

# 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.

## ■ INL User Facility Attracts New Partners

Research into fuels and materials that could improve tomorrow's nuclear reactors just got even more collaborative with the addition of two new partners to the Advanced Test Reactor (ATR) National Scientific User Facility based at Idaho National Laboratory. Oak Ridge National Laboratory and the University of California, Berkeley, are the newest user facility partners. Such affiliations increase access to national irradiation and testing capabilities and provide greater flexibility to respond to user needs. "The ATR National Scientific User Facility gives university and industry scientists unprecedented access to the nation's most capable nuclear research facilities," said Todd Allen, the user facility's scientific director. The U.S. Department of Energy established the ATR user facility in April 2007.

## ■ Idaho High School Teams Headed to National Competition

High school scholars from Rexburg, Coeur d'Alene and Challis have won trips to the U.S. Department of Energy's upcoming National Science Bowl. Teams from Madison High School, Coeur d'Alene Charter Academy and Challis High School emerged as victors in the 2011 version of Idaho National Laboratory's Scholastic Tournament, which earned them spots in the national competition April 28 - May 2 in Washington, D.C. For more than 20 years, INL has sponsored the state tournament, which is the largest of the regional Science Bowl contests held every year across the U.S. and Virgin Islands. This year, approximately 700 students representing 69 Idaho high schools participated in regional competitions that led up to the state finals event. INL Scholastic Tournament receives additional financial support from Micron Foundation, Westmark Credit Union and Idaho Power.

## ■ INL Researchers Design Mars Hoppers

Researchers and student fellows at the Center for Space Nuclear Research at INL have been fleshing out designs for a nuclear-powered Mars hopper that could examine one Martian site, jump to another, and repeat, hundreds of times. "We've got a little guy that we think can hop about 15 kilometers (more than 9 miles) every five to seven days," says Steven Howe, CSNR director. The lean, long-lived hoppers are designed to wring as much science and exploration as possible out of every ounce. They don't have to carry fuel with them; they can draw in the carbon-dioxide-rich Martian atmosphere and use it as a propellant. On cue, stored heat from a radioisotope power source would ignite the propellant and send the hopper in an arcing path toward its next landing site.

## ■ Lab Director Featured in New Energy Documentary

INL Laboratory Director John Grossenbacher is one of 36 international energy experts interviewed for the expansive new documentary, "Energy on Trial." The show, by Gary Jobson, presents an analysis of the facts surrounding all energy forms. The Emmy-winning television producer and commentator has produced more than 70 TV programs for ESPN, PBS and NBC. For "Energy on Trial," he shot more than 200 hours of footage and visited two nuclear power plants. He also spent two days filming at INL. A broadcast schedule is still pending.

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