

# The Chemical Bulletin

A publication of the Chicago Section of the American Chemical Society



## CHICAGO SECTION ACS MONTHLY VIRTUAL MEETING

THURSDAY, JUNE 17, 2021

7:00-8:30 PM

Register online at [chicagoacs.org](http://chicagoacs.org) to receive meeting link

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So Great,  
So Fragile:

Episodic series  
focuses on issues  
impacting the  
Great Lakes

**CHERYL SCOTT**

Meteorologist

ABC 7 TV Chicago

**ABSTRACT:** The Great Lakes are among North America's most valuable resources and one of the world's largest surface freshwater ecosystems. They are not only a source of drinking water and recreation for millions, but are also a trillion-dollar economic powerhouse. The Great Lakes however, face a number of threats, ranging from climate change to pollution to invasive species. That's why ABC 7 Chicago and Meteorologist Cheryl Scott teamed up with National Geographic to explore the fight to save the Great Lakes in a five-part series "So Great, So Fragile." The series explores contemporary issues including the effects of climate change, which plays a role in severe weather, flooding, agricultural pollution, and invasive species.

## Agenda for Virtual Meeting Thursday, June 17, 2021

7:00 – 7:05 PM	Announcements
7:05 – 7:15	Distinguish Service Award <ul style="list-style-type: none"> <li>• Introduction of Amber Arzadon, chair of the Distinguished Service Award (DSA)</li> <li>• Amber Arzadon introduces the 2021 DSA winner</li> </ul>
7:15 – 7:25	Emerging Star Award <ul style="list-style-type: none"> <li>• Introduction of Michael Koehler, chair of the Emerging Star Award (ESA)</li> <li>• Michael Koehler introduces the 2021 ESA winner</li> </ul>
7:25 – 7:30	Honoring the 50, 60, 70 years of service members <ul style="list-style-type: none"> <li>• Certificates, names and pins</li> </ul>
7:30 – 7:35	Introduction of presenter Cheryl Scott, meteorologist for WLS television ABC channel 7
7:35 – 8:15	Presentation
8:15 – 8:30	Questions
8:30 – 8:45	Why Chicago ACS? / adjournment

### PRESENTER BIOGRAPHY:

Meteorologist **Cheryl Scott** joined ABC 7 Eyewitness News, Chicago's #1 station for news, in December 2014. In her announcement, the ABC 7 News Director described her as "an experienced and knowledgeable meteorologist who enjoys the challenge of forecasting Chicago's unpredictable weather." Scott joined ABC 7 from NBC 5 in Chicago where she was the morning and weekend meteorologist since September 2011. Previously, Scott worked as a weekend meteorologist for WBIR-TV, the NBC affiliate in Knoxville, Tennessee. She was on the air when several tornadoes devastated Knoxville in April 2011. Not only did Scott serve as an important source for updating viewers on storm developments while providing critical safety information, she then volunteered her time working with the Red Cross following the disaster. Earlier in her career, Scott worked as the weekend weathercaster at WSEE-TV in Erie, Pennsylvania, in 2007 while also providing forecasts for a 24-hour Caribbean Weather Channel. She got her start as an intern in 2006 at WCAU-NBC 10 in Philadelphia, Pennsylvania. Scott is currently on the Board of Directors of the American Red Cross. While attending Brown University, Scott was recruited to run Division I track and graduated from the university in 2007 with a Bachelor's Degree in Geological Sciences. She received her Meteorology Certification from Mississippi State University in 2010.



**SELF-NOMINATIONS** We understand that times are difficult, but we are slowly moving back into a normalcy. Do you feel like you have a handful of hours to donate to your passion of chemistry? Do you want to help in the governing and guidance of the organization? Are you interested in helping to develop plans for chemists of all walks of life? I am personally inviting you to join me on the Chicago ACS Section's Board by nominating yourself for a position. The Section is in the process of gathering a list of nominations for various board positions. From this list, the Nominations Committee will select the slate of candidates for various positions. This fall we will be electing a chair elect, vice chair (this position only can be held by a previous chair of the section), secretary, treasurer, and directors. If you are interested in serving our section in any capacity, please fill out a [short self-nomination form](#) to be considered for inclusion on the ballot. The period for self-nominations will close on **June 30<sup>th</sup>** and the slate of candidates will be decided by the end of August. - Sherri Rukes

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## A "SAFETY FIRST!" MINUTE

### PERCEIVING AND UNDERSTANDING RISK

As we enter the summer months of 2021, we are being greeted for the first time in a very long time with good news on the public health front with respect to COVID-19. The Centers for Disease Control (CDC) recently [relaxed its guidelines](#) for both mask wearing and physical distancing by fully vaccinated individuals. These two preventative measures, in place for more than a year now, have been twin pillars in the strategy to reduce the risk of virus transmission and infection.

The coronavirus pandemic has cast a long shadow in our lives, and will undoubtedly be regarded as a transformative event in shaping our outlook on life for years to come. Among the many lasting effects of the pandemic, it will be interesting and instructive to examine how our culture of safety has been affected. In particular, what have we learned about evaluating risk and making decisions to mitigate risk?

