



[Update Profile](#)

[Join](#)

[Renew](#)

[Archive](#)

New digital ACS Guide to Scholarly Communication | **January 28, 2020**

FEATURE

Are Your Life's Elements Protected?

ACS Members have access to [world-class technical benefits](#) that enable you to thrive and advance in your education and career. Additionally, ACS provides valuable nontechnical member-only benefits to you and your family to support your personal financial goals — like [group insurance plans](#).



Employer-provided benefit plans may not adequately provide what you need to equip you or your family to handle an unexpected catastrophic event. Most company-provided insurance plans are just a starting point. The [ACS Member Insurance Program \(MIP\)](#) can help you fill the gaps in your benefit package with quality plans for you and your family to meet your unique needs.

With plans ranging from life, disability income, long term care, professional liability, chemical educators legal liability, auto, and more, the MIP helps members reach their long-term professional and financial goals. Plus, the plans are portable — they stay with you even if you change jobs. With more than 50 years of continued success, the program has proven to be a reliable and valuable member benefit. To learn how we can help you protect the elements you've built your life around, visit www.acs.org/insurance.

Sponsored by the Board of Trustees, Group Insurance Plans for ACS Members — Your Colleagues Working for You

MY ELEMENT

This week's favorite element is [technetium](#), submitted by Jim Schulte: "My passion for chemistry as a young boy started with the periodic table of elements. I've always had a fondness for Technetium. I found it curious that this element has no stable isotopes though it is completely..." [read more](#)

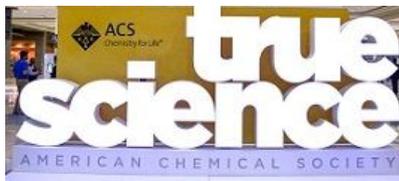
What's your favorite element? [Share your story today!](#)



ADVANCE YOURSELF & YOUR SCIENCE

Online Planner with Technical Program Available for Spring 2020 National Meeting

Plan your ACS Spring 2020 National Meeting & Expo experience with the [Online Planner](#). View the technical program, customize your schedule before the meeting starts, and sync to the Spring 2020 event in the ACS Meetings & Events mobile app when it launches.



Kick off your time in Philadelphia on Sunday, March 22, with the Opening Session around the meeting theme, *Macromolecular Chemistry: The Second Century*. Then join us in the Expo for the Welcome Reception!

On Monday, March 23, the Kavli Foundation Lecture Series will promote groundbreaking discoveries and public understanding of the world's mounting challenges and how chemistry can provide solutions. The series features:

- Prof. Cesar de la Fuente – University of Pennsylvania, *The Kavli Foundation Emerging Leader in Chemistry Lecture*
- Prof. Omar Yaghi – University of California, Berkeley, *The Fred Kavli Innovations in Chemistry Lecture*

[Register and book housing now](#) to join ACS and your colleagues in Philadelphia!

Apply for Petroleum Research Fund Grants Starting February 17



The ACS Office of Research Grants will be accepting proposals for Petroleum Research Fund (PRF) grants to support fundamental research in the petroleum field from 12:00 PM ET on February 17 until 5:00 PM ET on March 13. Proposals must be directed to fundamental petroleum research in one of 10 specified subject matter areas.

Grant programs are available for new professors beginning their first tenure-track position, and also for established tenured or tenure-track professors pursuing new research directions. Separate grant programs are available for qualified professors in non-doctoral departments. Further information and application forms can be found on the [PRF website](#).

Free Webinars This Week: Buckyballs en Español and Secret Lives of Snowflakes

[Serendipia en Química: Historia del Descubrimiento de los Fullerenos y sus Aplicaciones Biomédicas y Fotovoltaicas](#)

Wednesday, January 29, 2:00-3:00 PM ET

Join speaker [Luis Echegoyen](#), 2020 ACS President and Professor of Chemistry at the University of Texas, El Paso and moderator [Ingrid Montes](#), Professor of Organic

Chemistry at the University of Puerto Rico and Director-at-Large on the ACS Board of Directors, as they discuss the history, structural diversity and electronic properties of "buckyballs" or fullerenes. Register now for this [free interactive Spanish-language broadcast](#) to discover more about the mechanism of action of certain functionalized fullerenes as AIDS virus inhibitors and the importance of interfacial interactions in perovskite photovoltaic cells.



