

# Berkeley Center for Green Chemistry Newsletter

## SAGE Student Working at Tesla to Improve Electric Cars

[Katie McKinstry](#) is currently interning as a Project Manager in [Tesla's](#) Manufacturing Introduction division. Katie learned of the internship after visiting Tesla's Fremont Factory on a field trip for the course she was teaching as a GSI, ME290R Advanced Manufacturing Systems. It was on this field trip that she reconnected with her now Tesla manager, Milo Werner, manager of Manufacturing Introduction. Katie was inspired to apply for a position in Milo's department after hearing her describe the fascinating challenges and triumphs that this division oversees. She wanted to work at Tesla to support their mission of building electric cars of unparalleled high quality.

In her role in Manufacturing Introduction, Katie coordinates the steps necessary to bring a newly designed part to full production. She interacts with design engineers, test and quality engineers, production engineers, material management and supply chain specialists, manufacturing technicians and production associates. By working with people from all stages of the design and production process, she has been able to get a glimpse into the complexity and impressive coordination required to produce electric cars at scale.

## BCGC Advisor Bob Bergman Honored with the 2013 Distinguished Graduate Student Mentoring Award

Nominated by inspired colleagues, current and former graduate students, the award recipients have demonstrated an outstanding commitment to helping UC Berkeley graduate students succeed academically and professionally and creatively pursue new ideas. These distinguished individuals were selected from a pool of exceptional faculty members on the Berkeley campus. To read more about Bob Bergman's contributions to chemistry and education [read this recent feature from Catalyst Magazine](#).

## New Book: The Role of Green Chemistry in Biomass Processing and Conversion

Editors Haibo Xie, and Nicholas Gathergood have done an excellent job organizing their recently published book *The Role of Green Chemistry in Biomass Processing and Conversion*. This book is an excellent resource for chemists interested in understanding the current state of the art for biomass processing. Compared to other books in the biomass processing field this one focuses more on the molecular level transformations, without losing site of the broader context and drivers for biomass derived chemicals. This advance text is likely to appeal to chemistry students and faculty interested in considering new research in this area, or current researchers and practitioners that want to stay up-to-date concerning the recent technology advances.

The book highlights all of the major classes of process methods used to transform biomass into more valuable chemicals or fuels, while focusing on the chemical methods. They cover chemical methods (ionic liquids, heterogeneous catalysis, super critical CO<sub>2</sub>, etc.), thermochemical processes (pyrolysis, microwaves, and ultrasonics), and one chapter on microbial technologies. Importantly, this book also considers some of the broader implications of these new technologies including environmental and eco-toxicity impacts of various biofuels and processes. You can purchase the new book [here](#).

### [NSF looking for Graduate Students to help Improve the Grad School Experience](#)

Calling Science Technology Engineering and Mathematics (STEM) Graduate Students: Have you ever thought of ways to improve STEM graduate education? Do you have a creative idea regarding graduate training? If so, NSF wants to hear from you!

The National Science Foundation Innovation in Graduate Education Challenge is calling for entries from currently enrolled STEM graduate students and teams. They are invited to submit innovative ideas to prepare today's graduate students for tomorrow's opportunities and challenges. Entries are solicited for ideas with the potential to improve graduate education and professional development. Ideas can be directed toward students, faculty, departments, institutions, professional societies, and/or federal agencies. Winning ideas will be shared widely and winners will receive prizes between \$1000 and \$3000. For more information and to enter the challenge, go to [www.nsf.gov/gradchallenge/](http://www.nsf.gov/gradchallenge/) Entry deadline is April 15th!

### [Opportunity for a Graduate Student to Attend a Green Chemistry Conference in Delhi, India](#)

The [Green Chemistry Network](#) Centre in Delhi, India, is hosting an invitation only Workshop on 2-3 December 2013. The proposal is to have sessions on Bio-based products and waste valorization, Energy, Elemental sustainability, and Green Pharmaceuticals and Health. The Green Chemistry Network at York University will sponsor a Green Chemistry Postgraduate student to assist in preparation for the workshop, attend the workshop, record key information/conclusions/follow-up activities, write an article for the GCN newsletter and assist in the preparation of a web page to promote the sharing of best practices between Green Chemistry Centers. The graduate student will be awarded travel and accommodation as well as £500 paid for successful completion of the web page. To apply please send a 1 page resume with a covering letter (maximum 2 pages) stating why you wish to attend the conference, briefly outlining your interest in Green Chemistry and detailing your experience with web page development. Send to [heather.hamilton@greenchemistrynetwork.org](mailto:heather.hamilton@greenchemistrynetwork.org). Deadline for applications: 30<sup>th</sup> April 2013

### [Upcoming Events and Conferences](#)

1. [BioFuels Conference at Berkeley](#): - March 27-28th

2. When Green Tech Isn't Clean Tech: Presented by SynBioWatch- Thursday, March 21 7:30 p.m. – 10:00 p.m. In the Goldman Theater. [Click here for more info.](#)
3. Flame Retardant Symposium: It's all about Flammability Standards  
April 12th 8:30am - 4:00pm, 150 University Hall, UC Berkeley, California  
[To attend, please register here.](#)
4. 2<sup>nd</sup> Annual Safer Products Summit- April 2<sup>nd</sup>-4th. To register, please visit [www.infocastinc.com/saferproducts13](http://www.infocastinc.com/saferproducts13)
5. Meeting Flame Resistance Requirements for Green Electronics- April 4<sup>th</sup>, 2013  
8:30 AM to 5:30 PM. [Click here for more info.](#)
6. Sustainable Business Practices Conference- April 25<sup>th</sup>-April 26<sup>th</sup> in Portland, Oregon