Risk is a fundamental concept in science safety. While our *understanding* of risk may be grounded in knowledge and facts about the properties of hazards, our *perception* of risk is influenced to a large extent by psychological factors. We have been taught to assess risk based on the probability of exposure to a hazard and the severity of the outcome if exposed. This way of evaluating risk can make it seem like it's a mathematical exercise, that if we somehow gather enough information we will be able to calculate a "quantity" (degree of risk) and determine if it is reasonable or not and how to move forward. One enduring legacy of the pandemic, however, is that our knowledge about hazards and risks may evolve as new information is gathered and new facts emerge.

How do psychological factors influence how we perceive risk? Public health experts study risk perception in order to build trust and develop more

effective strategies for risk management. Research and scholarship in this [fascinating field](#) has contributed to better understanding and improved policies for many societal programs. While the results are well beyond the scope of this short "Safety First!" report, we can home in on a few simple "take-home" lessons. One is that we will usually downgrade the risk of an

activity or action if we feel that we have some control

over it. (Compare, for example, well-known accident statistics for car versus airplane travel relative to their perceived danger.)

Another lesson relates to media coverage and the "scariness" of certain events or outcomes. Possible events that have been in the news a lot or that involve very scary

scenarios are generally perceived as more likely even though statistically they are far less probable than lower profile events. Finally, an important lesson to keep in mind when it comes to safety is that risk aversion is NOT always due to lack of information. We can't change behavior by piling on more information!

The pandemic is global, but its effects are personal. Over the course of a year of pandemic living I have learned that: 1) Risk is relative. 2) I will NEVER have all the information I want, or think I need, before having to make a decision. 3) Judgment matters, but so does humility. Be open to, and continually seek out, new information.

Best wishes to readers of *The Chemical Bulletin* for a healthy and safe summer—I hope we will be able to meet again in person sometime soon!

Submitted by Irene Cesa



## Letter from the Chair



**T**hanks to everyone who attended our May monthly meeting celebrating the end of a different, to say the least, school year! It was a wonderful event and a great way to say thank you to all educators as well as all the graduates in the area. Students and teachers alike did a great job persevering and pivoting throughout this unprecedented year.

We had many members and friends attend the meeting to hear a fascinating talk about pop culture and chemistry. It was a thought-provoking, lighthearted talk looking at the topics, movies, and TV shows that everyone loves and how they can inspire interest in chemistry. I came away from the meeting looking at those shows in a different way and thought about how I can add them to my classroom activities. Teachers might want to look at the resources from the [May Chemical Bulletin](#) to see how you can use ideas for pop culture in the classroom. Remember to take the [short survey](#) to share your ideas.

June is a special month. This is a time to celebrate our membership. We will be handing out the [Distinguished Service Award](#) and the [Emerging Star Award](#). The awards are given to two volunteers in our section who go beyond the call of duty. Several of our members do so much. But we like to recognize those who give 120% to the section. Both awards are given to members who have done a bunch of heavy lifting for the organization to further the activities unique to the Chicago Section.

June is also when we celebrate the remarkable achievement of some of our most seasoned chemists. We will be honoring members who have 50, 60 and 70 years of service. This level of commitment is awe-inspiring! Very few people stay with any organization for that long, and it is a testament to what ACS means to chemists around the Chicagoland area. This made me think, why ACS, especially the Chicago Section of ACS? What makes this organization special and meaningful to its members? After many hours of reflection, I finally was able to put into words what the Chicago Section of ACS means to me.

I created a [video](#) about my response that I would love for you to watch. However, if you continue reading, you will get an idea of my answer and my challenge to you.

The Chicago ACS Section gives me a sense of belonging. The members of the section are my chemistry network, connections, and my FAMILY. I can meet many wonderful chemists whether young or seasoned in the field. I get to meet chemists working in all aspects of industry

and education. I learn so much from them, and I hope I can return that favor in some way. I can grow as a chemist from the monthly meetings and other professional development opportunities. I am also able to hear remarkable stories and learn about applications of chemistry from people who have the same love of a subject that I do. Chemistry is my passion, and I strive to give back by spreading my passion to the rest of the community. I hope to inspire the younger generation to pursue my passion as well. The Chicago Section of ACS provides many opportunities to give back to my community and inspire the next generation of scientists.

Without the section, I would have to figure out different ways to spread my passion to the young and old alike. Without the section, I would have to figure out another way to learn new applications or different connections between chemistry and the world in which we live. Without the section, I would never have met so many wonderful chemists, retired or still practicing, who have so much to offer. I hope that one day I will be able to do the same for a younger chemist. The Chicago Section provides me opportunities to meet so many others who have the same passion to share stories, learn and inspire. So, I raise the question to you – What do you value about the Chicago Section of ACS? Why are you a member? I want to hear from you. Please take the short survey to answer this question. I would love for you to watch the video as well. Share your thoughts about why Chicago ACS.

