

INL Intelligence

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A high-level monthly briefing on operations and activities at the U.S. Department of Energy's Idaho National Laboratory
Work at the lab advances the Department's strategic priorities of energy security,
nuclear security, scientific discovery and environmental responsibility.

■ Team Reaches New Hydrogen Production Milestone

INL researchers have set a new endurance record in the operation of their hydrogen-producing solid-oxide electrolysis cell stack. The Integrated Laboratory Scale experiment has now operated continuously for 2,583 hours at higher efficiencies than previously attained. "I'm very much encouraged that it will be able to operate for even longer periods of time," said Steve Herring, laboratory fellow and technical director of the INL High Temperature Electrolysis team. "It means that this research is closer to commercial viability." Hydrogen produced from more efficient high temperature electrolysis could be used in a variety of applications, such as refining poor-quality domestic crude oils and upgrading the bitumen in Canadian oil sands.

■ Center Exceeds Funding Goal

The Center for Advanced Energy Studies has delivered on a promise to Idaho Gov. C.L. "Butch" Otter to bring in \$5 million in new funding by October 2009. In less than 12 months, CAES secured \$13.9 million in research and other funding, nearly tripling its goal. CAES Director Harold Blackman committed to the \$5 million target last fall when the governor toured the Idaho Falls facility. "What's happening at CAES is a great example of what can be accomplished when we focus our complementary talents on our shared goals," Gov. Otter said. "All of Idaho is better off for having CAES working with researchers at our universities to advance the goals of energy independence and economic opportunity." Much of the \$13.9 million is for nuclear-related research, including a project for the Electric Power Research Institute.

■ INL Experts Share Energy Sustainability Ideas

Energy policy, green building technologies and emission reduction strategies were among the topics discussed when more than 100 city leaders, architects, engineers, building officials, builders and government agencies gathered in Boise Oct. 21-23 at the annual Association of Idaho Cities Energy and Green Building Conference. Among the expert presenters were INL's Deborah Tate and Chris Ischay. Tate, director of the R&D Support Services Division, and Ischay, program manager for the INL Sustainability Program, detailed INL's strategy for reducing its energy use, implementing sustainable technology options, reinforcing sustainable behavior and conducting research on cleaner and more efficient energy sources for Idaho and the nation.

■ Lab Energizes Idaho Educators

A small team of Idaho educators fanned out across the state to teach their colleagues about energy during the statewide in-service for K-12 teachers Oct. 1-2. It was all part of a new program INL is piloting to advance science, technology, engineering and math in Idaho schools. Eight instructors attended an INL-sponsored four-day energy workshop in August and underwent extra training so they could educate their peers about nuclear, solar and other sources of energy, and how to effectively apply that information in classrooms. The STEM lessons are interactive and designed to teach students through hands-on projects about the "Science of Energy."

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