

Supplement #1 March 2016
Monthly Update for the Green Chemistry in Education Network Julie Haack, University of Oregon
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Dear Green Chemistry Community,

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

- March 23 – application deadline for 2016 GC3 Innovators Internship Program
- March 28 – Ask the Innovators - What will it take to Mainstream Green Chemistry?
- March 29 - application extended for GCEC Student Workshop – Design Challenge – Color
- April 8 - application Deadline for GCEC 2016 Business Plan Competition
- April 13 - application deadline - Grant Funding for Curricular Development – Minnesota Pollution Control Agency (MPCA)
- May 2 - deadline for submission - 8th Green Solvents Conference in Kiel/Germany
- May 31 - call for nominations - Willi Keim Prize 2016

Webinars

- March 23, 2016 – Marks & Spencer – The Journey to Accelerate Clean Chemistry (GC3 Webinar)
- March 31, 2016 - Michigan Green Labs Webinar
- April 13, 2016 – Innovating with Intent: Science & Sustainability at Eastman (GC3 Webinar)

Conferences

- April 3-6, 2016 - Green and Sustainable Chemistry Conference, Intercontinental Hotel, Berlin, Germany
- October 16-19, 2016 - 8th Green Solvents Conference in Kiel/Germany and 1st Green Solvents Workshop

Social Media

- Listing of green chemistry social media sites. Please send me additional sites.

March 23 – application deadline for 2016 GC3 Innovators Internship Program

Calling all students! The GC3 is now accepting applications for the 2016 [Innovators Internship](#) Program.

The Green Chemistry and Commerce Council (GC3) Innovators Internship program places technically proficient students into sustainability-related internships with our member companies. The interns will spend 10-12 weeks over the summer working within a GC3 member company and learning the skills needed in sustainable industry. They will also have the opportunity to attend the GC3 Innovators Roundtable and network with major companies who are contributing to the advancement of green chemistry.

If you're interested in participating in this year's internship program, please visit our [website](#) for more information. **Applications are due by March 23rd.**

URL: <http://greenchemistryandcommerce.org/projects/innovators-internship-2016>

March 28 – Ask the Innovators - What will it take to Mainstream Green Chemistry?

<https://communities.acs.org/thread/8998>

On March 28th please join us on the Green Chemistry Innovation Portal (<http://www.greenchemistryportal.org>) for the third Ask the Innovators event: “What will it take to Mainstream Green Chemistry?” The mainstreaming of green chemistry is defined as when all chemistry — including chemistry and engineering research, education, and policy — becomes green chemistry. For an introduction to this topic, see this recent report from the GC3 (http://greenchemistryandcommerce.org/documents/An_Agenda_to_Mainstream_Green_Chemistry.pdf). During our online discussion, you can ask the author of the report, along with experts from industry and academia about what they think are the barriers to mainstream green chemistry, and what will have to happen to overcome them. See an example of a previous discussion here.

The experts joining us for this session will be:

- Amy Perlmutter, Perlmutter Associates and Green Chemistry and Commerce Council (GC3) Mainstreaming Project Lead
- Babette Pettersen, BioAmber, Senior Advisor
- Eric Beckman, University of Pittsburgh, Professor of Engineering and Co-Director of the Mascaro Center for Sustainable Innovation
- Martin Wolf, Seventh Generation, Inc., Director, Sustainability & Authenticity

How to Participate: “Ask the Innovators” is a unique online text-based Q&A forum. We invite the innovators and you can ask them anything you want relevant to the topic.

Create a free ACS ID (<https://account.acs.org/ssoamweb/account/doSignUp>), or log in. Come back on March 28, from 11:30 a.m. to 1:00 p.m. ET (8:30-10:00 a.m. PT), when our innovators will be online to answer your questions and engage in a live discussion. <https://communities.acs.org/community/science/sustainability/green-chemistry-innovation>

EXTENDED – March 29, 2016 - application deadline for GCEC Student Workshop – Design Challenge – Color

20th Annual Green Chemistry & Engineering Conference June 14 – 16, 2016 Portland, Oregon
<http://www.gcande.org/students/student-workshop/>

Eric Beckman (University of Pittsburgh), Julie Haack (University of Oregon) and Adelina Voutchkova-Kostal (George Washington University) and John Frazier are working together to create the first ever Green Chemistry Design Challenge at the 20th Annual Green Chemistry & Engineering Conference June 14 – 16, 2016 Portland, Oregon.

