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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 Researchers Achieve Hydrogen Production Milestone

A team of scientists from INL earlier this month succeeded in producing a significant volume of hydrogen through High-Temperature Electrolysis (HTE). The milestone was reached when the Integrated Laboratory Scale experiment started producing hydrogen at a rate of 5.6 cubic meters per hour. "This is by far the biggest achievement we've had," said Carl Stoots, the experiment's principal investigator. There are several potential applications of hydrogen from high-temperature electrolysis, all of which are closer to real-world application now that HTE has proven itself capable of producing hydrogen in heightened quantities. With this milestone met, HTE technology is on its way to opening many doors for innovation in energy production, accelerating the Department of Energy's pursuit of a hydrogen economy.

Security Technology Receives Prestigious National Award

New technology under development by a team of INL and Idaho Accelerator Center researchers that safely detects hidden nuclear materials before they can be smuggled into ports and across borders has been selected as the recipient of the 2008 Homeland Security Award sponsored by the Christopher Columbus Fellowship Foundation and AgustaWestland North America, Inc. In announcing the award, Kimberly Owens, the chair of the foundation, said, "Thousands of tons of cargo move through U.S. ports daily with little or no inspection. The Christopher Columbus Foundation and AgustaWestland are pleased to recognize Dr. James Jones and his team for their work on the development of a nuclear materials detection system to facilitate the inspection of cargo containers for illicit nuclear material."

New Energy Crop Research Partnership Announced

The Idaho Farm Bureau Federation and INL have signed a memorandum of understanding establishing cooperation and coordination on the development and evaluation of advanced technologies needed by the agriculture industry in Idaho. The memorandum addresses testing of varied grasses such as switch, prairie, sudan, the native Idaho basin wild rye and miscanthus as dedicated energy crops. It also covers the harvesting, collection and preparation of cellulosic and other feedstocks for biofuels processing and conversion into fuels, chemicals and energy. The testing and R&D effort are not intended to reduce the amount of land already devoted to food and feed crops. The agreement extends through December 2013.

Annual Science and Safety Expo Attracts Thousands

More than 4,000 students, teachers and parents discovered the wonders of science and technology at the eighth annual INL Science, Engineering and Safety Expo held mid-month in Idaho Falls. With the theme of "Discover the Wonder," the expo featured several "Airplane to the Moon" presentations by Woody Sobey with the Discovery Center of Idaho. Another 30 demonstrations and interactive exhibits were set up to encourage young people to discover the wonders of science, math, engineering, technology and medicine.

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

INL
Idaho National Laboratory