[The Secret Lives of Snowflakes: Peculiarities in the Molecular Dynamics of Ice Crystal Growth](#)

Thursday, January 30, 2:00-3:00 PM ET

What are the factors that determine if snow forms in to a soft, skiable powder, or a dense icy mess? Join speaker [Kenneth Libbrecht](#), Professor of Physics at Caltech, and moderator [Dawn Del Carlo](#), Associate Professor of Chemistry Education at the University of Northern Iowa and Chair of ACS CHED as they examine the science of snowflakes. Register now for this [free interactive broadcast](#) to discover how ice surface structure changes with temperature, how this affects ice crystal growth dynamics, and how designer snow crystals are grown in the lab, including "identical twin" snowflakes, which illustrate the origin of complex structural symmetry.



Resources from the Chemical Sciences Roundtable



The National Academies' [Chemical Sciences Roundtable](#) recently published Proceedings of a Workshop-in Brief on "Closing the Loop on the Plastics Dilemma," which you can [download for free](#) from the National Academies website. The Roundtable is also offering a free webinar on "[Inorganic Biohybrids: Advancing Artificial Photosynthesis](#)," to be held February 10, 12:00-1:30 PM ET. [Register online](#) for the event.

ACS CAREER NAVIGATOR

Maximize Your Learning at the Philadelphia National Meeting

Enhance your experience at the [ACS Spring 2020 National Meeting & Expo](#) by taking advantage of multiple professional and applied courses taking place in Philadelphia, March 20-25! Sharpen your skills and enrich your understanding of critical subjects with featured courses covering everything from molecular insights to multivariate calibrations and beyond. Explore training on topics such as HPLC and UHPLC, pharmacokinetics, polymer science and more. [Explore the full course selection](#) and select your National Meeting educational opportunities today.



ACS Career Day Returns to the DC Metro Area



All chemists are invited to attend a free [ACS Career Day](#) on Saturday, February 8, in downtown Washington, DC. This one-day event will feature career-building workshops, networking opportunities with recruiters, and more. ACS Members have the added opportunity to sign up onsite to meet with ACS Career Consultants.

[Register today!](#)

Chemjobber Shares His Tips on Overcoming Procrastination

We're all guilty of putting things off. The latest issue of *inChemistry*, the ACS student member magazine, features some [great tips to get over our tendencies toward procrastination](#). These tips, which originally appeared in *C&EN*, were provided by the blogger Chemjobber, an industrial chemist who blogs about the chemistry job market at chemjobber.blogspot.com. For more Chemjobber columns in *C&EN*, visit cenm.ag/benchandcubicle. (Image credit: Shutterstock/C&EN)



C&EN Jobs - Latest Postings

c&en JOBS

- Chemist | Titus | Warwick, RI
- Postdoctoral Appointee - Sustainable Energy Production, Storage, & Utilization | Sandia National Laboratories | Livermore, CA
- Tenure-Track Plastics Engineering Technology Faculty Position | Penn State Erie, The Behrend College | Erie, PA
- Assistant Professor, Chemistry | Gwynedd Mercy University | Gwynedd Valley, PA

ACS NEWS

ACS Bridge Project Offers Travel Scholarships for Underrepresented Minority Students



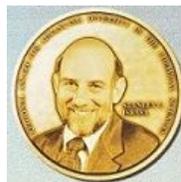
The mission of the [ACS Bridge Project](#) is to diversify the graduate student population in the chemical sciences. The program is currently accepting applications from students interested in pursuing graduate education in the chemical sciences. Currently, the [ACS Bridge Program](#) supports students in nine participating departments in the U.S.; only departments vetted by the ACS Bridge Project and who share the same beliefs and goals that the project is built upon will have access to this application pool. Visit www.acs.org/bridge for eligibility guidelines and to apply.

- The **Undergraduate ACS Bridge Travel Awards** support travel and/or registration costs for students from underrepresented minority (URM) groups to attend either the ACS Spring National Meeting or the annual meeting of the National Organization for the Professional Advancement of Black Chemists and Chemical Engineers (NOBCChE). Each award will be for up to \$2,000 of eligible expenses. The aim of the travel award is to increase the number of URM students who gain access to doctoral programs in the chemical sciences. Undergraduate students can get full eligibility details and [apply for the awards online](#).
- The **Graduate ACS Bridge Travel Awards** support travel and/or registration costs for URM graduate students to attend either the ACS Spring or Fall National Meeting. Each award will be for up to \$2,500 of eligible expenses. The aim of this travel award is to advance the career and professional development of URM chemical science graduate students by helping to support the students' efforts in presenting at ACS National Meetings. Review the eligibility details for grad students and [apply for the awards online](#).