The Challenge: Color dramatically influences human behavior from how we communicate to

how we make decisions and is a ubiquitous component of consumer products.

In light of the economic, social and environmental impacts of color on society, students attending this year's workshop will use the principles of green chemistry to design a comprehensive strategy for overcoming the challenges associated with dyes and pigments. The strategy should be economically viable, socially acceptable and have a net positive environmental impact compared to existing products/processes.

Attendees will learn about the history, chemistry, impacts, and business of color and will learn how to use a variety of tools to address the unintended biological activity of dyes and colorants. Student teams will have the opportunity to share their strategies as we explore the many facets of the problem.

This design challenge will take place during the 20th Annual Green Chemistry & Engineering Conference on June 13th (before the meeting begins) at the Hilton Portland & Executive Towers in Portland, Oregon. The challenge will be guided by experts in the field, and will allow participants to engage with potential employers and experience how chemists, engineers, toxicologists and business experts can work together to think outside the box. The challenge is open to undergraduate, graduate students and post-doctoral fellows.

IMPORTANT DATES AND DEADLINES

March 29, 2016: Application deadline (by 11:59 p.m. ET)

April 15, 2016: Selected participants will be notified via email

April 29, 2016: Registration deadline

<http://www.gcande.org/students/student-workshop/>

April 8 - application Deadline for GCEC 2016 Business Plan Competition

20th Annual Green Chemistry & Engineering Conference June 14 – 16, 2016 Portland, Oregon

<http://www.gcande.org/program/business-plan-competition/>

The ACS Green Chemistry Institute® is hosting the 2016 Business Plan Competition during the 20th Annual Green Chemistry & Engineering Conference, held in Portland, OR, June 14-16. Early stage companies dedicated to green chemistry and engineering solutions are encouraged to apply. This unique opportunity is the only business competition exclusively for green and sustainable chemistry and engineering.

April 13 - deadline for Grant Funding for Curricular Development – Minnesota Pollution Control Agency (MPCA)

The Minnesota Pollution Control Agency (MPCA) is seeking proposals that support the development of green chemistry curricula at secondary and post-secondary institutions in Minnesota. Projects must show the development of new syllabi, lesson plans, and/or lab experiments; number of enrolled students reached; pre/post-testing to measure green chemistry awareness' or achievement of waste reduction as a result of new lab experiments developed.

The maximum grant amount is \$15,000; no match is required; projects must end by June 30, 2019.

Examples of past green chemistry curriculum integration grant projects are at <https://www.pca.state.mn.us/quick-links/green-chemistry-and-design-college-curriculum-grant-projects>.

The Request for Grant Applications (RFGA), application forms, and links to applicable rules and statutes are available at <https://www.pca.state.mn.us/about-mpca/environmental-assistance-grants> (green chemistry curricula is Focus Area Category 3 in the Open category grants; page 10 of the RFGA).

The application deadline is April 13, 2016.

May 2 - deadline for submission - 8th Green Solvents Conference in Kiel/Germany

October 16-19, 2016 - 8th Green Solvents Conference in Kiel/Germany

Since its foundation in the year 2002, the "Green Solvents" biennial conference series has been established as a unique platform for the discussion of scientific progress and industrial implementation of advanced fluids in chemical synthesis and processes.