We still have many other opportunities for our members and community alike planned for the rest of the year. Be sure to check [chicagoacs.org](http://chicagoacs.org) for updates, information and opportunities to participate in all the fun and excitement we have in store! I really want to grow the number of members participating and volunteering in our great ventures. Please think about joining us. We welcome new ideas and volunteers all the time. My goal is to make us even better and more innovative than ever.


If you have any ideas for future meeting themes, comments or suggestions, please consider filling out a [short survey](#). I personally would like to know what our members are thinking. If the survey is not for you, please reach out to me: [chair@chicagoacs.org](mailto:chair@chicagoacs.org) with any comments, questions, or ideas.

- Sherri Rukes



## NEW DATE FOR GIBBS EVENT

As you might have noticed, our May meeting was not our typical Gibbs Medal Award Ceremony. This is not because we did not have a winner. Due to the pandemic, we moved the date of the ceremony to September, hoping to meet in person. The date is set for September 17, 2021 and we will be having an in-person event. Please stay tuned for more information about our 2021 Gibbs ceremony honoring Prof. Sharon Hammes-Schiffer from Yale University as our 110<sup>th</sup> Willard Gibbs Awardee. Registration for the event will open on July 15, 2021.



*Remarkably Good*

**Past Programs**  
**Available on Video**

Videos of recent monthly program presentations can be accessed via the Chicago ACS Section website under [Events](#)

*"Chemistry is for the Birds"*  
*"Exploring Organic Molecules in Works of Art"*  
*"Advocacy for Chemistry with Federal, State & Local Legislators"*

# GLRM 2021



## Elevating the Importance of Diversity and Inclusion in Chemistry

**JUNE 6-9 | VIRTUAL**



[glrm2021.org](http://glrm2021.org)
Hosted by the Minnesota Local Section

Pre-conference programming:

**Saturday, June 5**  
**"Picture a Scientist"**  
**Movie Night**  
**6:00 - 7:30 PM**  
**Facilitated Discussion**  
**7:45 - 8:30 PM**

**REGISTER NOW** for the **2021 Virtual ACS Great Lakes Regional Meeting (GLRM)**. Cost of registration is \$30 for all categories except 50-year members (free).

Participate in technical symposia, flash talks, and workshops along with chemical professionals, students, and educators. Beginning as early as June 5, take part in a career fair and networking opportunities and award ceremonies. The GLRM is being hosted by the Minnesota Local ACS Section and will also serve as the Central Regional Meeting.

- The meeting will take place online (ACS Zoom platform) from Sunday, June 6 at 7 AM through Wednesday, June 9 at 10 PM.
- **Symposia format:** Flash talks will be offered in lieu of poster sessions. These live talks will be 7 minutes in length (3–4 slides) and grouped in pods. Once 4–6 flash talks are completed there will be a Q & A for all presenters in the pod.
- **Talks by graduate students and postdocs** will usually be 15 min long while other presenters will each have 25 min.
- **A virtual career/graduate fair** will be held at the meeting. Companies, colleges, and more will be represented at the fair.

**GLRM post-conference programming: Thursday, June 10**  
**Career Pathways / Networking / ACS Leadership Course on Fostering Innovation / Virtual Career Fair**

**PAST DISTINGUISHED SERVICE AWARDEES**

1974 Victor Conquest, Roy C. Newton, Otto Eisenschiml, Arthur W. Schaar  
1975 Hoylande Young Failey, Byron Riegel, Ward Evans, Carl S. Miner  
1976 David Klein, E. H. Volwiler, M. H. Arveson, P. N. Leech  
1977 William A. Converse, Benjamin B. Freud, Robert J. Reinarts, Helen Selin  
1978 Walter S. Guthmann, Charles DeWitt Hurd  
1979 Richard Maltoon, Herbert E. Robinson  
1980 Herman S. Bloch, Julius D. Stieglitz  
1981 Vivian B. Biske, Edward G. Rietz  
1982 Bernard S. Friedman, Paul Van Cleef  
1983 Clifford W. Crosby, J. Fred Wilkes  
1984 James J. Doheny  
1985 Roy H. Bible  
1986 Carl E. Moore  
1987 Elaine R. Anderson  
1988 Nellie M. Payne  
1989 Louis J. Sacco  
1990 Thomas J. Kucera  
1991 James P. Shoffner  
1992 Margaret Lally Huston  
1993 Herbert S. Golinkin  
1994 Stephen Sichak, Sr.  
1995 Marie Ann Liskha, Adele Rozek  
1996 Gayle E. O'Neill  
1997 Fran Karen Kravitz  
1998 Marilyn Kouba  
1999 Charles E. Cannon, Jay S. Curtice  
2000 Ellis K. Fields  
2001 Stanley W. Drigot  
2002 Cherlynlaughn Bradley  
2003 Lawrence E. Thielen  
2004 Lawrence U. Berman  
2005 Seymour Patinkin  
2006 L. Jewel Nichols  
2007 Barbara Moriarty, Louis Lerner  
2008 Margaret Stowell Levenberg  
2009 Susan M. Shih  
2010 Russell Johnson  
2011 David Crumrine  
2012 Sanford "Sandy" Angelos  
2013 Milt Levenberg  
2014 Frank Jarzembowski  
2015 Richard Cornell  
2016 Ken Fivizzani  
2017 Avrom Litin  
2018 Amber Arzadon  
2019 Josh Kurutz  
2020 Michael Koehler

