Support Aspiring Chemists on Giving Tuesday, December 3

Following the shopping frenzy that is Black Friday and Cyber Monday, Giving Tuesday is a global day for generous giving to others. For your part, please join ACS members around the world in supporting the ACS Scholars Program.

The program provides scholarship and mentoring support to accomplished college students from minority groups that are underrepresented in the chemical sciences. ACS Scholars are selected based on academic achievement, financial need, and leadership ability. They are often the first in their families to attend college.

Since its inception 25 years ago, this program has helped thousands of students realize their full academic potential and pursue their professional dreams. Mary Martinez Nuñez, who is earning a biochemistry degree at Wellesley College, says:

"The ACS Scholars Program has provided not only money for tuition and books, but also a mentor on campus, the opportunity to attend national conferences, and a network with a community I didn’t know existed – high-achieving chemists from all over the nation. All of these experiences have helped me to be confident in what I do and what I can achieve."

PLEASE DONATE on or before December 3, Giving Tuesday, at www.acs.org/success to support chemistry’s future leaders!

MY ELEMENT

This week’s favorite element is lithium, submitted by Kuzhikalail M. Abraham: "With an atomic number of 3 and an atomic weight of 6.94, it is the lightest metal and the most electropositive element in the periodic table. Its positive ion with a high charge density is a very strong Lewis acid. Lithium compounds are used in medicine, metal alloys..." read more
ADVANCE YOURSELF & YOUR SCIENCE

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.

Free Spanish-Language Webinar Tomorrow on Nanotechnology and Chemistry

The concept of nanotechnology is no longer new, but it is often misunderstood. A special webinar in Spanish will focus on the basics and the latest news regarding this important area of science and technology. Register today for "Reflexiones sobre Nanotecnología en el Año Internacional de la Tabla Periódica," on Wednesday, November 27, 2:00-3:00 PM ET. Join speaker Luis M. Liz Marzán, Scientific Director of the Center for Cooperative Research in Biomaterials, and moderator Ingrid Montes of the ACS Board of Directors for this free, Spanish-language broadcast as they discuss traditional chemistry concepts of chemistry and nanoscience as well as nanotechnology applications to celebrate the International Year of the Periodic Table.

Deadline Extended for SCI Scholars 2020 Summer Internship Applications

The deadline to apply for SCI Scholars 2020 summer internships has been extended to December 4, 2019, to accommodate the Thanksgiving holiday. Chemistry and chemical engineering majors who have a minimum 3.5 GPA and are U.S. citizens or permanent residents should make sure that all of their application materials are received by ACS no later than Wednesday, December 4. Candidates who are selected will receive a paid 10-12 week industry internship, a professional development stipend, and the opportunity to recognize an influential teacher. For more information, visit www.acs.org/sci.
EXCLUSIVE: 2020 Professional Education Preview

The new year brings new professional development opportunities, and ACS is here to support you every step of the way. Check out our upcoming 2020 Professional Education courses to help you learn new skills and advance your career:

- Laboratory Safety – January 23-24, Atlanta, GA
- Pharmacokinetics for Chemists in Drug Discovery and Development – February 4-March 10, Online Live
- 1-D and 2-D NMR Spectroscopy: Structure Determination of Small Molecule Organic Compounds – March 20-21, Philadelphia, PA

Browse more upcoming courses and find out how ACS Professional Education is your partner in refining your chemistry skillset and knowledge base.

Innovation Zone: Karin Calvinho, Chief Technology Officer, RenewCO₂

*Karin Calvinho is a Ph.D. Candidate at Rutgers University with five years of experience in heterogeneous electrocatalysts for energy conversion and storage. She has been working on... read more*

Career Perspectives: Paul Lobben, Scientist, Thermo Scientific

*A Ph.D. is usually seen as an advantage for an industry position, but sometimes recruiters see it as an over-qualification. In the instances where having a Ph.D. seems detrimental, how can I prove that it actually makes me more marketable?*

"You can prove it by effectively communicating your soft skills and not just your hard, technical skills. Constant change is a near certainty in the global marketplace. Individuals that continue to develop their soft skills will..." *read more*

