

## Green Chemistry Education Project Group Call

March 2, 2012

*Present: Amy Cannon, Beyond Benign; Shari Franjevic, Clean Production Action; Barbara Hanley, HP; Roger McFadden, Staples ;Mark Myles, TURI ;Bob Peoples, ACS Green Chemistry Institute; Alex Stone, Washington State Department of Ecology; Phyllis Strong, Minnesota Pollution Control Agency; Homer Swej, Johnson & Johnson; Joel Tickner, Lowell Center for Sustainable Production; David Wylie, ACS Green Chemistry Institute;*

### GC3 policy statement on green chemistry education

- Bob Peoples – commitment to the backend – some of them not applicable to an ngo – reflects support for it.
- Should governments sign on to this? Written from a company perspective. Is it applicable? Could get support letters for it? Barbara will reach out through the HP chain. Will push through its legal channels.
- Would like to circulate through trade association – progressive electronics cos. Could get John Frazier to reach out to apparel; Roger through retail. See what other companies would be supportive. Can train someone to do their job but without the skills it's difficult. Have stories like from HP in the outreach/sign ons.
- MN sends out to green chemistry list to get sign ons- is it too early.
- Is a first step a press release- a statement that supports the statement, explain its origins.
- Useful to connect to the GC3 – as it originated from there. Is there an urgency to do before. Time to collect more supporters. Opportunities to talk to people at the GC3 meeting for more support.
- Should we reach outside of GC3 now or later? If we waited until to GC3 conference – to show how many signed on – then could use gov delivery process in MN.
- Keep it simple – get more businesses. Should develop cover memo describing what this is. Put on GC3 letterhead, etc.
- Important for academic side of this to stand up in some way. Could we get it to these institutions to make some public statement about the statement? More we can show unified approach to this, more powerful it will be.
- GC Commitment 10 institutions on faculty advisory board. Trying to coordinate this work with GC commitment and GCI governing board support – to board on professional training. Coordinating messages is really critical.
- Also, powerful to have government agencies where they can weigh in as this is important. More unified message, more business will embrace.
- Who would oppose this? Only opposition is someone trying to do something. Spectrum of people who may be interested – some may not agree with a university commitment to gc. This document will be palatable to mainstream and progressive companies.
- Possibility to get federal government or state governments to sign on. Could bring to IC2.
- One of biggest barriers may be people who might think that alternative ways – LC or RA way may be better to addressing this issue than GC. Staff understanding these principles reduce internal training costs. Shouldn't be an issue. Commitment not mutually exclusive to tools.

- All things equal is important as we can't change existing hiring/procurement policies. In communication that this is not intended to usurp other policies in place is adding a concurrent priority.

### **Green Chemistry Boot Camp**

- HP developing green chemistry training in next year or two as they see it as a gap. Most of chemists at HP have not had training in green chemistry or toxics. HP interested in offering people as beta testers. How best to do it in a cost-effective way. Budgets are tight – may be an area to spend some money.
- Is issue learning technical issues or connecting people in firms and through supply chains – are people communicating? How do I know enough to communicate effectively with others to make this work well? Whole field of safer alternatives/tools/techniques – how do they all fit in together? Where does AA come into play versus green chemistry and that varies depending on where you are in supply chain. How this all fits and feeds in together – reflective of GC3 companies and goals – supply chain focus. Going into some deeper dives so if group of chemists and engineers could do break outs in more details and then come back together with larger group. Get group of companies together to develop generic supply chain/lifecycle model. Overlay boot camp idea on that. When do you apply gc principles, safer alts, etc. Graphic of how it all fits together. Barbara will take a crack at it.
- UC Berkeley GC certification curriculum – so should look at what's been developed to see what is overlapping. Victoria Sharma replacement for Barbara Peterson – Barbara still willing to be involved sometimes. Barbara Hanley will send Joel Barbara's new contact information

### **ACS Sci-Mind for Professional Education**

Technical training group at ACS – new project – Sci mind – module based system – delivery on demand. Take a test and it places you in a sequence of modules at a self pace over weeks or months. Complete and get a certificate of completion. Up and running with a few modules. Pre-test and personalized program. How about the collaboration/communication aspect of this. In person and web based – various options. In person trainings very hard at this point – to get people to do off site training is tough. Make it deliverable to tele commute model – bring work to person rather than person to work – HP. Don't penalize based on geography. On line degrees/programs very palatable at this point.

Here are the links to the recently launched ACS Sci-Mind for Professional Education along with the Green Chemistry courses I mentioned in San Diego. We have run GC 101 & 201 (beginning and intermediate) before. GC 601 is in its initial run. Great discussion today.

- Advanced: [http://proed.acs.org/courses/course\\_overview.cfm?course\\_code=GCI3](http://proed.acs.org/courses/course_overview.cfm?course_code=GCI3)
- Intermediate: [http://proed.acs.org/courses/course\\_overview.cfm?course\\_code=GCI2](http://proed.acs.org/courses/course_overview.cfm?course_code=GCI2)
- Intro: [http://proed.acs.org/courses/course\\_overview.cfm?course\\_code=GCI1](http://proed.acs.org/courses/course_overview.cfm?course_code=GCI1)
- Sci-Mind: Click on the big yellow Sci-Mind box - <http://www.proed.acs.org/>

***Next Call: Tuesday, April 10, 2012 at 1pm Eastern/10am Pacific***