Berkeley Center for Green Chemistry Newsletter

May 6th Systems Approach to Sustainable Biobased Energy

Join the BCGC and SAGE IGERT programs for an evening discussion and poster session on May 6th from 6-8 pm in 775 Tan Hall. The panel discussion will include scientists at local biotechnology firms as well as experts considering the use of woody biomass as a fuel source for electricity generation. After the panel discussion, we will host a poster session with students from our Graduate Class who have been working in interdisciplinary teams to evaluate the technical, economic and social drivers and barriers for the adoption of biobased energy technologies. Refreshments will be served. Click here to let us know you are coming!

Help Design Sustainable Roofing Panel for the Developing World

The BCGC is partnering with the researchers at the Blum Center for Developing Economies to help improve the performance of a modular roofing panel made from waste material. Executive Director, Marty Mulvihill, is looking for a motivated student (Undergraduate or Graduate Student) interested in testing safe and effective water proofing coatings and additives that could be used to improve the panel performance. The interested students would work alongside researchers in the BCGC as well as with partners in Blum and India, to produce and test new materials. If you are interested in volunteering this summer, please send your CV and a brief statement of your previous research experience to marty_m@berkeley.edu. For more information about the roofing challenge in India, you can read the attached summary produced as a part the Design for Sustainable Communities Class offered through the Blum Center.

Participate in the 2013 Greener Solutions Course with Biomimicry

The Greener Solutions program is project based class that partners students with companies, non-profits, and/or government agencies interested in promoting the adoption of more sustainable chemistry. Every year we recruit teams of graduate students and advanced undergraduates to work closely with our partner organizations on interdisciplinary projects that leverage student knowledge in a real-world context. This fall we will be partnering with the Biomimicry Institute to consider biologically inspired design alternatives as a starting place for the replacement of formaldehyde based resins, adhesives and preservatives which are used in textiles and beauty products. Students will work alongside industrial partners at Levis and Beautycounter to identify promising replacement materials. Download the course application here, or contact Meg Schwarzman with questions.

Watch the New Video Highlighting Research by SAGE Student Chris Hill

This video was created as part of the SAGE IGERT program, which helps fund graduate student research related to developing and understanding the impacts of new energy technologies. If you are interested in the SAGE program, we will be accepting applications for the 2014 class in the Fall. Learn more here.
**Sustainable-Nano.com from BCGC Alum now at Madison**

Green chemistry science outreach in blog form! Sustainable-Nano.com is a blog written for a general audience by scientists at the Center for Sustainable Nanotechnology. The goal of this multi-institution center is to develop a molecular-scale understanding of the nano-bio interface in order to facilitate the development of nanotechnology in a sustainable manner. Sustainable-Nano.com welcomes new readers, guest authors, or collaborators of almost any kind. Please get in touch! Contact: Lee Bishop (lbishop@chem.wisc.edu).

**Green BioPharma/Engineering Summer Internship at Genentech**

Genentech, one of the founders of biotechnology and now part of the Roche group, is seeking to lead the industry into a sustainable future though the development and application of Green Biopharma principles. Green Biopharma is inspired by the principles of Green Chemistry and Green Engineering applied to the unique needs of the biopharmaceutical industry. The mission of the Green Biopharma program at Genentech is to reduce the ecological footprint resulting from our core competencies of drug discovery, process development, and biologics manufacturing. You have the opportunity to build tools and processes that will be used throughout Genentech and the entire global Roche organization. Learn more and apply here.

**HP looking for an Summer Environmental Chemistry Intern**

This intern will work with other engineering staff to evaluate new environmentally friendly chemicals and materials for use in HP products. HP is looking for a student in a Bachelor's degree program in Material Science, Chemistry, Toxicology, or Biology completed by June 2013. The intern will study help evaluate a range of materials challenges including complete assessments of the health and environmental impact of chemicals and materials used in HP products and their potential replacement materials, including phthalates and non-phthalate plasticizers. Click here to learn more about the position. Interested students can apply for this position at [http://jobs.hp.com](http://jobs.hp.com).

**GSR focused on technology commercialization with the Center for Integrated Nanomechanical Systems (COINS)**

COINS is an NSF-funded center at UC Berkeley conducting cutting edge research on sensors. We are looking for a graduate student to assist with a project on technology transfer and commercialization models to support COINS’ continued efforts to commercialize its technologies in sensors.

Sensors are an important yet challenging industry area. Sensors can be used to detect atmospheric gases and chemicals, leaks, personal injuries. With nanotechnology, sensors are becoming increasingly sensitive, accurate and small, opening up a series of exciting new commercial opportunities. The position requires a motivated and visionary person interested in engaging with the challenges of transfer from lab to market in new industry sectors.
The position is available from July 1 for 2013-2014. For more information please contact Javiera Barandiaran at javiera.barandiaran@gmail.com.

**Upcoming Events and Conferences**

1. Systems Approach to Sustainable BioBased Energy May 6th at UC Berkeley. [Learn more here.](#)
2. The 2013 Sustainable Chemistry Summit, June 5-7, presented by [GreenCentre Canada](#), will map the journey of green chemistry technologies from lab to market.
3. ACS Green Chemistry and Engineering Conference, June 18-20, in Washington DC.