**PAUL BRANDT RECEIVES  
2021 DISTINGUISHED  
SERVICE AWARD**

We are proud to announce that the recipient of the 2021 Chicago Section American Chemical Society's Distinguished Service Award is Dr. Paul Brandt. The Distinguished Service Award was established in 1974 at the suggestion of Louis L. Lerner, then the Editor of The Chemical Bulletin. This annual award recognizes a member who has provided exceptional service to the Chicago Section over, above, and separate from any other achievements of the recipient, either in the profession or by the National ACS.

Paul has been an ACS member since 1983 and an active member of the Chicago Section since 2006. He is a Professor of Chemistry and Chair of the Department of Chemistry and Physics at North Central College (NCC). Despite his demanding schedule, he still manages to volunteer for the Section on many fronts. Over the past 15 years, one of his main contributions has been supporting chemistry education at all levels. Paul impacts the lives of numerous students and their teachers through his service as a High School and Primary School Committee member, Project SEED Scholarship Committee Chair, and Chicagoland ACS Scholarship Exam Writer. At NCC, he has hosted the Chicagoland ACS Scholarship Exam, the Chemistry Olympiad Exam, satellite Section dinner meetings, the Boy Scouts of America (BSA) Chemistry Program, and the Girl Scouts (GS) of the USA Chemistry Program. Acting as the consummate host, Paul provides lab and lecture space, equipment, and volunteers. His contributions are crucial to the success of these worthwhile outreach programs.

Paul's other contributions to the Section include his positions as Section Chair, Councilor, Editor of the Chemical Bulletin, Director, and Nominating Committee Member. Paul brings his calm, respectful, and efficient demeanor to each of these roles. We would like to thank Paul for his meaningful service to our members and the Chicagoland community. Please join us at the June monthly meeting as we honor Dr. Paul Brandt with the 2021 Distinguished Service Award.

## 2021 Emerging Star Award Goes to Jason Romero

It is with great pleasure that we announce the 2021 Chicago Section of the American Chemical Society's **Emerging Star Award** goes to **Jason Romero**. Each year the Chicago Section presents the Emerging Star Award to a younger member or member with less than 10 years of service with the Chicago Section who has provided exceptional service to the Section, over, above, and separate from any other achievements from either their profession or the National ACS.



The committee that selects the Emerging Star Awardee is Chaired by the previous Chicago Section Distinguished Service Awardee and is comprised of the past five Distinguished Service Awardees. The committee recognized Jason's enthusiasm and continuous efforts to improve the Section's governance, communications, and public outreach.

Jason is the Chair of the Section's Social Media Subcommittee of the Public Relations Committee, which seeks to engage our members through numerous social media platforms. The Social Media Subcommittee presents important information about meetings and other key Section events to members and the public. Social media platforms have grown increasingly into one of our Section's more important and highly effective means of communication.

Jason also serves on the Section's Public Affairs Committee and has completed the American Chemical Society's training for Public Advocacy. The Public Affairs Committee focuses on communications and advocacy with government agencies and elected government representatives.

Jason serves on the Chicago Section's Board of Directors and was recently elected by members of the Section to serve as Treasurer for 2021.

Recognizing Jason's leadership talents, the Chicago Section nominated him to participate in the 2021 American Chemical Society's Leadership Experience Institute, an annual invitation-only conference where ACS leaders come together to learn both management and leadership skills to enable them to be successful leaders within the American Chemical Society. Jason participated in the kick-off session in January and will continue throughout 2021 as new leadership materials are introduced to the invited participants.

Jason earned his degree in Chemical and Biomolecular Engineering from the University of Illinois in Urbana-Champaign and is currently a Senior Global Deployment Scientist for The Mars Corporation.

Please join us in congratulating Jason as our 2021 Emerging Star Awardee.

## Teachers' Resource Highlight #1: ChemEd X

*Get Inspired This Summer!*

As the school year comes to a close and summer approaches, many teachers are still searching for ways to improve their classroom teaching. This summer might be the best time to become familiar with a teacher-oriented website that features blogs, discussions, and ideas about chemistry. The resource is called Chemical Education Xchange ([ChemEd X](#))! This website is not new at all. ChemEd X is the new name for the former web site of the *Journal of Chemical Education*.

In 2010, the Division of Chemical Education, Inc. partnered with ACS Publications to co-publish the *Journal of Chemical Education* (*JCE*). When this transition occurred, the journal was transferred to the ACS Publications website. Because not all *JCE* published content was subject to this agreement, however—and due to continued demand for it—ChemEd X was established.