Call for Nominations – Stanley C. Israel Regional Award for Advancing Diversity

The [Stanley C. Israel Regional Award for Advancing Diversity in the Chemical Sciences](#) recognizes individuals or institutions that have advanced diversity in the chemical sciences and significantly stimulated or fostered activities that promote

inclusiveness within the region. Nominees may come from academia, industry, government, or independent entities, and may also be organizations, including ACS Local Sections and Divisions. The nominee must have created and fostered ongoing programs or activities that result in increased numbers of persons from diverse and underrepresented minority groups, persons with disabilities, or women who participate in the chemical enterprise.



The nomination deadline for the award in the Central, Middle Atlantic, and Northwest regions is March 1; for the Southwest/Southeastern and Northeast regions, the deadline is August 1. Visit the [Stanley C. Israel Regional Award website](#) for requirements and additional information.

Apply Now for Women Chemists Travel Award to Attend Fall Meetings



It's time to apply for the [ACS Women Chemists Committee \(WCC\)/Eli Lilly Travel Awards!](#) These grants support travel to meetings taking place in the U.S. between July 1 and December 31, 2020 for undergraduate, graduate, and postdoctoral female chemists to present their research. Awardees can receive up to \$1,000—don't let this opportunity pass you by! Visit the [WCC/Eli Lilly Travel Award website](#) to apply online by March 1, or send e-mail to ACS Diversity Programs at diversity@acs.org.

Public Outreach Award: Call for Nominations

Do you know any ACS Members who have improved public recognition and appreciation for the contributions of chemistry? If so, please consider nominating them for the [Helen M. Free Award for Public Outreach](#), which carries a \$1,000 prize, a crystal trophy, and an honorarium to attend the Fall 2020 ACS National Meeting. You can even nominate yourself! [Nominations](#) are due February 15.



ACS in the News: ABC News



"How rattlesnakes collect water in the desert"
(from *ABC News*, January 17, 2020)

"Now a team of engineers and biologists has discovered special properties of the reptiles' scales that help the snakes become living rain buckets. They found that a water droplet hitting the back of a western diamondback rattlesnake breaks into smaller droplets that often stay pinned to the snake's skin.... The researchers [published](#) their findings in December in the journal *ACS Omega*."

Special Discounts from Office Depot

U.S.-based ACS Members can save up to 10% off the everyday web price on more than 30,000 office supplies available through the [ACS Office Depot Partner Program](#). From pens to protractors, for home, school, or work, you'll find it at Office Depot! Register at www.1800member.com/od-acs or call 1-800-636-2377. Once registered, you can shop in store or online. [Sign up today](#) and start saving!



C&EN - This Week's Headlines

- [C&EN, Table of Contents, January 27 issue](#)
- [Lessons learned from a year in Washington](#)

- The time is now for edible packaging
- So you want to start a detergent company
- Periodic Graphics: The chemistry of snow and ice
- Video: Scientists spin yarn from crab-shell and seaweed compounds
- Large screening strategy uncovers dozens of non-oncology drugs that kill cancer cells
- Chemical belt buckles and a century of hard hats
- Rhodium photocatalyst does double duty to generate hydrogen
- More evidence that sunscreens absorb through skin
- CEOs of Bayer, BASF pitch to Davos attendees
- Mechanoacid polymer signals a smash hit
- EPA adds 160 PFAS to Toxics Release Inventory

c&en

PHUN & GAMES

Reactions: Can You Cryogenically Freeze Your Body and Come Back to Life?



When you die, there are a lot of things you can do with your dead body – embalm it, cremate it, donate it to science (the list goes on...), but some people will choose to have their dead bodies, or body parts, frozen until the technology of the future has (hopefully) advanced enough to bring

them back to life. In a (sort of) recent episode of *Reactions*, we break down the [chemistry of cryogenic freezing](#) and whether it's realistic to think we could ever reanimate a frozen corpse.

Reactions is a video series produced by ACS and PBS Digital Studios that uncovers the chemistry all around us. Check out dozens of archived videos that answer the burning questions you've always wanted to ask – with chemistry! Subscribe to *Reactions* on [YouTube](#) and follow us on [Facebook](#), [Twitter](#), and [Instagram](#).

American Chemical Society
1155 Sixteenth Street, NW | Washington, DC 20036
Copyright © 2020 American Chemical Society All rights reserved.

You are receiving this email because you opted-in to receive it or due to your relationship with ACS. To ensure that you continue to receive our emails, please add us to your address book or safe list.

[Email Subscription Management](#) | [Unsubscribe from ACS Matters](#)
[Privacy Policy](#)