

## ACS MATTERS

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*Free Virtual Classrooms bring experts to your desktop!* | **November 5, 2019**

## FEATURE

### Nominate Your Heroes of Chemistry

Nominations for the 2020 [ACS Heroes of Chemistry Awards](#) are now open! The Heroes of Chemistry Award is one of the highest honors the ACS gives to industrial chemists, recognizing teams whose work and research led to the development of successfully commercialized products that have greatly benefited humankind.



Nominations are due February 1, 2020. Winners will be notified in June 2020, then recognized at a gala celebration during the ACS Fall 2020 National Meeting & Exposition in San Francisco. Complete eligibility details and inspiring stories of past award winners can be found on the [Heroes of Chemistry](#) web page.

Celebrate your company's hard work and success in innovation – [submit your nomination today!](#)

## MY ELEMENT

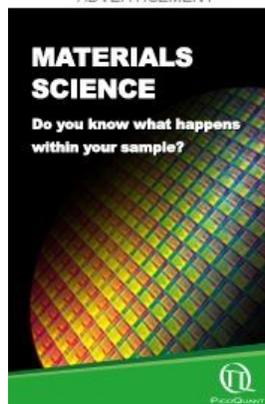


nevertheless..." [read more](#)

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

"My favorite element is **chromium**," says Professor N. Rajesh. "I find its chemistry to be incredibly fascinating. Among the stable oxidation states, Cr (III) is perceived to be a nutrient in glucose metabolism, while Cr (VI) is carcinogenic. Although, the +6 oxidation state is toxic,

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## ADVANCE YOURSELF & YOUR SCIENCE

## Understanding Chemistry Networks on Twitter

ACS Publications, in partnership with the ACS Division of Chemical Information (CINF), is excited to announce the next free webinar in our series for the chemical information and cheminformatics community, "How to Better

Understand Professional Networks on Twitter Using Data," to be held on Wednesday, November 13 at 1:00 PM ET.



Have you read *C&EN's* recent deep dive into the [chemistry network on Twitter](#)? In this webinar, Dr. Paulette Vincent-Ruz will teach you how to run a similar analysis to understand your professional network, and Dr. Dorea Reeser will give you a glimpse of the story and presentation process for the final piece published by *C&EN*. After a detailed presentation from our host, a live Q&A will conclude the webinar.

[Registration is free](#); if you can't attend live, you can still complete the registration form to receive a link to a recording after the webinar.

## Free Webinar on November 7: Saving the World with Nanobugs



The two biggest existential environmental threats to human survival on the planet are climate change due to excessive emission of greenhouse gases and 10,000-year-lifecycle plastic pollution. The next free online event from ACS Webinars, "Combating Climate Change with New Nanobugs: Teaching Bacteria to Eat Carbon Dioxide and Light with Quantum Dots," on Thursday, November 7, 2:00-3:00 PM ET, will explore how these issues can be addressed simultaneously and through an inexpensive, sustainable, and scalable technology.

Join speaker [Prashant Nagpal](#) of the University of Colorado Boulder and moderator [Mark Jones](#) of Dow Chemical as they discuss the development of living nano-biohybrid organisms that use sunlight to convert massive amounts of carbon dioxide, air, and water into biodegradable plastics, fuels, and value-added chemicals such as fertilizers and food-preservatives. During this [free, interactive broadcast](#), Nagpal will explain how these "nanobugs" are made by simply combining bacteria found in soil with engineered quantum dots targeted to penetrate the cell, self-assemble on specific enzyme sites, and then trigger these enzymes using different colors of sunlight.

## ACS-Hach Professional Development Grant for High School Teachers

The application period for the [ACS-Hach Professional Development Grant](#) is open! High school chemistry teachers can request up to \$1,500 to pursue opportunities that advance their professional development and enhance the teaching and learning of chemistry. Applications will be accepted through January 4, 2020. [Learn more and apply today!](#)



## Nominations Open for the 2020 Green Chemistry Challenge Awards

The U.S. Environmental Protection Agency (EPA) has announced the call for nominations for the [2020 Green Chemistry Challenge Awards](#). These



prestigious national awards honor companies and institutions that have developed a new process or product using green chemistry approaches that helps to protect public health and the environment.

