

Berkeley Center for Green Chemistry Newsletter

Welcome Back!

After a wonderful summer filled with research, travel, and adventures, we are excited to have the students back on campus! Classes got underway a little early at the BCGC with a day-long retreat for the [2013 Greener Solutions Students](#), who spent time last week learning about [biomimicry](#) and this year's design challenge from [Levi Strauss and Co.](#) As you will see below, this promises to be a very exciting semester with many opportunities for students, faculty, and the public to engage with the growing green chemistry community on and off campus.

Associate Directors Mike Wilson and Meg Schwarzman Lead Training at California EPA

BCGC Associate Directors Megan Schwarzman and Mike Wilson conducted a day-long training session on August 20 for technical staff of the state's Department of Toxic Substances Control, who are charged with implementing the new [California Safer Consumer Products Regulations](#). The Regulations were approved by the Office of Administrative Law on August 28 and are in their final [15-day comment period](#), with comments due by September 9th. Drs. Schwarzman and Wilson presented sessions on decision-making under conditions of uncertainty, exposure modeling, assessing sensitive subpopulations, and the effects of mixed exposures. Graduate student Sara Tepfer presented comprehensive materials that DTSC will be able to adopt in developing the scientific basis for assessing chemical-product combinations under the regulations. With a background in chemistry, Ms. Tepfer is studying sustainable architecture at UC Berkeley; she was joined in her work on the curriculum by environmental health graduate student Nikoline Nygard Knudsen, who studied with BCGC as a Fulbright Scholar from Denmark. The work gave both students hands-on experience in the nexus of science and regulatory policy. This training built on Drs. Wilson and Schwarzman previous reports in [2006](#) and [2008](#) which formed the initial framework for the implementing legislation (AB 1879 and SB 509) of the Safer Consumer Products Regulations.

Now Accepting Applications for the 2014 SAGE IGERT Fellowships

We are currently seeking graduate students interested in applying interdisciplinary approaches to their research related to alternative energy materials. Using a Systems Approach to Green Energy (SAGE), we support technology developments in solar energy, biofuel, and energy storage systems as well as innovative approaches to the evaluation of technology sustainability using principles of green chemistry and engineering. You can learn more and apply at: <http://sage-bcgc.berkeley.edu/>. Students from all disciplinary backgrounds are encouraged to apply. Applications will be due on October 14th 2013. [Sign up here](#) to get alerts about information sessions and opportunities related to the SAGE IGERT fellowship.

[BCGC Director John Arnold Travels to Tokyo to Discuss International Opportunities for Inorganic Chemistry to Address Sustainability Challenges](#)

BCGC Director John Arnold will be leading a delegation of scientists from around the country, including BCGC ED Marty Mulvihill, to Tokyo where they will be part of an international consortium addressing the future of chemistry. The meeting is part of the [Chemical Science and Society Symposia \(CS3\) program](#). The CS3 series, hosted by the funding agencies and chemical societies of the US, Germany, China, Japan and the UK, convenes eminent researchers from each participating country to explore frontier chemistry research and its potential application to global challenges. By design, each meeting in the CS3 series, hosted in turn by each of the organizing countries, is to focus on a particular key societal challenge, as mutually identified by meeting organizers, and the role of chemical research in addressing the challenge.

[Green Chemistry and Sustainable Design Seminar \(GCSD\)](#)

[The GCSD is a student hosted seminar series](#) featuring chemists, designers, policy makers and thought leaders aimed at advancing greener technologies. This interdisciplinary seminar series is sponsored by the BCGC, NSF as well as a number of academic departments. There are a number of ways to stay up-to-date with these exciting talks including: (1) Students may register for the class Chem 298.10 CCN: 12809, (2) [Everyone can get involved by signing up for the email list and suggesting potential speakers.](#)

[Green Chemistry Commitment Buckminster Fuller Award](#)

We would like to share some good news about the [Green Chemistry Commitment](#). It was announced last week that the program has been selected as a [Semi-Finalist for the Buckminster Fuller Challenge](#). This is quite a prestigious award and we are thrilled and [honored to be selected](#). The Green Chemistry Commitment (GCC) is a consortium of universities, including Berkeley, and industry partners designed to create systemic and lasting change in university-level chemistry education, and to increase the number of green chemists and scientists in the U.S. and the opportunities available to them in the field.

[BCGC joins other International Green Chemistry Centers at the International Workshop on Green Initiatives in Energy, Environment & Health](#)

[This international workshop](#) is being organized by green chemistry centers representing the diverse research and education interest in India, Europe, Latin America, North America and Asia. Chemistry, sustainability, and innovation are three key components for the future of our society. The chemical sciences are the key to solving the challenges that society faces over the coming years. This two-day workshop will take place this December 1-3 in Dehli India. During the day international workshop, four of the major challenges will be presented by leading green chemistry centers from around the world: Energy (India), Bio-based products and waste valorization (Brazil), Green Pharmaceuticals and Health (York/Berkeley), Elemental Sustainability (Korea). For the

official conference flyer, [please click here](#). For more information and to register, please contact [Katy Holiday](#).

Berkeley Energy Research Symposium on September 17th

i4Energy and Berkeley Energy and Climate Institute are hosting the Berkeley Energy Research Symposium on September 17 from 8:00am-4:00pm in Sutardja Dai Hall Auditorium on UC Berkeley's campus. [Registration is free!](#) The [i4Energy](#) is a nexus, bringing multi-disciplinary minds together to create information technology advances for our multi-layered energy challenges. i4Energy is a collaboration among CITRIS (U.C. Berkeley, Davis, Merced, and Santa Cruz); the California Institute for Energy and Environment (CIEE); and the Lawrence Berkeley National Laboratory (LBNL). The research collaboration is focused on creating an integrated information infrastructure that will transform our energy grid into a cooperative, "aware" energy network that is both efficient and able to use sustainable energy resources. The Symposium will present on-going energy research at the i4Energy and the [Berkeley Climate Change Institute](#).

Green Chemistry and BioBased Chemicals are being highlighted at the Western Regional ACS Meeting in Santa Clara

This year's [ACS Western Regional meeting](#) will take place on October 3rd through 6th in Santa Clara, California. BCGC Executive Director Marty Mulvihill is organizing a session titled, "Value-added Commodity Chemicals from Biofuel Platforms." The session will take place on Thursday October 3rd. The session will represent both academic and industry perspectives examining the range of challenges from basic research in synthetic biology, to the commercialization of value-added biobased chemicals. The diverse perspectives shared during this session will help spark conversations that stimulate new thinking in this rapidly-growing field.

Free Green Chemistry Webinar Series for High School Teachers

The WA Department of Ecology and Beyond Benign will be hosting a free series of 3-one hour [Green Chemistry webinars for high school chemistry teachers](#) in October/November. The webinars are targeted to high school chemistry teachers and provide ideas on ways to incorporate green chemistry into their classroom through example activities, replacement labs and case studies. If you are a WA state teacher, you can earn 3 clock hours by attending the full series. [Click here to learn more.](#)

Upcoming Events and Conferences

1. [Fall National ACS Meeting](#) in Indianapolis, IN on September 8-12, 2013.
2. [3rd Safer Consumer Products Summit](#) in Washington DC, September 17-19, 2013.
3. [The Sustainable Nanotechnology Organization \(SNO\)](#) will hold its 2nd Annual Conference in Santa Barbara, CA, on November 3-5, 2013.
4. [Western Regional ACS Meeting](#), in Santa Clara on October 3-6, 2013
5. [International Workshop on Green Initiatives in Energy, Environment & Health](#) in Delhi India on December 1-3, 2013.

Stay in Touch:

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