

Supplement #1 March 2015
Monthly Update for the Green Chemistry in Education Network
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Dear Members of the Green Chemistry Community,

Thank you for your submissions. Please remember to send me your position announcements so that we can post them on the Green Chemistry Education Network website (<http://cmetim.ning.com/>).

You can invite others to join this list by forwarding this email with the following instructions: To subscribe, please send an email request to jhaack@uoregon.edu with the subject heading "subscribe green chemistry." As always, please let me know if you would like to be removed from the list.

Quick Summary

TIME SENSITIVE

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- Friday, March 13 – Green Chemistry Student Awards Deadline
- Friday, April 3 - Abstracts due for *Advancing Sustainability: Catalyzing Interdisciplinary Scholarship for Green Chemistry* (Pacifichem 2015)
- Register now for webinar on student-led green chemistry initiatives (March 31, 2015)

RESEARCH NEWS

- Collaboration leads to new process for refolding proteins

Selected items from the Berkeley Center for Green Chemistry Newsletter

- Green Chemistry Connection online community launched
 - The Tenth Annual GC3 Innovators Roundtable
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TIME SENSITIVE

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Friday, March 13 – Green Chemistry Student Awards Deadline

Attention undergraduates, graduates, and post docs:

The deadline for three student travel awards is approaching fast and the ACS Green Chemistry Institute® wants to ensure you do not miss the opportunity to have your green chemistry and engineering research recognized! These awards will help support travel to the **19th Annual Green Chemistry and Engineering Conference**, July 14-16, 2015 in N. Bethesda MD.

- **NSF Travel Scholarships** (<http://www.gcande.org/students/>) Students receive up to \$1,000 for travel, accommodations, and conference registration fee. Student must be currently enrolled in an accredited U.S. university at the undergraduate, graduate or postdoctoral level.
- **Joseph Breen Memorial Award**: Up to \$2,000 to participate and present research in an international Green Chemistry conference or seminar
- **Kenneth Hancock Memorial Award**: \$1,000 award provides national recognition and honor

for outstanding student contributions to furthering the goals of green chemistry through research and/or studies

Friday, April 3 - Abstracts due for Advancing Sustainability: Catalyzing Interdisciplinary Scholarship for Green Chemistry (Pacifichem 2015)

CALL FOR ABSTRACTS

Pacifichem 2015, Symposium #383
December 15 – 20, 2015

Dear scholars and practitioners from business, government and the NGO sector interested in cleaner and safer chemistries,

We wish to draw your attention to a unique opportunity for those of you working on topics related to sustainability in the chemical industry, including innovation and commercialization of greener chemical technologies, eco-entrepreneurship, the transition to bio-based materials, risk management, alternatives analysis, life cycle analysis, metrics and tools for the design of cleaner and safer chemistries, etc.

Please consider submitting a paper to Symposium #383 on **Advancing Sustainability: Catalyzing Interdisciplinary Scholarship for Green Chemistry** at the 2015 International Chemical Congress of Pacific Basin Societies ([Pacifichem](http://www.pacifichem.org)). Pacifichem is a renowned international chemistry conference that is staged once every five years; and Pacifichem 2015 will take place in Honolulu, Hawaii, USA, on December 15-20, 2015.

This symposium represents a unique opportunity to:

- bring together research from a diverse group of social scientists working on green/sustainable chemistry (e.g. scholars of business and management, legal and policy scholars, historians, economists, political scientists, environmental studies researchers, and science and technology scholars) and to explore the role it can play in understanding – and, hopefully, accelerating – the transition to a sustainable global chemical enterprise;
- share and learn from the experiences of practitioners;
- interact with engaged chemists and engineers; and
- build an interdisciplinary network committed to advancing green/sustainable chemistry.

More details about the overall conference can be found here: <http://www.pacifichem.org/>

Details about the symposium, immediately below, can also be found here: http://www.pacifichem.org/symposiadesc2015/c_symp_383.htm

Green chemistry may be a science but its implementation in industry – or not! – will result from the interplay of social processes traditionally theorized by business school researchers, legal and policy scholars, historians, economists and political scientists as well as scholars of science and technology. If implementation is the goal, understanding green chemistry as well as its social context from multiple perspectives can yield valuable insights. This session provides a forum for exemplifying the initial implementation of green/sustainable chemistry in both academic and industrial settings and overlays a discussion of how green/sustainable chemists interact with social scientists interested in green/sustainable chemistry and to share their research results as well as to network with each other. Ultimately it is the commercial practice of green chemistry that will enable the transition to a more sustainable planet. Commercial scale

implementation is gaining global traction and the role of social science in enabling this transition will be critical to the pace of change and acceptance. This symposium will enable a rich dialogue at the interface of the physical and social sciences.