C&EN Jobs - Latest Postings

- President and CEO | Science History Institute | Philadelphia, PA
- Visiting Post-Doctoral Fellow of Chemistry | Dixie State University | Saint George, UT
- Scientist | Missouri University of Science & Technology | Rolla, MO
- Staff Scientist | Kinnos | Brooklyn, NY

ACS NEWS

Become a U.S. National Chemistry Olympiad Mentor

The U.S. National Chemistry Olympiad (USNCO) program is searching for college chemistry educators to serve as mentors for the 2021-2023 USNCO teams. Mentors play a vital role in preparing students for the International Chemistry Olympiad competition. They help guide students on the national level through a series of preparatory problems to test student skills and
ultimately select the U.S. team for the international competition. For more information about becoming a mentor and to apply, visit the USNCO site today!

**Webinar: College-Level Labs That Can Be Done in 50 Minutes or Less**

Do you need college-level labs that don’t take 2-3 hours? In an upcoming webinar from the American Association of Chemistry Teachers (AACT), University of Colorado chemistry instructor and general chemistry lab coordinator Linda Cummings will describe five meaningful labs that can be completed during a 50-minute class period. Register today for this free AACT webinar, which is scheduled for Wednesday, December 4, at 7:00 PM ET.

**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!

**Give the Gift of AACT Membership**

Tis’ the season of giving! This holiday season consider giving the K-12 chemistry teacher in your community the gift of membership in the American Association of Chemistry Teachers (AACT). An AACT membership gives teachers the opportunity to expand their teaching resources, enhance their professional development, and stay up to date on the latest news in the chemistry teaching community.

**Call for Research Proposals Using NASA Physical Sciences Data**

NASA has released the NASA Research Announcement (NRA) titled “Use of the NASA Physical Sciences Informatics System – Appendix F,” which solicits ground-based research proposals to generate new scientific insights by utilizing experimental data residing in NASA’s Physical Sciences Informatics (PSI) system. This online database provides investigators access to the raw and processed experimental data from physical science reduced-gravity flight experiments conducted on the International Space Station, Space Shuttle flights, Free Flyers, or commercial cargo flights to and from the ISS, and from related ground-based studies.

The current call for proposals solicits research ideas in five areas – Combustion Science, Complex Fluids, Fluid Physics, Fundamental Physics, and Materials Science – for which eligible experimental data will be available in the PSI by the proposal due date of December 16, 2019. Data from 63 investigations are eligible for this NRA. The call is open to two types of investigators: established researchers and graduate students. Anticipated award amounts, eligibility requirements, and further instructions for both types of investigators are provided in the solicitation document.
PHUN & GAMES

Special Savings from Office Depot!

Join or use the ACS Office Depot Partner Program today for additional savings on your qualifying order until December 2, 2019*. Members can save up to 10% off the everyday web price on more than 30,000 office supplies. Plus, you can earn an additional $35 off when you spend $250 or more (use coupon code 65475661), or $20 off your order of $150 or more (coupon code 24163906). From calculators to copier cartridges, 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 to stock up today. Once registered, you can start saving on your next in store or online purchase, but do hurry, this special offer ends on December 2!

(*Some exclusions apply. Special offer expires 12/2/19. See Terms and Conditions.)

C&EN - This Week’s Headlines

- C&EN, Table of Contents, November 25 issue
- Chemists move indoors to measure the air quality in our homes
- The 3-D printing industry tries to make body parts
- How to say goodbye to PFAS
- The surge continues in pharmaceutical services
- Help for helium users is on the way
- Noni Byrnes wants to bring more transparency to grant review at the NIH
- Periodic Graphics: Suppressing wildfires with chemistry
- Croissants and Blenders
- CRISPR gene editing in humans appears safe, and potentially effective
- New catalyst turns waste CO<sub>2</sub> into valuable commodity chemical
- China plans another crackdown on chemical plant safety
- Chemistry professors charged with making methamphetamine
- Court issues mixed ruling on U.S. chemical risk assessments
- DDT exposure linked to type 2 diabetes risk

Reactions: The Chemistry of Perfect Roasted Potatoes

Making delicious roasted potatoes is all about finding the right texture and consistency. Just in time for Thanksgiving, the stalwart folks at Reactions have brought us their latest video on using chemistry to create the roasted potatoes of your dreams. (Not to mention a link to a past video, “How to Fry a Thanksgiving Turkey Without Burning Your House Down” - timely!)

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.