The paper submission is open until 2 May 2016 at <http://www.dechema.de/gsc2016.html>

1st Green Solvents Workshop, 14 – 16 October 2016 in Kiel/Germany

The target of the workshop is to provide the background knowledge of different advanced fluids and green solvents especially for PhD Students, Post-Docs and early stage researchers. The number of participants is limited. Please register at <http://www.dechema.de/en/workshop.html>

May 31 - call for nominations - Willi Keim Prize 2016

This prize is dedicated to young scientists in the field of Advanced Fluids and their innovative application. It will be awarded at the Green Solvents Conference 2016. Please submit your nomination until 31 May 2016. Further details are given in the Call for Nominations. http://processnet.org/en/willikeimprize2016/_WK_Preis_Ausschreibung_englisch2016.pdf

Webinars

March 23, 2016 – Marks & Spencer – The Journey to Accelerate Clean Chemistry (GC3 Webinar)

Wednesday, March 23, 2016 | 12:00 PM - 1:00 PM ET

URL: <http://www.greenchemistryandcommerce.org/events/webinars>

SPEAKER: Phil Townsend, Sustainable Raw Materials Specialist, Marks & Spencer

Environmental and chemical compliance has been at the heart of the Marks & Spencer (M&S) clothing business for many years. The spotlight on environmental stewardship and responsible manufacturing is becoming increasingly magnified with pressure from NGOs, the media, and governments. M&S began its journey in this space back in the late 1990s and is continuing to evolve its Environmental and Chemical policy. In recent years M&S has joined forces with other brands and retailers to collaborate as part of Zero Discharge of Hazardous Chemicals (ZDHC).

In this webinar, Phil Townsend, Sustainable Raw Materials Specialist, will describe M & S efforts to accelerate clean chemistry in its global supply chains.

March 31, 2016 - Michigan Green Labs Webinar

Hosted by the DEQ in partnership with the University of Michigan and the West Michigan Sustainable Business Forum

The Michigan Green Labs Webinar will cover a successful green labs program at the University of Michigan and examine an initiative to take the University of Michigan model and expand it to business orientated labs. This webinar is geared toward lab professionals, facilities managers, green team leaders, academics, process improvement professionals, and sustainability professionals.

Registration and Information -

<https://attendee.gotowebinar.com/register/4612976118368169732>

April 13, 2016 – Innovating with Intent: Science & Sustainability at Eastman (GC3 Webinar)

Wednesday, April 13, 2016 | 12:00 PM - 1:00 PM ET

URL: <http://www.greenchemistryandcommerce.org/events/webinars>

SPEAKERS

- Carol Perkins, Industry Leader, Industrial & Household Care, Eastman
- David Kossor Associate Toxicologist, Eastman
- Mark Pavlin, Sr Technical Associate, Eastman

With heightened consumer awareness surrounding chemicals of concern in everyday products, it is critical that chemical companies find ways to develop safer products. Eastman Chemical Company is one chemical manufacturer that has a long-standing commitment to sustainability and is actively working to provide its customers with a number of sustainable and safer options.

This presentation will take a deeper dive into the developmental and commercialization process for creating safer chemicals for industrial and consumer products. As a case study, this webinar will highlight a recently launched sustainable solvent from Eastman and will discuss both the need for desirable properties (e.g., enhanced safety profile, good chemical stability, low odor and colorless) for a solvent in cleaning products as well as the specific developmental process behind such solvents. It will also discuss the process used for determining the environmental, health, and safety profile of both the candidate molecules and the ones selected for additional testing and ultimate commercialization.

Finally, the challenges faced in launching and gaining market adoption of a new, safer solvent from a commercial standpoint will be discussed.

Conferences

April 3-6, 2016 - Green and Sustainable Chemistry Conference, Intercontinental Hotel, Berlin, Germany

URL: <http://www.greensuschemconf.com>

As the world's population edges towards 9 billion, the strain on the planet's resources is steadily increasing. In both the developed and developing world there is a growing demand for food, manufactured goods and improved access to clean water and fuel. Over the past 30 years it has become obvious that the products of human manufacture, even those produced to benefit society, can have negative effects on human health and the environment.

The field of Green and Sustainable Chemistry has developed to help monitor, understand and limit the changes to our world due to the varying levels of chemicals in our environment. It seeks for methods to reduce waste, energy and use of resources. This will not only contribute to a more sustainable growth of industry but also to a more green economy and environment.