A major emphasis of this website is to better serve our precollege and two-year college audiences for whom the journal may not be a central resource. If you become a member of the American Association of Chemistry Teachers ([AACT](#)), you will be able to download 50 articles per year from the ACS Publications website. You might want to consider joining [AACT](#) in order to take advantage at some of the endless possibilities for activities and research gleaned



from the [Journal of Chemical Education](#). The goal of the ChemEd X website is to deliver relevant content in a way that is more accessible to this audience, while at the same time adhering to the scholarly principles of peer review and assessment of contributions.



ChemEd X offers the opportunity to collaborate with colleagues, share resources and experiences, and, of course, and access content for learning. The content includes [activities](#) that can be implemented in the classroom, videos that illustrate concepts and inspire critical thinking, and assessment resources especially for teachers. There are even more light-hearted forums—including a “[Picks](#)” section and a place to [blog](#)—that allow readers to find out what teachers are reading and what’s on their minds.

[ChemEd X](#) also provides an opportunity for chemistry teachers to publish. Whereas *JCE* is highly research based, ChemEd X provides an interactive platform for works-in-progress and ongoing collaborations while teachers work to transfer the research practices of others into their own curriculum plans.

The website also has an area for videos, which allows *JCE* articles to feature videos and other related information on ChemEd X. Ideas from new and experienced chemistry educators are welcomed. Or consider offering support as teachers develop their ideas. This summer might be the best time to read some short articles to get inspired by a topic, idea and change up your classroom this coming fall.

## Chicago ACS Section Officers for 2021

Chair	Sherri Rukes	<a href="mailto:chair@chicagoacs.org">chair@chicagoacs.org</a>
Vice Chair	Michael Koehler	<a href="mailto:vice-chair@chicagoacs.org">vice-chair@chicagoacs.org</a>
Chair-Elect	Mark Cesa	<a href="mailto:chair-elect@chicagoacs.org">chair-elect@chicagoacs.org</a>
Secretary	Aleks Baranczak	<a href="mailto:secretary@chicagoacs.org">secretary@chicagoacs.org</a>
Past Chair	Paul Brandt	<a href="mailto:past-chair@chicagoacs.org">past-chair@chicagoacs.org</a>
Treasurer	Jason Romero	<a href="mailto:treasurer@chicagoacs.org">treasurer@chicagoacs.org</a>

## For additional information see:

<https://chicagoacs.org/board.php>

<https://chicagoacs.org/Committees>

<https://chicagoacs.org/Volunteer>



## Teachers' Resource Highlight #2: Best of ChemEd



### *Looking for some professional development. . .*

. . . that could help you get inspired to start off the new school year with a bang? This summer there will be a free three-day event, Best of ChemEd, hosted by the American Association of Chemistry Teachers ([AACT](#)) as part of the association's Virtual Summer Symposium. The event dates are **July 27–29, 2021**.

The program for Best of ChemEd is posted on the [University of Guelph's ChemEd website](#). The star lineup includes popular presenters from Canada, US, Brazil, UK and Ireland. ChemEd is the largest conference in North America for educators involved in teaching high school and introductory chemistry. The annual event typically draws teachers from across North America and around the world. To read more about each day's session and the presenters, go to the [ChemEd website](#). Event registration is now open through the [AACT](#) website.

### EVENT HIGHLIGHTS

**Tuesday** – Microscale Concepts, Modeling Instruction, Making and Using Classroom Resources, Kinesthetics, Student Research Groups, Demonstrations, and PhET Simulations

**Wednesday** – George R Hague AP Symposium with the Chief Reader and Chief Reader Designate presenting the results of the 2021 AP Chemistry Exam

**Thursday** – Smartphone Spectroscopy, Flipped Classrooms, Chemistry Games, Creative Assessments, Beyond the Bohr Model, Implementing "Claim, Evidence and Reasoning"



Web: [Laboratory-Equipment-Services.com](http://Laboratory-Equipment-Services.com)  
 Email: [info@laboratory-equipment-services.com](mailto:info@laboratory-equipment-services.com)  
 2906 Central Street, Suite 135, Evanston, IL 60201

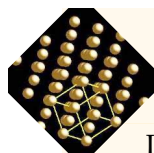
### Pipette and Analytical Balance Calibration

- Calibrations performed in your lab
- Minimum down time
- Pipette repairs available
- Flexible scheduling
- Lower cost than manufacturer's calibration

Let us keep your lab instruments accurate and working at their best.

