INL Intelligence
Volume 9, Issue 9 – September 28, 2009

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.

New Nuclear Research Grants Awarded

INL nuclear scientists recently won two highly competitive grants from the U.S. Department of Energy's Office of Science. The funds will allow work to start as soon as Oct. 1 on research aimed at improving nuclear reactor simulations and nuclear fuel recycling. In one project, INL and Brookhaven National Laboratory scientists will use data from experiments already performed at nuclear facilities around the world to test and calibrate their models of nuclear reactions at the atomic level. In the other project, the INL team will collaborate with scientists at the Argonne Tandem Linac Accelerator System user facility in Illinois to learn how elements within fuel rods respond to neutron irradiation. The two grant awards are significant for INL, which receives the bulk of its research funding for applied engineering work, rather than basic research projects like these.

Engineers Develop Tunnel Detector

A trio of INL engineers has developed a new device for finding out what lies beneath the ground's surface. Called the Look-ahead Sensor, or LAS, the unit uses a rapid succession of acoustic waves sent into the earth over a few seconds to get the soil and rocks below shaking. A motion detector picks up the motion and exports the information to a laptop computer, where special software can graph and analyze it. Although the device is still in prototype form, its inventors believe the LAS could be used in applications ranging from border security where agents need to be able to find tunnels used to smuggle people and drugs, to the mining, oil and gas industries. Developers point out the device is portable, cheap and effective in most types of ground – a combination other detection systems have a hard time matching.

INL Leader Elected to Prestigious International Academy

One of INL's top managers, Phillip J. Finck, Ph.D., has been elected to the membership of the elite International Nuclear Energy Academy (INEA). INEA is a group of prominent, experienced scientists, engineers and related nuclear energy specialists who conduct studies and discussions, and develop recommendations for the international nuclear community on various generic nuclear energy issues. Academy membership is limited to 100 distinguished individuals from around the world. Finck is the associate laboratory director for Nuclear Science & Technology at INL and is an internationally recognized expert in advanced reactor and fuel cycle programs.

Lab Launches Facebook Page

INL this month launched a new Facebook page (www.facebook.com/IdahoNationalLaboratory). The page contains video interviews with researchers and recent interns, photos of life at the lab, news clips, a careers/internships link and related information designed to encourage more interaction. "We're launching this Facebook page so we can actively engage a new audience in a dialogue about INL's mission of ensuring our nation's energy security," said Brent Stacey, INL chief information officer. "There are numerous benefits to INL's long-term strategy that are realized through interacting individually with the larger Internet community."

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