

Decoding Green Chemistry for Workers



Discuss need for green chemistry and its basic principles



Present successful real life examples



Explore implications for worker health and safety



Provide tools to take back to the worksite

This curriculum contains six modules that cover background information, lesson plans, and handouts. This 8 hour course is designed to be interactive and dynamic, incorporating various teaching methods and activities, and providing some tools for workers to be applied in their worksites. Highlights from each module are described as follows:

Session 1 – Getting Started/ Sustainability

- Show how workers' health is affected by toxic chemicals in the workplace
- Recognize workers' efforts to improve health and safety conditions for workers
- Define sustainability in their own words

Session 2 – Chemical Hazard Awareness

- Describe in their own words what chemicals are, how they enter our bodies, and what their health effects are
- Identify how the environment is polluted

Session 3 – Regulations

- Explain what rights workers have under the Hazard Communication regulation
- List the existing gaps that make difficult to assess and manage chemicals of concern
- Identify what is happening in Europe and how REACH works

Session 4 – What Green is Chemistry

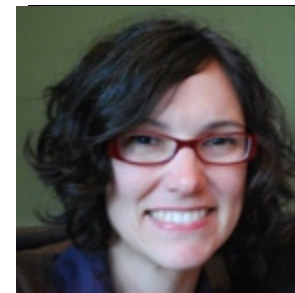
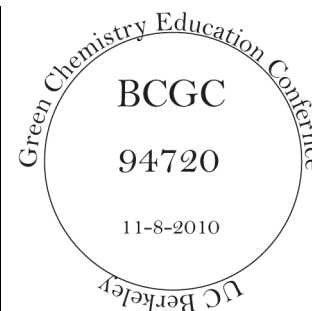
- Identify how conventional chemistry affects sustainability
- Define in their own words what green chemistry is

Session 5 – Principles of Green Chemistry

- Review the hierarchy of controls for chemical hazards
- Become familiar with the precautionary principles of green chemistry

Session 6 – Green Chemistry and Workers

- Identify various resources that can help workers and those interested in staying aware of green chemistry issues
- Develop a plan for next steps to address chemical hazards using the green chemistry approach



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Further Reading:

Schwarzman, M., Wilson, M., *New Science for Chemicals Policy*.
Science Vol 326 1065-1066 (2009)
http://coeh.berkeley.edu/docs/news/science_policy_for_um_112009.pdf

Elizabeth Grossman, *Chasing Molecules: Poisonous Products, Human Health, and the Promise of Green Chemistry*,
Island 2009

Beyond Benign. *Solutions in Green Chemistry*.
www.beyondbenign.org/K12education/highschool.html