# What's happening in the CSN?

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# Celebrations

#### The CSN values diversity

We are all fortunate to be part of a group that values diversity of culture, ethnicity, origin, and every other dimension that make each of us a unique individual. While the current political environment in the US doesn't appear to be in alignment with the values that many of us hold dear, we're writing to let you know that we absolutely believe that better, more creative, and more impactful science is done and a stronger community is built when a diverse set of voices is speaking and a diverse set of hands are doing the work. Within the Center, we will do everything we can to protect and uphold our shared values. Each of us is likely to take on the battles we care most about in our own way, but we can also register our disagreement with the current climate by performing well in the spotlight we have - as a sustainability-focused NSF center. If you are experiencing serious personal difficulties due to the current situation, please talk to your PI and/or one of us so we can work together to help you.

- Bob, Christy, Mike, and Miriam (Reprinted from Jan 31 email)

#### Thanks for all the hard work!

Thank you to all those who have been submitting your monthly progress reports (students) and quarterly/annual reporting documents (faculty). Your timely submissions (without *too* much nagging) has made a big difference in making the Center run more smoothly, and the reports are a great demonstration of the outstanding work being done throughout the CSN!

#### **Milestones and awards**

**Cathy Murphy** was elected a Fellow of the Materials Research Society, Class of 2017. Cathy has also been appointed to the Editorial Board for the Proceedings of the National Academy of Sciences, 2017-2020. Congratulations Cathy!





Student **Jo Machesky** (**Geiger** lab), who participated in the CSN's <u>Research</u> <u>Experience for Undergraduates</u> program last summer, has received a Conference Travel Grant from Northwestern University to attend the ACS meeting in San Francisco this April. The title of Jo's presentation is "Alteration of Membrane Compositional Asymmetry by LiCoO<sub>2</sub> Nanosheets." Congratulations, Jo!



Congratulations to graduate student **Liz Laudadio** (**Hamers** lab), whose Valentine's Day blog post, "<u>What Does Nanotechnology Have to Do with Chocolate?</u>" was recognized as a <u>ScienceSeeker Editor's Pick</u> for Feb 6-12.

# **CSN Productivity**

Jiewei Hong's paper, entitled "A Hybrid Molecular Dynamics/Multi Conformer Continuum Electrostatics

(MD/MCCE) Approach for the Determination of Surface Charge of Nanomaterials," has been published in *The Journal of Physical Chemistry C*. Congratulations to Jiewei and coauthors **Bob Hamers, Joel Pedersen** and **Qiang Cui**! You can read the published manuscript here.



Xu (Mary) Huang's paper, entitled "Ab Initio Atomistic Thermodynamics Study of the (001) Surface of



LiCoO2 in a Water Environment and Implications for Reactivity Under Ambient Conditions," has been accepted to *The Journal of Physical Chemistry C*. Congratulations to Mary and her co-authors **Joe Bennett, Mimi Hang, Liz Laudadio, Bob Hamers** and **Sara Mason**! You can read the Just Accepted manuscript <u>here</u>.

Miranda Gallagher's Research Highlight, entitled "Research Highlights: Applications of Life-cycle

Assessment as a Tool for Characterizing Environmental Engineered Impacts of Nanomaterials," has published been in Environmental Science: Nano. Congratulations to Miranda and the rest of the Highlight's co-authors, Caley Allen, Joe Buchman, Tian (Autumn) Qiu, Peter Clement, Miriam Krause, and faculty advisor Leanne Gilbertson (U of Pittsburgh)! You can read the published paper here.



## Lab Exchanges

Don't forget to fill out the Lab Exchange Report form as soon as you get back from a lab exchange. It's very important that we have accurate information on this program for our upcoming site visit and annual report. You can find the link to the <u>online lab exchange report form</u> at the end of each newsletter or on the <u>Center Resources</u> page of the CSN website. Thanks!

## **CSN Talks and Presentations**

**Erin Carlson** was recently interviewed for the People Behind the Science podcast. The podcast, entitled "Dr. Erin Carlson: Battling Antibiotic Resistance Through Development and Discovery of Novel Antibacterial Agents," includes a brief online summary of Erin's background and some of the cool work beign done in her lab. Check out the article and the podcast <u>here</u>.

## Fun!

Has your lab tried out any *Mad Libs* from your CSN care package yet? If you have any favorites, please consider sharing the results with the newsletter!



The Hernandez group (Caley Allen, Ali Rahnamoun, Gene Chong, & Rigoberto Hernandez) showing off their CSN care package.

**CSN Nature Walk Photo Competition**. There's still time to submit your photo of the great outdoors for the CSN photo competition! You know you want to win some cool stuff and see your name and photo highlighted in the next newsletter! Submit your photos to <u>CSNphotocompetition@gmail.com</u> by **Tuesday**, **Feb 28**<sup>th</sup> (one submission per contestant).

## **Opportunities**

ACS Webinar. TERA-print: From Academic Discovery to A Commercial Desktop Fab. **Thursday, March 2, 2:00 Eastern.** From the ACS email: "How do you successfully transition your academic discoveries to a commercial market? Chad Mirkin of Northwestern University is a world-renowned expert in nanotechnology, with pioneering contributions for the production and manipulation of materials at the nanoscale. He also turns nanotech into successful products, discovering and developing applications of nanotechnology. Join Live to see a second-chance opportunity for those that missed the standing-roomonly Kavli lecture at the ACS Philadelphia National Meeting." Link for more information & registration is here.

