

December 2013

Berkeley Center for Green Chemistry Newsletter

Dedicated to Swetha Akella



It is with tremendous sadness that we announce that Swetha Akella, who earned her chemistry B.S. in May 2013, passed away from a rare and aggressive form of cancer.

Swetha was an amazing young woman to work with; she was enthusiastic, inquisitive, motivated, and extremely intelligent. Swetha was one of the first students to work with the BCGC to develop green chemistry experiments for the undergraduate labs. She began working with us during the summer after her freshman year. Her work has been incorporated into the introductory chemistry courses and continues to influence the development of the greenchemistry curriculum at UC Berkeley.

During the following summer, Swetha worked with Genentech's Green BioPharma program. Her advisers said, "Of the many interns our department has employed in the last dozen years, she was the most exceptional in her knowledge, skills, and dedication. She was a pleasant, gentle person whose future was truly unlimited." Her work at Genentech laid the foundation for our Pilot Plant to rethink their approach toward more efficient use of disposable technology in bioprocess operations. As disposable equipment is gaining popularity in the industry, her contribution is likely to help develop industry best practices around this new technology, enabling and inspiring scientists and engineers to conduct research and design processes in ways that benefit the environment.

During her time at Berkeley, Swetha's dedication and kindness toward her fellow students inspired others, including other young women to be involved with chemistry at UC Berkeley. She helped start the Undergraduates of Chemistry (UChem) program to support undergraduates in the college of chemistry by organizing social events, newsletters, and outreach activities. In addition to all of this work, Swetha also worked for three years with Jay Keasling at the Joint BioEnergy Institute contributing to the development of cleaner safer sources of energy from biomass.

According to Undergraduate Dean Marcin Majda, "Swetha was a very serious and driven student, yet soft-spoken and gentle. She loved science and dedicated many hours to research. I was always very impressed with her progress and had big hopes for her future as a scientist." All of us at the BCGC also believed that Swetha would go on to do many more great things as a scientist.

Now, looking back at all of her contributions, it is clear that she lived up to those expectations of greatness during the short time that we were lucky enough to have worked with her at Berkeley. Her contributions to programs across campus will continue to benefit students and research for many years to come.

The college has established a fund in Swetha's memory that will provide support to undergraduate students. Gifts may be directed to the [Swetha Akella memorial fund](#) in the college of chemistry.

Meg and Marty Share their Thoughts about Greener Building Materials through the US Green Building Council Insight Blog

The [US Green Building Council \(USGBC\)](#) is the organization behind the [LEED rating system](#). The USGBC launched the [Insight Blog](#) as a part of their continuing effort to share research with stakeholders throughout the building industry and academia. They have invited experts including Meg Schwarzman and Marty Mulvihill to share their thoughts on the future of greener, healthier buildings in the United States. The blog already contains information from many different perspectives and you can read articles ranging from, "[Social Equity in the Built Environment](#)," to "[Linking Energy and Economy in Buildings](#)." Meg and Marty will be focusing on materials selection and the impacts that they have on human health and the environment. If you are interested, you can follow our posts here: ([Meg](#) & [Marty](#)) .

Green Chemistry Education Talks from the ACS Conference are Now Available

Heather Buckley, a BGCG student, gave a talk titled, "[Braiding with many strands: UC Berkeley's interdisciplinary graduate curriculum to advance greenchemistry](#)." In this talk Heather discusses our Greener Solutions program and her experience as a student taking green chemistry classes at UC Berkeley. You can also watch other talks from the session on Chemical Education [here](#).

Student Project Presentations Next Week

As the end of the semester rapidly approaches, students are preparing to present their findings from a number of very interesting team projects.

I am very excited about the work that our interdisciplinary green chemistry teams have been doing this semester in the [Greener Solutions class](#). Two months ago our students were given a challenge by LS&Co to find ways to develop safer fabric treatment chemistry. At the same time folks from Biomimicry presented examples drawn from nature that could be used to inspire new solutions. It has been a joy and an inspiration to work alongside these students as they develop and evaluate potential biomimetic solutions for fabric treatment.

The teams will present their findings on December 10th from 9-11 am in [University Hall 714C](#)

Also on December 10th students from UC Berkeley and Laney College will be sharing the results from their **Bio-Manufacturing to Market Program class**. This event will take place from 5:30-8:00pm in Emeryville. [RSVP here](#).

Job Opening at the EPA Design for the Environment Program

The U.S. EPA Design for the Environment (DfE) Program has a vacancy for a physical scientist. DfE uses multi-stakeholder engagement and technical tools to find safer chemicals for use in consumer products and industrial processes. Information about the program is available [here](#) and you may apply for the position [here](#).

Post-Doc Position at the UMass Lowell Center for Sustainable Production

A postdoctoral position in safer chemistry is available at the Lowell [Center for Sustainable Production](#) to undertake research on tools, drivers, and methods for the evaluation and adoption of safer chemistry. The Safer Chemistry Fellow will work within the Chemicals Policy and Science Initiative (CPSI). The CPSI has two main initiatives: the [Green Chemistry and Commerce Council](#), a network of 75 leading firms working to overcome barriers to development and adoption of green chemistry; and the [alternatives assessment project](#), an initiative to advance development and application of frameworks and tools for the evaluation of safer chemicals, materials, and products. You can find the full job description [here](#), or you can contact [Joel Tickner](#) at UMass Lowell to learn more.

Save the Date: BCGC Spring Conference February 20th-21st Materials and Sustainability

In late February the BCGC will be hosting a number of events to engage students, faculty and off-campus stakeholders in discussions related to materials and sustainability. We will include student and faculty speakers who are conducting research related to the production and adoption of greener and more sustainable materials. More details to follow soon!

Infocast's 5th Annual Next Generation Bio-Based and Sustainable Chemicals Summit

February 2014, bio-based technology start-ups, global chemical majors, high-profile brand owners, feedstock providers, strategic venture capitalists and financiers from around the world will once again convene in San Diego for [Infocast's 5th Annual Next Generation Bio-Based and Sustainable Chemicals Summit](#). This year's Summit will provide a detailed overview of the critical developments the industry is currently facing, including innovative feedstocks, end-user applications, and progress of established and new chemical production platforms and applications.

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