

Sustainability IS the Eye of the Storm

by Stefan G. Koenig, Ph.D.

With our current economic atmosphere, there are many who wonder how one could afford to continue pursuing “green” practices. Is it not too expensive to dedicate resources to a luxury, they ask? Well, in fact, it appears most organizations have recognized that as the political environment changes along with the planet’s climate, green is no longer a luxury. Instead, these institutions are calmly adopting “sustainable” practices, and doing so for the long-term. As a case in point, the month of June saw the 13th installment of the Green Chemistry and Engineering Conference, this time a short distance away from Washington DC, at the University of Maryland. The meeting, taking place in the middle of a deep recession, was a thriving success with over 400 attendees, 180 presentations, and two keynote speakers.

The conference started with a Student Workshop on Monday, June 22, 2009, a day which also celebrated this year’s U.S. EPA Presidential Green Chemistry Challenge Awards (<http://www.epa.gov/greenchemistry/pubs/pgcc/past.html>). All the winners presented their research at the meeting, perfectly underlining this year’s theme of “Innovating for the Future: Progress on the Grand Challenges in the Chemical Enterprise.” In all, seven different tracks – each centered around one of the Grand Challenges – were explored over the next three days, including: a) the transformation of Green Chemistry and Engineering; b) metrics, particularly Life Cycle Analysis (LCA); c) toxicology and environmental effects; d) renewable energy; e) the design and optimization of processes; f) management and prevention of greenhouse gases; and g) incorporating Green Chemistry and Engineering into science education.

Both keynote speakers called for scientists to take into consideration the environmental fate of modern chemical products and recall that in our ecosystem, “everything is connected.” In a forum open to the public, Jean-Michel Cousteau, (son of the illustrious French marine conservationist and Founder and President of the Ocean Futures Society (<http://www.oceanfutures.org/>)), suggested that humans should learn to live off the dividends of the planet’s resources and not consume or destroy them. Similarly, Len Sauers, Ph.D., Vice-President for Global Sustainability of Proctor & Gamble Company (<http://www.pg.com/>), expounded on the business opportunities inherent in sustainability and P&G’s efforts to use a science-based approach to make green innovation products.

Also at the meeting, the ACS Green Chemistry Institute considered starting up a Chemical Suppliers Roundtable to address issues in a precompetitive or noncompetitive space, similar to the established and successful Pharmaceutical and Formulators programs. The benefits of such an assembly might include furthering sustainability concepts, forging collaborations, providing tools for assessment and improvement, as well as benchmarking across the industry.

Overall, the conference focused a serious light on all things sustainable, doing an admirable job of “uniting chemistry and engineering to the benefit of business and the environment.” The confluence of commercial interests and ecological advocacy comes at a time when the planet and its nations’ economies are off-balance. Harvesting new opportunities in sustainability from the crisis appears to be one of the few bright spots with both grand challenges and the potential for large improvements. This just may be what gets us out of the malaise and back on the road to continuing prosperity.