

# 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 and Idaho National Guard Develop Improved 911 System

Engineers at INL are working closely with members of the Idaho National Guard to develop a mobile 911 system that would allow disaster victims to call for help even when regular dispatch centers or cell towers are inoperable. The technology uses a commercial communication base station manufactured by Qualcomm Inc., which is then supplemented with software and routing protocols written by INL engineers. The end result is an independent cellular network capable of receiving emergency cell phone calls and transferring them to first responders. The capability should enhance the Guard's response time and efficiency during disasters. The system has been designed to work seamlessly with the Guard's existing Joint Incident Site Communications Capability.

## ■ Researcher Receives National Fusion Engineering Award

J. Phillip Sharpe, group leader of INL's Fusion Safety Program, has been selected by the Fusion Power Associates Board of Directors to receive the 2008 Excellence in Fusion Engineering Award. The annual award, established in 1987, recognizes individuals in the relatively early stages of their careers who have shown both technical accomplishment and potential to become exceptionally influential leaders in the fusion field. In his selection for the honor, the FPA Board noted his many technical accomplishments, including "key research on plasma-materials interactions, tritium behavior in materials and inertial fusion blanket design; and your leadership in the important area of fusion reactor safety." Sharpe is the third INL researcher to win this award. Previous recipients include Steve Piet in 1987 and Kathryn McCarthy in 1994.

## ■ Lab Advances Water Sampling Technology

The U.S. Environmental Protection Agency and INL have developed a new portable, rapid Water Sample Concentrator that integrates and automates the process of collecting smaller, more concentrated field samples from water sources with suspected contamination. The technology concentrates waterborne contaminants, including pathogens, reducing the sample size that needs to be shipped to a certified laboratory where its contents can be accurately and quickly determined.

## ■ International Energy Collaboration Continues

INL hosted the Alberta Deputy Premier and Minister of International and Intergovernmental Relations, as well as Idaho Office of Energy Resources Administrator Paul Kjellander during a late-month visit to INL research laboratories in Idaho Falls. Discussions and tours focused on world-class energy resources within the western inland energy corridor extending from Canada to southern Utah and surrounding states. The visit also highlighted existing and potential collaborations between INL and Alberta, and INL capabilities related to nuclear, renewable and hybrid energy system integration.

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