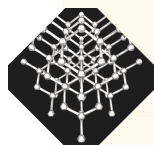
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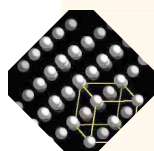
### 50 YEARS OF SERVICE

Dr. Irshad Ahmad  
 Dr. Michael Chen  
 Mr. Robert Edwards  
 Dr. Robert Elder  
 Dr. Charles Guengerich  
 Mr. Kenneth Hamel  
 Mr. Robert Hamilton  
 Dr. Russell Johnson  
 Dr. Charles Jonah  
 Dr. Robert Lumpkin  
 Dr. Cary Thrall  
 Dr. Stephen Ulrey  
 Dr. Michael Wasielewski



### 60 YEARS OF SERVICE

Dr. Cavit Akin  
 Mr. Ludwig Asfeld  
 Mr. Wilbert Bartelt  
 Dr. Joseph Demendi  
 Dr. Joseph Di Salvo  
 Ms. Mary Firszt  
 Dr. Milt Levenberg  
 Dr. Kenneth Lewis  
 Mr. Donald Martinez Jr.  
 Mr. Wayne Miller  
 Dr. Warren Sherman  
 Dr. Leonard Stach  
 Dr. Thomas Sutliff



### 70 YEARS OF SERVICE

Dr. James Ibers  
 Mr. Thomas Keyabian  
 Dr. Leonard Leibowitz  
 Mr. Ralph Robinson  
 Mr. Rubin Weiner

## ACS MEMBERSHIP ANNIVERSARIES

A **SPECIAL THANKS** to our Chicago Members who have dedicated their service to ACS for over 50 years. This is a remarkable achievement. In this day and age, when many people do not see the value of an organization, it is a testament to ACS that so many members continue to find value in an organization over a long period.

This month we honor this elite group of our Section members who have been ACS members for 50, 60, or 70 years! To mark the occasion, they will receive a certificate, a special lapel pin and a permanent member card from the ACS National office in grateful appreciation of their many years of service to the Society.

Normally our June meeting would be in person, but as the pandemic continues our June meeting will be held virtually. The certificates and pins will be mailed out prior to the event.

I personally want to **THANK** the honorees for their continued support to our section as well as to the National organization.

These remarkable members stayed with the organization for their entire career and beyond. This makes me consider, once again, the question I raise to everyone in the Chicago Section – all 3500 of you: **WHY CHICAGO ACS?** What do you value about your membership? Just as in my Letter from the Chair, please consider answering this question for us by filling out a [survey](#) about our organization. Better yet, make a [video](#) and send it to [chair@chicagoacs.org](mailto:chair@chicagoacs.org) and tell us what you value about being a Chicago ACS member. We want to hear from all members, whether it is the end of your first year, fifth, tenth, twentieth or a celebrated milestone with the organization. - Sherri Rukes



### From the Editor's Desk

Dear Readers,

We are coming to the end of the 2020-2021 'pandemic / academic' year of meeting programs – all conducted virtually. In addition to the consistently high quality of the presenters, two things stand out for me about the meetings held in virtual space. The first is that some ACS members and guests from around the United States and beyond were able to participate. The second is that the use of the virtual "chat" feature allowed the elements of curiosity, humor, and shared knowledge to be present during the talks. Rather than being distracting, in my view this mode of engagement with other participants was a lot of fun and added another dimension to the programs. Chat topics have included, for example, welcoming participants from outside the Chicago area, sharing websites for additional information, humorous comments back-and-forth, and expressions of gratitude to the presenter.

This will be my last issue as editor of *The Chemical Bulletin*, as I have decided to pass the baton on to a new team, still being formed, of talented members of the Chicago Section. My experience of working with our chair and the many other contributors to prepare the monthly bulletin has been both effortful and rewarding. As always, I want to thank the MANY contributors to this issue. And thank you for reading!

~~ M.E.S. ~~





### ANITA MEHTA HONORED FOR PATENTED TECHNOLOGY

Congratulations to Chicago ACS Section member Dr. Anita Mehta for being selected as the 2021 IPLAC Creator of the Year. The award is sponsored by IPLAC

(Intellectual Property Law Association of Chicago). The Creator of the Year Award honors significant creative contributions in one or more of the substantive areas protected by intellectual property law, which includes patent law, trademark law, and copyright law. Dr. Mehta is being recognized in the area of patent law for "an invention or group of inventions having technological significance and an important social and economic impact."

Anita received her Ph.D. Degree from Delhi University (India) and conducted postdoctoral research at The State University of New York at Stony Brook, Manchester University (UK) and ICSN-CNRS (France).

She was employed at Ranbaxy Labs India (now Sun Pharma) for nine years and moved up the ranks to become Associate Director of New Drug Discovery Research before joining Saintlife Inc. (USA) as Chief Scientific Officer. In 2004, she joined Avocet Polymer Technologies Inc. (USA) as Vice-President of R&D. She was also employed as Technical Services Manager for a mining plant owned by Freeport McMoRan (USA).

Currently, Dr. Mehta serves as President and CEO of Chicago Discovery Solutions, a chemical technology company located in Plainfield, Illinois. The company is dedicated to finding sustainable chemistry solutions, with special interest in the synthesis of organic compounds in aqueous media. She is working on the design of new active ruthenium metal catalysts for green and sustainable chemistry and is credited with the invention and commercialization of a catalyst (MCAT-53) used for C–C bond coupling and C–H bond activation. Altogether, Dr. Mehta is listed as lead inventor or co-inventor on 24 US patents.

Congratulations to one of our own!