A unique aspect of this conference is its broad scope, addressing the many diverse fields of Green and Sustainable Chemistry, while other meetings in this field are focused mainly on the synthesis aspects. The goal of the meeting is to bring together international researchers, from academia and industry, to communicate and share the latest developments across the broad and diverse fields of Green and Sustainable Chemistry.

October 16-19, 2016 - 8th Green Solvents Conference in Kiel/Germany and 1st Green Solvents Workshop

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SOCIAL MEDIA

ACS Green Chemistry Institute®

Blog: <http://bit.ly/ACSGCIblog>

Facebook page: <https://www.facebook.com/ACSGreenChemistryInstitute>

Twitter channel: <https://twitter.com/ACSGCI>

LinkedIn Group: <http://bit.ly/ACSGCIgroup>

YouTube Channel: <http://www.youtube.com/user/ACSGCInstitute/videos>

GC3 and ACS GCI

Green Chemistry Innovation Portal: <http://www.greenchemistryportal.org>

The Green Chemistry Network

LinkedIn: Green Chemistry Network (GCN) York

GreenCentre Canada

Facebook: GreenCentreCanada

Twitter: Green_Centre

LinkedIn: GreenCentreCanada

You Tube: GreenCentreCanada

Pinterest: GreenCentre

Flickr: GreenCentre Canada

Website: <http://www.greencentrecanada.com/> (where you can also link to all of the above mentioned social media platforms)

News: <http://www.greencentrecanada.com/news/>

Interactive Green Chemistry Google Map

<http://greenchem.uoregon.edu/Pages/MapDisplay.php>

ADDITIONAL GREEN CHEMISTRY NEWS and INFORMATION

The Green Chemistry & Commerce Council Quarterly e-Newsletter

URL: <http://www.greenchemistryandcommerce.org/publications/newsletters/>

From their website: "A publication of the Lowell Center for Sustainable Production at the University of Massachusetts Lowell. Each issue of the newsletter provides current information about upcoming and ongoing GC3 activities, and news about green chemistry and design for environment." Sign up to receive the GC3

Newsletter: <http://greenchemistryandcommerce.org/publications/newsletters/sign-up-to-receive-the-gc3-newsletter>

News from ACS GCI: Nexus Newsletter

URL: <http://www.acs.org/content/acs/en/greenchemistry/the-nexus-newsletter-blog.html>

The Nexus e-newsletter is published monthly by ACS GCI and is dedicated to connecting and expanding the global green chemistry and engineering community.

Advancing Green Chemistry

URL: <http://advancinggreenchemistry.org>

From their website: "Our mission is to promote the development and adoption of Green Chemistry. Green Chemistry is the scientific foundation of greener products, a sustainable economy, and healthier people. AGC's role is to strengthen and promote the science and its practitioners, to link to strategic partners, and to highlight emerging opportunities for stakeholders. In short, AGC seeks to tip the balance in favor of broad support for – and wide adoption of – Green Chemistry."

Berkeley Center for Green Chemistry Newsletter

URGENT: This will be the last email sent through our old mailing list! Please sign up for our new list here (<http://berkeley.us11.list-manage2.com/subscribe?u=574f025d12b6504de2e30ff08&id=9dacab7627>) to keep receiving our newsletter and other emails. Thank you!

Green Centre Canada

URL: <https://www.greencentrecanada.com/news-articles/>

From their website: "At GreenCentre Canada, we take a "hands on" approach to commercializing emerging Green Chemistry innovations originating from academia and industry. Our job is to transform these breakthroughs into green products, services, and industries to enhance our quality of life and preserve our environment for existing and future generations."

Network of Early-Career Sustainable Scientists & Engineers (NESSE)

URL: <http://www.sustainablescientists.org>

From their website: "We are a new generation of scientists and engineers using collaborative and green approaches to science and technology to achieve a prosperous and sustainable future for all."

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Connecting design and innovation to the science of sustainability.