

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.

■ New Research Center Coming to INL

INL has been selected to host a new Center for Materials Science of Nuclear Fuel – one of 46 first-of-their-kind Energy Frontier Research Centers (EFRC) recently announced by the U.S. Department of Energy. INL's Dieter Wolf, Ph.D., coordinated the funding application and will head the new center. Work will start this October when funding is in place. For the next five years, DOE plans to fund the EFRC at an annual level of \$2 million. The center's objective is to create computer models that will predict the behavior of materials in nuclear reactors and then validate those models against actual experiment results. With a total of 260 applications submitted and only 46 centers receiving funding, the selection process was "based on a rigorous merit review process utilizing outside panels composed of scientific experts," according to a DOE news release.

■ INL Assists in International Fuel Recovery Effort

A team of INL and Savannah River Site scientists, supporting the National Nuclear Security Administration (NNSA), removed more than 160 pounds of Russian-origin highly enriched uranium from Kazakhstan over the past four months. The used nuclear fuel was removed and returned to Russia by rail for storage at a secure facility in a series of four shipments between December 2008 and May 2009. INL's Igor Bolshinsky coordinated efforts on behalf of NNSA, while employees from Savannah River provided assistance on location. The removal of used reactor fuel from foreign countries is part of DOE's Global Threat Reduction Initiative, which aims to reduce and protect vulnerable nuclear and radiological materials located at civilian sites worldwide.

■ Idaho Schools Awarded INL STEM Grants

INL late this month awarded nearly \$100,000 in grants to schools and teachers across the state to improve science, technology, engineering and math (STEM) education in grades K-12. The lab's Mini Grant program provides teachers up to \$2,000 per proposal for classroom equipment, materials and professional development projects. More than 40 grants were awarded in 2009 to support innovative STEM projects. For the first time this year, INL also awarded two \$10,000 Science Laboratory grants to Idaho schools to either establish or upgrade a chemistry or physical science laboratory. The inaugural recipients are Kuna Middle School and Butte County High School in Arco.

■ INL-sponsored Physics Day Attracts Thousands

On May 15, several thousand high school and middle school students from Idaho, Utah, Wyoming and Nevada spent the day at Lagoon Theme Park near Farmington, Utah, for the 20th annual Physics Day, sponsored by INL and Utah State University. "The purpose of Physics Day is to make the amusement park a physics lab," said Ali Siahpush, a mechanical engineer at INL. Siahpush helps coordinate the event and has worked on the activity since its very beginning. Using tools like homemade accelerometers and logging their findings in workbooks, students learn the physics behind the rides, while enjoying a day in a unique outdoor classroom.

For more information, contact Lou Riepl at (208) 334-9574.