### SEEKING BULLETIN VOLUNTEERS

*Do you have a talent for writing, editing, creating, formatting, collaborating or publishing . . . or all of the above?*

*The Chicago ACS Section seeks volunteers to work on the bulletin.*

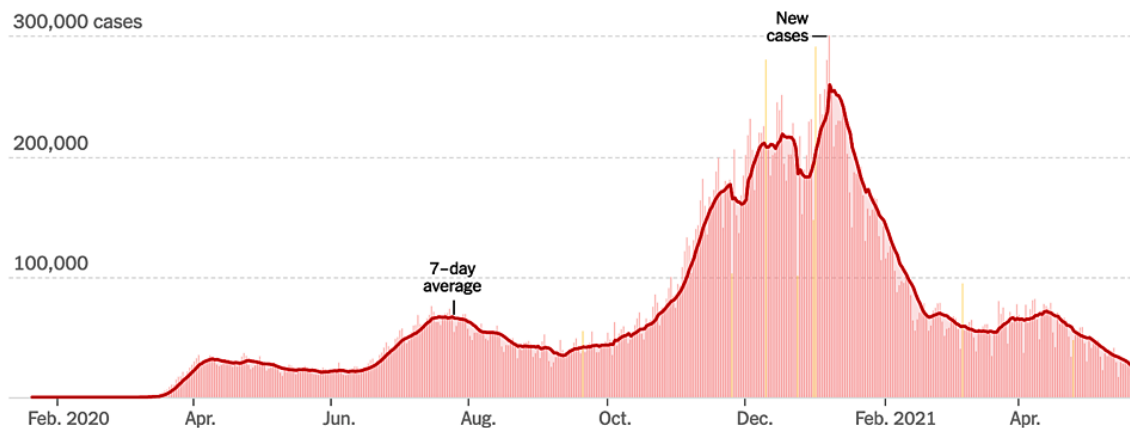
*Put your skills to work on the Chicago Section's flagship monthly newsletter, The Chemical Bulletin*

*Contact Sherri at [chair@chicagoacs.org](mailto:chair@chicagoacs.org) today – We need you!*

### U.S. trends

#### New reported cases by day

COVID-19 pandemic data downloaded on May 25, 2021 from [The New York Times](https://www.nytimes.com)



### ACS

#### MEMBERSHIP

#### RENEWAL OFFER

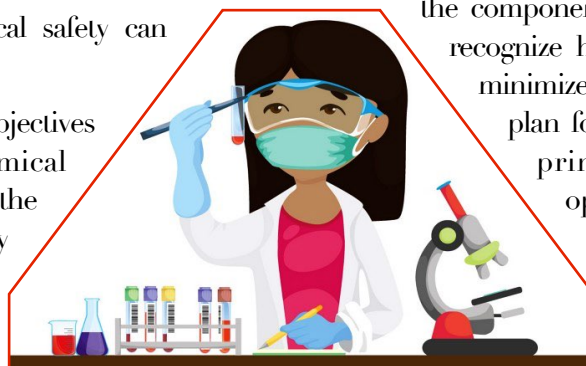
During the COVID-19 crisis, ACS is offering renewing members a one-year waiver on unpaid national dues for those who have suffered hardships due to the pandemic. If you have become unemployed or furloughed, have had your hours or wages reduced, or are facing illness or family care responsibilities, please contact Member Services at [service@acs.org](mailto:service@acs.org) or by phone at 1-800-333-9511.



## Free Online Course: Foundations of Chemical Safety and Risk Management for Chemistry Students®

The ACS Office of Safety Programs is offering [Foundations of Chemical Safety and Risk Management](#), a free online course that's open to all. The target audience is undergraduate chemistry students who have completed two semesters of general chemistry and one semester of organic chemistry, but anyone who wants to increase their knowledge about risk-based chemical safety can sign up.

The course incorporates learning objectives from the "Guidelines for Chemical Laboratory Safety," published by the ACS Committee on Chemical Safety and the ACS Committee on Professional Training, and is based on the principles of RAMP:



recognize hazards, assess the risks from the hazards, minimize and manage the risks, and prepare for the unexpected and emergencies.

The self-paced course includes 17 units and takes approximately 15 hours to complete. Participants will learn the components of a strong safety culture, how to recognize hazards in the laboratory, methods to minimize hazards and risks, processes needed to plan for emergencies, and how to apply the principles of RAMP to laboratory operations. Attendees will receive a certificate. For complete course details and online enrollment, visit the [Safety Programs](#) website, or send email to [safety@acs.org](mailto:safety@acs.org).