Nominations for innovations in five categories are due by December 31, 2019. The categories are academic, small business, greener synthetic pathways, greener reaction conditions, and the design of greener chemicals. Visit the EPA website for [complete details](#) about the awards and to [download](#) the nomination package.

## ACS CAREER NAVIGATOR

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### Everything You Need to Know About Polymer Chemistry

Develop a better understanding of polymer chemistry through a hands-on combination of lectures and labs with the upcoming ACS Professional Education course, "[Polymer Chemistry: Principles and Practice](#)." Join us on December 1-6 in Blacksburg, VA, to explore polymer synthesis, polymer structure and morphology, and measurements of polymer properties. [Register today](#) to enhance your knowledge on this important topic and boost your skills.



### What I Learned: Anne DeMasi, Manager, Hazard Communications, LANXESS Solutions, US Inc.



***Having experienced the disruption that occurs during a major acquisition – for example Dow purchasing Rohm and Haas in 2009 - what was that like for you? And what did you learn about managing through that challenging process that might be helpful to others who find themselves in a similar situation someday?***

"It is a multifaceted role with many internal and external stakeholders, and requires a balancing act. Like any of the other labs at the Institute, we test the performance of hundreds of products each year. Our test results feed directly into our editorial content in print and online..." [read more](#)

### Career Corner: ACS Career Consultants and Other Experts Answer Questions about Advancing Your Career

#### ***Under what circumstances are lateral career moves smart?***

##### ***Norton Peet, ACS Career Consultant***

"Lateral career moves are smart when they (1) allow you to move away from a smothering boss or colleagues who are not team players, not supportive or are deceitful..." [read more](#)



##### ***Andrea Alexander, Technical Service & Development Manager, Shin Etsu Silicones of America***

"If you feel yourself stagnating and are no longer growing professionally, a lateral career move may be the perfect solution..." [read more](#)



##### ***Natalie LaFranzo, Vice President - Market Development, Cofactor***

## Genomics

"A lateral career move to a new company with more potential for growth and advancement is always a good idea..." [read more](#)



### C&EN Jobs - Latest Postings

**c&en** JOBS

- Chief Innovation Officer | Living Proof | Boston, MA
- Organic Chemistry Tenure-Track Faculty | Metropolitan State University of Denver | Denver, CO
- Tenure Track Position in Organic Chemistry | Saint Mary's College | Notre Dame, IN
- Tenure Track Assistant Professor | McGill University | Montréal, QC
- Lecturer | St. Edward's University | Austin, TX

## ACS NEWS

### Apply Now for the ACS Scholars Program

The ACS Scholars Program is an undergraduate scholarship program that offers financial support, mentoring, and networking for students majoring in a chemical science field. Selected recipients are awarded up to \$5,000 per academic year (number of awards and award amounts are determined by school year, demonstrated financial need, and available funding). To date, more than 3,000 students have received a funding from the ACS Scholars Program. [Learn more and apply today!](#)



### International Research Experience for Students (IRES)



Applications are now being accepted for the International Research Experience for Students (IRES) Program. Funded by the NSF, the IRES Program provides undergraduate juniors and seniors the opportunity to conduct research in Singapore or Germany for approximately 11 weeks during the summer of 2020. This program is open to U.S. citizens and U.S. permanent residents only. For more information, please visit [www.acs.org/ires](http://www.acs.org/ires) or e-mail [ires@acs.org](mailto:ires@acs.org) or [intlacts@acs.org](mailto:intlacts@acs.org).

