



HIGH SCHOOL CHEMISTRY DAY

HIGH SCHOOL TEACHERS PROGRAM

SAN FRANCISCO

SUNDAY, AUGUST 10, 2014 | 8:00 AM – 6:00 PM

You can visit the exhibiting companies and organizations on:

Sunday, August 10, 2014

6:00 PM–8:30 PM

Monday, August 11, 2014

Tuesday, August 12, 2014

9:00 AM–5:00 PM

**Moscone Center – Halls B&C.
San Francisco, California**

HIGH SCHOOL CHEMISTRY TEACHERS!

The **American Chemical Society** will hold its 248th National Meeting in San Francisco, CA on August 10–14, 2014. More than **15,000** scientists are expected to attend, and over **7,000** presentations are slated, comprising symposia that highlight a broad range of scientific advancement.

The **American Chemical Society** is the world's largest scientific society dedicated to a single discipline. The meeting will be held at the Moscone Convention Center and hotels around the city.

EXPOSITION

Network with technical professionals from more than 200 exhibiting companies inside the **ACS Exposition**. Investigate new technology and techniques in instrumentation, publications, scientific software and hardware, analytical, chromatographic, laboratory and safety equipment and services.



FOR MORE INFORMATION
CONTACT THE OFFICE OF HIGH SCHOOL CHEMISTRY
1 800 227 5558, EXT. 2105

education@acs.org
www.acs.org/hsday

HIGH SCHOOL PROGRAM SUNDAY: 8:30 AM TO 4:00 PM

MORNING PROGRAM

Welcome

Symposium organizer:

Kate Anderson

Beyond Benign, Wilmington, MA

Chemistry Education for Global Stewardship

Mary Kirchhoff

American Chemical Society, Education Division, Washington, DC

This presentation will explore strategies for integrating green chemistry and sustainability topics into the high school curriculum.

Teaching green chemistry and sustainability with PHET Interactive Simulations

Julia M. Chamberlain

University of Colorado Boulder, Boulder, CO

In this presentation, we will highlight simulations that enrich the effective teaching of sustainability topics such as climate change, and share simulations that support green chemistry principles.

Green Chemistry in Secondary Agriculture and Environmental Science Education

Miriam Kaplan

Soquel High School Soquel, CA

Learn how students are evaluating chemistry-based conditions, changes and solutions using the principles of green chemistry in a multidisciplinary course.

Greener activities from the Journal of Chemical Education and ChemEdX

Deanna Cullen

Whitehall High School, Whitehall, MI

Several "greener" replacement labs and activities from the Journal of Chemical Education and their companion Web-site, ChemEdX, will be highlighted that offer safer/greener alternatives to laboratories that are typically used.

Teaching the metric system for meaning and understanding

Sally Mitchell

East Syracuse Minoa High School, East Syracuse, NY

Learn how easy it is to teach the metric system with sound tips for meaning and understanding.

What in the World is a Bioplastic?

Sherri Conn Rukes

Libertyville High School, Libertyville, IL

With the push to become greener, bioplastics are emerging more and more. Learn the components of bioplastics and even make your own!

Making Chemistry Safer, More Relevant and Way More Fun with Green Chemistry

Kelsi Himmel,

Argonaut High School Jackson, CA

Must we rely upon the "wow factor" of a lab that is dangerous to hook our students? With green chemistry we focus on real world problems and solutions that students' care about.

LUNCH

A feature of each national meeting, the High School/College Interface Luncheon brings together educators from different levels with the goal of facilitating an exchange of ideas and networking between teachers. This activity is organized and sponsored by the **ACS Division of Chemical Education (CHED) and ACS Education Division.**

NOTE: Pre-college registrants should not purchase a ticket to the High School/College Interface Luncheon. Tickets for pre-college registrants to this event are generously provided by the ACS Division of Chemical Education and ACS Education Division.

During the luncheon there will be several poster presentations about various resources available through the ACS Education Division and local science organizations.

AFTERNOON PROGRAM:

Online Green Chemistry Lessons Learned

Ann Akey

Woodside High School Woodside, CA

Learn how online professional development provides useful tools and resources for high school teachers integrating green chemistry in the classroom.

Introducing Green Chemistry Using Inspiration from Nature

Kate Anderson

Beyond Benign, Wilmington, MA

Introduce green chemistry by challenging your students with a biomimicry matching game. Connect the sciences as you introduce your students to new innovative technologies.

X-ray crystallography and NGSS: A bridge across categories

W. Rogers

San Diego State University, San Diego, CA

In this session, learn how X-ray crystallography, a physics technique, is uniquely qualified to bridge the ideas in chemistry, physics and biology as they are represented in the NGSS.

What is renewable energy? Activities that demonstrate solar and wind energy conversion

L. Paw and L. Rubin

University of California Berkeley, Berkeley, CA

Bay Area Scientists in Schools (BASIS), an outreach program of Community Resources for Science (CRS), places volunteers excited about

science and engineering into local elementary and middle schools. Learn two new activities that demonstrate solar and wind energy conservation.

Periodic table animated: Discover the organization of the periodic table

Jodye Selco

University of California Poly Pomona Pomona, CA

This exercise helps students visualize numbers of valence electrons on atoms and helps them with ionic charges, Lewis Dot Structures, and more. Student responses and lessons learned will be discussed.

Hot Pack Calorimetry: Finding the Heat of Hydration for Magnesium Sulfate

Jewyl Clarke

Eastlake High School, La Mesa, CA

This simple lab teaches students exothermic and endothermic reactions and is part of a high school medical chemistry curriculum unit designed to encourage students to see the way that chemistry serves the broader public.

Following the HS Day Program, the ACS Education Division will host a networking reception.

REGISTRATION METHODS

There are several ways to register for the meeting:



Online:

<http://www.acs.org/meetings>
(credit cards only).



Phone:

800-251-8629 (U.S./Canada only)
508-743-0192 (International)
M - F, 9 AM to 5 PM EST
(credit cards only)



Fax completed form with payment to:
(508) 743-9605



On-site: Moscone Convention Center

REGISTRATION

All attendees must register for the meeting in order to participate in the technical sessions and programs. Registration provides full access to the special High School Chemistry Day program on Sunday as well as the entire ACS meeting (Sunday through Thursday) and Exposition (Sunday through Tuesday).

The cost for registration for Pre-college teachers is \$105.00. Early registration ends on June 30, 2014. Register after that or on-site and you will need to pick up your badge at the ACS Attendee Registration.

PROFESSIONAL DEVELOPMENT DOCUMENTATION

Attendees can track professional development (based on clock hours) for sessions attended at the ACS national meeting. Upon completion and submission of ACS forms, participants will be mailed a certificate documenting their participation in the conference.