### Course Outline

#### [INTRODUCTION](#)

Unit 1: From Rules to Risk

Unit 2: OSHA and EPA Regulations for Laboratories

Unit 3: Communicating Hazards GHS and the SDS

Unit 4: Communicating Hazards NFPA

Unit 5: Recognizing Hazards Toxicity

Unit 6: Recognizing Hazards Flammability

Unit 7: Recognizing Hazards Corrosivity

Unit 8: Recognizing Hazards Reactivity

Unit 9: Recognizing Hazards Physical and Biological Hazards

Unit 10: Assessing Risk Laboratory Operations

Unit 11: Assessing risk Hazard and Risk Assessments

Unit 12: Minimizing risk Chemical Storage

Unit 13: Minimizing risk Hazardous waste

Unit 14: Minimizing risk Elimination, Administrative, and Engineering Controls

Unit 15: Minimizing risk Personal Protective Equipment

Unit 16: Preparing for and Responding to Emergencies

Unit 17: Risk Management Capstone RAMP Assessment



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**ACS USNCO**

U.S. National Chemistry Olympiad

### EDUCATION & OUTREACH:

**K 12 Education** (Russ Kohnken)

Administered and proctored part I of the National Chemistry Olympiad. Ten of our section's students qualified to take part II of the exam, which occurred the weekend of April 23. We're awaiting the results. Separately, the section administered the scholarship exam the weekend of May 22.

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## Chemists Celebrate Earth Week Poetry Contest Winners



Congratulations to these K - 12 students on their winning entries to the Chicago ACS Section's Chemists Celebrate Earth Week poetry contest.

3rd - 5th grade: **Akshara Kasinathan**,  
4th grader at Barbara B. Rose  
Elementary School (at left)

*Reducing our footprint with Chemistry,  
it'll provide help throughout history!  
Solar panels channel light  
into electricity!  
LED lights we love, so bright.  
Use a vehicle that doesn't use gasoline,  
so our sky will beam!  
Earth's life will be more rife!*

6th - 8th grade: (below) **Noah Cho**,  
6th grader at Franklin Middle School  
Virtual Academy (below)

Congratulations again to our winners and thank you to all who entered the contest. Please stay tuned for the next poetry contest for National Chemistry Week (October 17-23, 2021): "Fast or Slow...Chemistry Makes It Go!" The focus will be on reaction rates.

Greenhouse gasses we create  
so devastating to see a  
hole in earth's atmosphere.  
The catastrophic events and  
in which we are the main suspects.  
Chemists at this moment are  
solving problems that we made.  
Because this planet is our home.



## FROM THE ARCHIVES

*The Chemical Bulletin*, June 1921, page 159

## A Sermon from History

"They (the alchemists)" pried into many secrets of nature, but they were obsessed by 'practical' ideas: they sought not knowledge, but power; they wanted to find out how to manufacture gold from cheaper materials, how to make men [and women] immortal by the elixir of life and such-like vulgar dreams. *Incidentally*, in their researches they learned much about poisons, dyes, metallurgy and the like; they discovered various refractory substances and worked their way towards clear glass and so to lenses and optical instruments; but as scientific men [scientists] tell us continually and as 'practical' men [and women] still refuse to learn it is only when knowledge is sought for her own sake that she gives rich and unexpected gifts in any abundance to her servants. The world of today is still much more disposed to spend money on technical research than on pure science. Half the men [workers] in our scientific laboratories still dream of patents and secret processes. We live today largely in the age of alchemists for all our sneers at their memory. The 'business man' of today still thinks of research as a sort of alchemy." – (H. G. Wells, "The Outline of History," Vol. II, 174, 1920.)

*Herbert George Wells (1866–1946) was an English writer. Prolific in many genres, he wrote dozens of novels, short stories, and works of social commentary, history, satire, biography and autobiography.*



Friday, June 25, 2021

2:00 – 3:30 PM (Eastern)

1:00 – 2:30 PM (Central)

"Artificial Molecular Machines:  
Going from Solution to Surfaces"

Sir Fraser Stoddart

Northwestern University

2016 Nobel Laureate in Chemistry

[Register](#) to join ACS President H. N. Cheng for Frontier Fridays, a mini-series that explores new frontiers in science that will revolutionize the future of the human race.

## 2021 PROGRAM MEETINGS

New Date: Thursday, June 17

Programming will continue in the Fall

2021 BOARD MEETINGS  
Open to All Section MembersThursday, June 10  
Thursday, August 5

## UPCOMING EVENTS

Please refer also to the Section's website [chicagoacs.org](http://chicagoacs.org) and Chicago ACS Section Social Media

June	<a href="#">ACS WEBINARS LINK</a> - including archived webinars (some in Mandarin or Spanish language)
June 6–9	ACS Great Lakes Regional Meeting ( <a href="#">GLRM</a> ) - see page 5
June 9–12	ACS Middle Atlantic Regional Meeting ( <a href="#">MARM</a> ) - Driving Innovation
June 14–18	<a href="#">25th Annual Green Chemistry &amp; Engineering Conference</a> - Sustainable Production to Advance the Circular Economy - reflecting the role of chemistry and engineering in creating a closed-loop economy for a sustainable future.
August 12–22	Chicago Section booth at <a href="#">Illinois State Fair</a>
August 22–26	ACS Fall National Meeting: Resilience of Chemistry
September 17	Gibbs Medal Award Dinner
October 22	Basolo Lecture and Dinner

Plan to participate this coming Fall  
in other [ACS regional meetings](#) :  
Midwest / Southwest / Rocky  
Mountains / Southeast