

KETTERING INDUSTRIAL ECOLOGY TEAM

KIET NEWSLETTER



Issue 5

April 7, 2008

KETTERING UNIVERSITY

Upcoming Events

- Jennifer Aurandt will be presenting at the American Chemical Society National Conference in April 2008.
- The six KIET faculty are delivering a workshop at the upcoming American Society of Engineering Education (ASEE) conference in Pittsburgh on June 22, 2008.
- Terri Lynch-Caris will be representing KIET at a conference in Washington, D.C. in August, 2008.

Focus the Nation comes to Kettering

On Jan. 31, 2008 Kettering took part in "Focus the Nation" nationwide event involving over 1700 universities and colleges by hosting in a "Teach-in". This event's goal was to educate the Kettering community and K-12 students about the issues involved with sustainability.

Outreach: eighty-five local K-12 students participated in interactive sessions given by Kettering professors on environmental topics like green

chemistry, green business, fuel cell vehicles and how small lifestyle changes could add up to positive steps for the Earth.

Kettering community: Four lectures were given throughout the day related to energy issues, economic issues and Global Warming. The co chairs of the event, Dr. Jennifer Aurandt and Dr. Jacqueline El-Sayed, intend to expand this successful event next year. Thanks to the many contributors from across campus.



Rachel Charron at her work site, GM Powertrain Flint Engine South, a landfill free facility.

Rachel Charron, environmental engineer for GM, spoke at Kettering.

Survey Results?

All Advisory Board members should have received a survey from our external evaluator, Marty Goldstein, in January, 2008. The purpose of the survey is to assess the efforts of our work and provide feedback to the NSF funding agency. If you have not yet returned your survey, please do so as quickly as possible. Marty has plans to move out of Michigan in the near future and hopes to wrap up the survey before leaving town.

IME 540

The third offering of IME540 - Environmentally Conscious Design will occur in the Spring term of 2008. One noticeable change is that lectures will be taped in Kettering's video studio toward the goal of offering this online in the future. The six teaching faculty successfully met the challenge of meeting the course learning objectives. Preliminary assessment results were presented

Pre-Post Test Knowledge assessment showed significant increase in all modules. Overall knowledge on the topics covered in IME540 increased from 1.64 on the first day of class to 3.39 at the end. The knowledge scale was 1-Very Little, 2-Somewhat Familiar, 3-Familiar, 4-Very Familiar.

Course Module Development



KIET member Craig Hoff is a Professor of Mechanical Engineering at Kettering. He is responsible for developing and teaching the second module in the IME540 course, "Life-Cycle Analysis." His message for students is that the environmental impact of every product extends from the cradle or original design of the produce to the end of its useful life. Raw material extraction,

production processes, energy consumption, product use, and end-of use strategies all play an important role in the overall environmental impact made by a single product. His examples show the importance of considering the entire life cycle during the design stage. Spreadsheet and software tools facilitate active learning.