### Dorothy Phillips Honored as Vanderbilt Trailblazer

ACS Board of Directors member Dorothy J. Phillips has been named a Vanderbilt Trailblazer by Vanderbilt University. The honor recognizes her as the first African American woman to receive an undergraduate degree from the university. On October 18, Vanderbilt unveiled a portrait of Phillips as part of the Trailblazer initiative, which honors pioneers who have broken barriers and made a positive impact on society. Phillips earned a bachelor's degree in chemistry from Vanderbilt in 1967 before earning a Ph.D. in biochemistry from the University of Cincinnati. She established a successful industrial career, retiring in 2013 as a director of strategic marketing at Waters Corp.



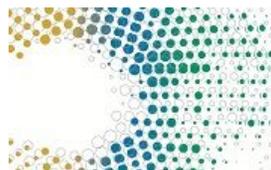
## Discover an Easier Way to Submit ChemRxiv Research to Peer-Reviewed ACS Journals



Direct Journal Transfer is a free feature of ChemRxiv that helps authors submit their posted preprints from ChemRxiv to established journals for editorial consideration and peer review. This feature, which is available on the ChemRxiv website, currently enables direct submission to journals published by ACS, the Royal Society of Chemistry (RSC), and the German Chemical Society (GDCh), including ChemPubSoc Europe (CPSE) journals. Share your research at ChemRxiv and discover Direct Journal Transfer today at [ChemRxiv.org](http://ChemRxiv.org)!

## Free Workshop on Advances, Challenges, and Opportunities for Electrochemistry

Please join the Chemical Sciences Roundtable for a workshop on "Advances, Challenges, and Long-Term Opportunities of Electrochemistry: Addressing Societal Needs" on November 18-19, 2019. Participants can join online or in person at the National Academy of Sciences Building in Washington, DC. More information about the program and free registration is available [online](#).



## ACS in the News: BBC News



"The battle to break plastic's bonds" (from *BBC News*, October 23, 2019)

"Prof Poepelmeier and his colleagues at Northwestern University in Illinois, US, have developed a chemical technique which breaks down the bonds that make polyethylene – the plastic most commonly used to make the ubiquitous carrier bag – so indestructible.... His team [published their breakthrough](#) in the journal *ACS Central Science*."

## Special Member Savings from Lenovo!

Now through November 17, you can [save big on technology products from Lenovo](#), including ThinkPad, Yoga, IdeaPad and other devices and accessories. No matter if your purchase is for gaming, back to school, a personal or work upgrade, or if you're thinking ahead to the holidays, you'll receive FREE shipping on all web orders to U.S. addresses, warranty service upgrades, and business financing. Be sure to check the [ACS Member Savings Program](#) page often for the latest offers. Members can also call 1-800-426-7235, ext. 3881 (Monday-Friday, 9:00 AM-9:00 PM ET; Saturday, 9:00 AM-6:00 PM ET) to speak with a customer representative.



## C&EN - This Week's Headlines

- *C&EN*, Table of Contents, November 4 issue
- Amping up the pharma lab: Drug companies explore the potential of electrochemistry
- What U.S. chemists make, according to the 2019 ACS salary survey
- The art of salary negotiations
- Can laboratories move away from single-use plastic?
- From our archives: An essay on plutonium, by Shenda M. Baker
- Career Ladder: Jason Pontrello
- Ecofriendly skivvies with benefits



- H. N. Cheng is 2020 ACS president-elect
- KRAS drug developers offer early data on new classes of small molecules
- California researchers learn to roll with power outages
- Single-use plastics transformed into high-quality liquid hydrocarbons with new catalyst
- Exposure to toxic substances threatens human rights, UN expert says

## PHUN & GAMES

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### **Reactions: Space Mirrors and Other Weird Ways to Fight Climate Change**



There are things you can do right now to help our climate, like investing in renewable energy. (Or using [nanobugs](#) - see above!) But in [one of our favorite recent episodes](#), the *Reactions* crew dig into a few of the weirdest climate change-combating ideas out there.

*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](#) and [Twitter](#).

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