

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 mission to ensure America's security and prosperity by addressing its energy, environmental and nuclear challenges through transformative science and technology solutions.

■ Idaho Space Battery Heads to Mars

When NASA's latest interplanetary science mission was launched from the Kennedy Space Center the Saturday after Thanksgiving, it carried a unique made-in-Idaho item – a heat and power source assembled and tested at INL. The Multi-Mission Radioisotope Thermoelectric Generator on board the Curiosity rover is commonly referred to as a “space battery,” a device that can reliably power a deep space mission for many years. The space agency chose to use a nuclear power source because solar power alternatives did not meet the full range of the mission's requirements. Only the radioisotope power system allows full-time communication with the rover during its atmospheric entry, descent and landing regardless of the landing site. And the nuclear-powered rover can go farther and power and heat a larger and more capable scientific payload compared to the solar power alternative NASA studied.

■ INL Helps Assess Geothermal Potential

City leaders in Stanley recently reached out to INL and its Technical Assistance Program in an effort to secure the in-kind donations needed to match a USDA Rural Development grant that is helping the community look for potential geothermal resources. In response, INL physicist Gail Heath and research technician Trent Armstrong were tasked in October with conducting geophysical surveys within the city's boundaries using an INL magnetometer and electromagnetic profiler to look for promising subsurface features. The city will receive the geophysical survey data in early December.

■ Lab Engineer Receives International Recognition

Longtime INL engineer Donald McEligot was presented with a special award at the recent International Conference on Engineering Education held in Belfast, Northern Ireland. McEligot received the International Network for Engineering Education and Research (iNEER) Leadership Award for “visionary leadership in innovative research, consistent scholarship through international collaborations and pioneering contributions to engineering,” according to the award citation. McEligot is a thermal scientist at the Center for Advanced Energy Studies in Idaho Falls and a Nuclear Science and Technology division Fellow at INL.

■ Energy Secretary Honors INL Employees

Seven INL employees have received awards from Energy Secretary Steven Chu for their technical assistance in Japan and Kazakhstan. Doug Burns, Cal Christensen, Betsy Connell, Harold McFarlane, Joy Rempe and Derek Wadsworth were recognized for their contributions to DOE's response following Japan's 9.0-magnitude earthquake and subsequent tsunami that caused extensive damage to four nuclear reactors at the Fukushima Daiichi nuclear power station. Eric Howden was also honored for leading a 14-year initiative to secure 10 tons of highly enriched uranium and three tons of plutonium that originated in the former Soviet Union's BN-350 nuclear reactor. Secretary Chu praised the employees for going above and beyond the call of duty.

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