Among a range of other topics, papers for this session could address:

- In which ways is green chemistry the same as or different from other technologies for which theories of innovation and frameworks for thinking about adoption in industry exist?
- In which ways is green chemistry the same as or different from other technologies for which theories of legal and policy tools for stimulating innovation and encouraging adoption in industry exist?
- What are the business logics for green chemistry? How do these logics map to different parts of the global chemical enterprise? How do these logics map to different sub-fields within green chemistry?
- What role does corporate and business strategy play in the development of green chemistry as a science and in its implementation in industry?
- What role does regulation and government policy play in the development of green chemistry as a science and in its implementation in industry?
- What role do industry codes of conduct such as Responsible Care play in the development of green chemistry as a science and in its implementation in industry?
- What role do pre-competitive industry forums such as roundtables or research consortia play in the development of green chemistry as a science and in its implementation in industry?
- What role do NGOs and NGO-business collaborations play in the development of green chemistry as a science and in its implementation in industry?
- How does green chemistry relate to the broader social movement seeking reform of chemicals management regimes at state, national and international levels? What role does this movement play in the development of green chemistry as a science and in its implementation in industry?
- Case studies of the development and commercialization of green chemistry innovations.
- Case studies of legal and policy tools used to stimulate innovation in sectors producing and/or using chemicals.
- Case studies of interdisciplinary teaching and education programs bringing together students from a range of disciplines with chemists or materials scientists to design cleaner, safer and more sustainable products or processes.

The Call for Abstracts is open from January 1 – April 3, 2015; and abstracts are limited to 2,000 characters (~ 250 words). More details about submitting an abstract can be found here: <http://www.pacifichem.org/congress-details/abstracts/>

If you have any questions, please direct them to steve.maguire@mcgill.ca. Please do consider submitting an abstract and joining us in Honolulu.

Sincerely,

Steve Maguire (Desautels Faculty of Management & Centre for Green Chemistry & Catalysis, McGill University, Canada)

Robert Peoples (Carpet America Recovery Effort, United States)

Milton Hearne (Centre for Green Chemistry, Monash University, Australia)

Register now for webinar on student-led green chemistry initiatives (March 31, 2015): At many universities, there is no formal way to gain a green chemistry education, but students with a passion for sustainability forge their own way forward. This webinar from the Green Chemistry Commitment's Education Series and NESSE examines three groups founded by students who saw a gap in the resources available to them and set out to fill it. Speakers from NESSE, University of Toronto's GCI, and University of York's GreenSTEMS will discuss their respective initiatives and how they help students pursue green chemistry. The webinar will be held March 31 from 9:00am – 10:00am and you can [register here](#).

RESEARCH NEWS

Collaboration leads to new process for refolding proteins: Scientists from the University of California, Irvine, The University of Western Australia, and Flinders University have developed a process for refolding proteins, which reduces the waste stream significantly, as well as the processing time. Indeed the research went viral under tyne umbrella of "unboiling" an egg.

Yuan, T. Z., Ormonde, C. F. G., Kudlacek, S. T., Kunche, S., Smith, J. N., Brown, W. A., Pugliese, K. M., Olsen, T. J., Iftikhar, M., Raston, C. L. and Weiss, G. A. (2015), **Shear-Stress-Mediated Refolding of Proteins from Aggregates and Inclusion Bodies**. *ChemBioChem*, 16: 393–396. doi: 10.1002/cbic.201402427

Email: Prof. Colin L. Raston (colin.raston@flinders.edu.au), Prof. Gregory A. Weiss (gweiss@uci.edu)

<http://onlinelibrary.wiley.com/doi/10.1002/cbic.201402427/abstract>

<http://www.scientificamerican.com/article/unboiled-egg-untangles-a-knotty-protein-problem/>

Selected items from the Berkeley Center for Green Chemistry Newsletter

Green Chemistry Connection online community launched: The [Northeast Waste Management Officials' Association \(NEWMOA\)](#) launches the [Green Chemistry Connection](#), an online community of green chemistry practitioners and an information clearinghouse now available at. The website brings together federal, state, and local programs, academic institutions, non-governmental organizations, and private companies that are working on green chemistry initiatives. Features include discussion forums, blogs, news, job notices, and more.

The Tenth Annual GC3 Innovators Roundtable: [The tenth annual GC3 Innovators Roundtable](#) will be held at Nike World Headquarters in Beaverton, OR April 28 - 30. The conference features over 160 leaders from a range of industry sectors, government, non-government organizations and universities, who will convene to share challenges and best practices and work on collaborative projects to advance green chemistry practices in industry, including our very own Marty Mulvihill.