

Technical Highlights for December 2012

The Oak Ridge National Laboratory (ORNL) Participates in Low Temperature Aftertreatment Workshop

Office of Energy Efficiency and Renewable Energy (EERE) and Basic Energy Sciences catalyst experts from ORNL participated in a workshop held on November 29–30, 2012, in the Detroit area to develop a roadmap to address low temperature aftertreatment challenges for the automotive industry. Hosted by the Catalyst Sub-Team of the Advanced Combustion and Emission Control Tech Team of United States Driving Research and Innovation for Vehicle efficiency and Energy sustainability (USDRIVE), the workshop centered on the “150°C Challenge” to achieve emission control at exhaust temperatures as low as 150°C. Such performance is needed to meet upcoming emission regulations while simultaneously meeting fuel economy standards with more fuel efficient internal combustion engines.

ORNL Team’s Research Published as Feature Article in December Issue of *Sealing Technology*

An ORNL team was awarded a feature publication for “Compatibility of Elastomers with Test Fuels of Gasoline Blended with Ethanol,” pp. 7–12 in *Sealing Technology*, **2012**(12), December 2012. *Sealing Technology* is the leading international journal dealing with news and technological advances associated with sealing. The authors were Mike Kass, Tim Theiss, Chris Janke, and Steve Pawel of ORNL and Tom Chapin, Ken Boyce, and H. S. Yang of Underwriters Laboratories.

High-Level or Noteworthy Visits

ORNL Hosts Visitors from Hyundai Motor Corporation

ORNL researchers hosted two Korea-based visitors from Hyundai Motor Corporation on December 12, 2012, to discuss ongoing work related to fuel reforming and thermochemical recuperation. Both organizations presented previous work and interest in this research area. Discussions regarding a formal collaboration between the two organizations are ongoing.

Visit from Partners for Advanced Transportation Technology (PATH) program at the University of California, Berkeley:

Wei-Bin Zhang, program manager in the PATH program at the University of California-Berkeley, visited ORNL on December 3, 2012. Founded in 1986, the PATH was the first Intelligent Transportation Systems research program in the U.S. Since its inception, PATH has participated actively in major national ITS research programs in the U.S., including the original ITS Architecture development, National Automated Highway Systems Consortium, Intelligent Vehicle Initiative (IVI), Vehicle-Infrastructure Integration (VII), IntelliDrive and SafeTrip-21. Dr. Zhang had the chance to meet with various ORNL researchers and scientists and explore potential collaborations on Intelligent Transportation and eco-driving solutions.

Invited Talks and Presentations

Fuels, Engines, and Emissions Research Center (FEERC) Researchers Present Greenhouse Gas Findings to the Department of Energy (DOE) Program Manager

FEERC Researchers Scott Curran and Robert Wagner along with the Sustainable Transportation Program Director, Ron Graves, presented initial well-to-wheels greenhouse gas and energy use for natural gas in transportation to the DOE Vehicle Technologies Analysis program manager, Jake Ward. The study examined natural gas used directly in compressed natural gas vehicles as compared to indirectly through electric vehicles from electricity generated from stationary power with natural gas.

Awards

ORNL Postdoc Association

Andreas Malikopoulos has been assigned to be the president of the first postdoc association established at ORNL. The association will seek to foster a sense of community, provide resources for career development, and contribute a framework for representation of postdocs in the ORNL research community. Dr. Malikopoulos will oversee monthly meetings, act as primary advocate on behalf of postdoctoral fellows pertaining to administrative matters, and serve as the representative of laboratory management.