

Green Chemistry Education Project Group Call

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Present: Monica Becker, Monica Becker & Associates Sustainability Consultants; Amy Cannon, Beyond Benign; Carol Derby, DesignTex; Rich Helling, The Dow Chemical Company; Roger McFadden, Staples; Barbara Peterson, UC Berkeley Extension; Phyllis Strong, Minnesota Pollution Control Agency; Homer Swei, Johnson & Johnson; Joel Tickner, Lowell Center for Sustainable Production

Advancing Business Support for Green Chemistry Education

Summary of project

The group would develop an industry “policy statement” in support of green chemistry education at the university level. The goal of this project would be to develop a policy statement that can be widely supported by chemical companies, product manufacturers, and retailers supporting the need for establishment of green chemistry education programs at the university level and how graduates of institutions with such programs would be preferentially treated in the market place, all other aspects of education being consistent. In developing the statement, the group would interview industry and green chemistry education experts to develop an appropriate scope set of positions in the policy statement. The group would then conduct outreach for sign-ons to the policy statement once it is written. This policy statement would provide synergies with Beyond Benign’s university compact for green chemistry education.

Suggestions from the group

- The statement should show that there is a top level commitment from industry that these are the type of graduates they are looking to hire.
- It should be a policy statement that could be supported by university administrators and policy makers (for example in research and education agencies) that supports preferential treatment for chemistry students graduating with green chemistry education, including also those who participate in continuing education programs on green chemistry.
- The statement should package together university and continuing education – that education should be ongoing.
- Chemist internal training- reason for promotion- those who take the initiative will be preferentially treated. Companies committed to make sure chemists get that training.
- Incorporate law and policy, toxicology, EHS training, and sustainability education as part of training that chemists receive.
- Continuing education/Training is not only for chemists in chemical manufacturers. It can also include suppliers. It is one way to give preferential treatment to suppliers that have training in green chemistry/safer alternatives.
- GC3 to put stamp of approval on curriculum. – GC3 “supported curriculum”. How does this connect with work being done on accreditation through the Green Chemistry Institute?

- Next Steps: Amy Cannon – Beyond Benign – will do a first draft of the policy statement (relatively short) and reach out to a small group for input (Rich and Roger volunteered).

Green Chemistry and Safer Alternatives Boot Camp

Summary of project

The project group would develop curriculum for a 3-4 day green chemistry and safer alternatives boot camp to be held in summer 2012. The curriculum would be tailored to a broad technically savvy audience from material designers and chemists to regulatory affairs experts and include both concepts of molecular design, alternatives assessment, and implementation. The curriculum would be based on adult learner concepts with active learning and case studies. Curriculum development would involve the Lowell Center, Beyond Benign, the GC3 project group and the Massachusetts Toxics Use Reduction Institute, among others.

Suggestions from the group

- Many companies are looking for continuing education for their employees. The goal of this project is to develop curriculum for green chemistry and safer chemicals that would include; molecular design, how do you assess alternatives, how do you implement changes.
- Develop curriculum in conjunction with industry so information is relevant/useful and there is increased likelihood of participation. Offering CEUs for licensed professions may be helpful.
- Hazard communication should be part of this.
- The focal group of the training would be broad. Change agents within firms from the chemical design side, business side, engineering side, EHS side. The agenda would include training as well as networking time.
- Organizations are now often structured around H&S and risk. Green Chemistry is focused around hazard even though traditional h&s is risk based. It is important to think about how to fit the training into that reality. Risk management maybe a better way to get industry people into the course.
- Keep the broadness by having common sessions where everyone discusses the same issues and then break-out sessions where policy or business people and chemists are split up to get more specialized training relevant to their area of expertise and then get together again to communicate findings.
- What would be a reasonable cost? Training should be self-supporting – staff time, etc. should be covered.
- In person would be ideal to hold these trainings (perhaps in an area where people can drive easily); however a web option such as HP's Halo would be a good option if travel is too expensive.