<u>Chemistry World Science Communication Competition</u> deadline **March 31, 2017.** From the competition website: "Our finalists receive tailored mentoring from expert communicators, get their work published in Chemistry World and come to our live final in London to impress our distinguished judges and invited audience from the media, academia and industry." Application is open to anyone around the world who is age 16+ and not a professional science communicator. Check out the website for details on this year's theme (the role of chemistry in local urban environments) and submission form. Applications require an 800 word essay and 2 minute video.

The first <u>MICCoM Summer School on Computational Materials</u> will be taking place at the Research Computing Center (RCC), located on the campus of the University of Chicago, on July 17<sup>th</sup>-19<sup>th</sup>, 2017. The school will include lectures and hands-on exercises which apply cutting-edge algorithms to simulations of soft and hard materials, utilizing codes developed by the MICCoM center: first principles molecular dynamics (Qbox), GW calculations (WEST), and free energy and reactive path sampling methods (SSAGES/COPSS). In particular, the school will focus on how these codes may be used and coupled in order to compute properties of complex heterogeneous systems and how to validate experimental data. Graduate students in molecular engineering, physics, chemistry, chemical engineering, and materials science who are interested in participating are invited to submit their application before April 15<sup>th</sup>, 2017. Accommodation will be provided on the campus of the University of Chicago. A limited number of travel grants are available.

**Blog Research Opportunity**: We have been approved to conduct a small research project at the Minnesota State Fair, studying the efficacy of our blog as a science outreach tool. Contact Miriam if you are interested learning more – CSN trainees at any location could be involved in a variety of ways, from finalizing the experimental design to the human subjects review process to actual data collection at the Fair (exact dates TBD between August 24 and Sept 4, 2017).

# Looking Ahead

March 27 at 10:00 Central: Professional Development: <u>Work-Life Balance Faculty Panel</u>. Panelists Christy Haynes, Rigoberto Hernandez, Sara Mason, and Joel Pedersen will discuss what "work-life balance" even means, and their own experiences and recommendations for managing it.

### **Upcoming Conferences and Meetings**

- March 5-9: Pittcon 2017
- April 4-6: ACS National Meeting.
- April 16-21: MRS National Meeting
- June 18-23: Environmental Nanotechnology GRC (Vice Chair: Rebecca Klaper). Apply before May 21 <u>here</u>.
- June 13-15: 21st Annual Green Chemistry & Engineering Conference (GC&E) in Reston, Virginia. Conference theme is "Making Our Way to a Sustainable Tomorrow." Call for papers closes Feb 13. See <u>website</u> for more information.

#### **Upcoming CSN Meetings and Reminders**

#### **Site Review**

- April 4: CSN faculty meeting at ACS to outline site visit presentation. WebEx for those not at ACS that need/want to participate.
- April 10: Full practice for site review presentation.
- **April 13**: "Red Team" meeting in Minneapolis for all faculty plus specific student presenters and EAB members.
- April 21, April 28: Preparation (3 hours in the afternoon, exact time TBD).
- May 6-9: Site Visit in Madison. Everyone participating in the Site Visit will need to arrive on Saturday, May 6. The Site Review will occur on Monday, May 8 through the early afternoon of Tuesday, May 9<sup>th</sup>. Participants can plan to leave in the early evening on Tuesday, May 9<sup>th</sup>.
- October 5-8: CSN All-hands at the University of Illinois, Urbana-Champaign.

#### Annual Report (additional information will be posted as it becomes available)

- March 1: Budget decisions for Year 3 will be released to Faculty.
- March 31: Theme Leaders Activities and Accomplishments narratives for Annual Report due.
- April 21: Final version of Annual Report completed.

# Lost in Cyber-Space?

HOME ABOUT US OUR TEAM NEWS EDUCATION & OUTREACH WORKING WITH THE CSN

REACH WORKING WITH THE CSN PUBLICATION

PUBLICATIONS RESEARCH MEMBERS

# *Links to frequently requested CSN documents and information sources*

For these documents and more, visit the <u>Center Resources page</u> on the <u>CSN website</u> (requires login though Members page, contact <u>Miriam</u> if you need help).

**Newsletter submissions** (awards, highlights, lab exchanges, publications, FUN, etc.): <u>link</u>

#### **CSN Documents and Downloads**

- CSN calendar (RFA, All-hands, professional development): link
- CSN Operations Guide 2.3: link
- CSN participants list (Names, group, and email addresses): link
- CSN Projects Documents (Spring 2017 version): <u>CSN Projects</u> <u>% Effort sheet</u>

#### **CSN Reporting Forms**

- Report lab exchange activities: <u>link</u>
- New CSN Publications: link
- New CSN Presentations: link
- Report Outreach Activity: link
- CSN Safety Verification form: link
- Nanoparticle availability (Listing of NPs available center-wide): link

#### **CSN Feedback Forms**

- Requests for the Executive Committee (meeting agenda): link
- SuggestionOx (completely anonymous comments/suggestions to CSN staff): Director (Bob): <u>link</u>
  Associate Director (Christy): <u>link</u>
  Managing Director (Mike): <u>link</u>
  - E/O Director (Miriam): <u>link</u>

#### **Annual Report Forms**

- <u>New CSN Conference Presentations/Papers</u>
- Outreach Activities
- <u>Awards (or other activities)</u>

Find the most recent list of all our publications on the <u>CSN Google Scholar</u> page.

