLA, Rigoberto Hernandez of Johns Hopkins University, and Kayunta Johnson-Winters of University of Texas at Arlington will lead a community discussion on this important and timely topic.

The NSF [Division of Chemistry \(CHE\)](#) supports innovative research in chemical sciences, integrated with education, through strategic investment in developing a globally engaged U.S. chemistry workforce reflecting the diversity of America.

CHE invites our entire community to this listening session as we specifically invite those most affected by inequities in chemistry and related fields to add their voices to this conversation. CHE is working to identify the areas of greatest concern where funding or other actions by the Division might have real, measurable, and sustainable impact in accelerating Broadening Participation, Diversity, Inclusion, and Equity in Chemistry.

[Register here](#) for the March 5 listening session.

[Invitation from the ACS Faculty Newsletter, February 2021.]



## ACS Spring 2021 Opening Session and Kavli Lecture Series

Kick-off [ACS Spring 2021](#) with the Opening Session, **Macromolecular Chemistry: The Second Century**, with our distinguished [panel of speakers](#).

**Supramolecular Polymerization: Its Significance and Applications.** Professor Takuzo Aida, University of Tokyo

**Polymer Networks as Synthetic Extracellular Matrices: Biology in the 4th Dimension.** Professor Kristi S. Anseth, University of Colorado

**Neofossils: Bio-based Plastics to Sequester CO<sub>2</sub>.** Professor Anthony J. Ryan, University of Sheffield

[Register and join](#) the chemistry community from around the globe for ACS Spring 2021.





## Communicate Chemistry's Value this Earth Day with CCEW: April 18 - 24

Chemists around the world are “[Reducing Our Footprint with Chemistry](#)” this Earth Day through the annual Chemists Celebrate Earth Week (CCEW) campaign from April 18-24. Due to COVID-19, the campaign will be fully-digital with instructions for planning virtual events and a full suite of digital educational resources.

Learn how to plan [Virtual Demo Events](#) and [Digital Illustrated Poem Contests](#) for K-12 audiences, and Virtual Teach-Ins for higher education and adult audiences. Amplify the campaign on social media using the hashtags #CCEW, #EarthDay2021, and #GreenChemistry. Help show collective action by adding your virtual events to Facebook and submitting your photos, videos, and screenshots to the [CCEW 2021 Photo Album](#).

Want to contribute? Contact Donna Wiedemann, our local CCEW coordinator ([wiedemann.dj@pg.com](mailto:wiedemann.dj@pg.com)), to get involved! If you don't have time to plan events, you can still spread the word via social media and share digital educational resources with teachers and parents in need. Visit the Chemists Celebrate Earth Week website at [www.acs.org/ccew](http://www.acs.org/ccew) for more information.



## Annual Awards (virtual) Meeting — coming April 15, 2021 —

**Hold the Date: April 15, 2021**

### April Meeting

The third monthly meeting of 2021 will be on April 15 at 7 PM. This is our traditional Awards Ceremony. It will be a virtual meeting; free registration is required to obtain the Zoom details. Save the date; details will be coming in the April CINTACS!

### Deadlines and Scheduled Events

March 3	Organic Chemistry Discussion Group at 7 PM
March 18	Analytical Discussion Group at 5:30 PM
<b>March 24</b>	<b>Monthly meeting at 7 PM; Cincinnati Chemist and Technologist of the Year!</b>
March 31	ACS Bridges Program Fellow applications due
April 5-30	ACS National Meeting online; April 5-16 oral presentations
<b>April 15</b>	<b>Awards Night monthly meeting</b>
April 18-24	Chemists Celebrate Earth Week (CCEW)
May ?	Party Night: Virtual?
June 6-9	Joint Great Lakes / Central Regional Meeting online
Aug 22-26	National ACS Meeting in Atlanta and online
Oct 20	Midwest Regional Meeting in Springfield, MO

### April CINTACS Deadline



**ACS** Local Section  
Cincinnati

Send news for the April CINTACS Newsletter to Susan Marine ([mariness@miamioh.edu](mailto:mariness@miamioh.edu)) before Thursday March 25 to be included. Thank you!