Idaho National Laboratory

MEDIA DAYS 2024

MAY 22-23

Agenda

ADVANCING THE FUTURE OF ENERGY

Tuesday, May 21, 2024 (Mountain Daylight Time)
Event location: Snake Bite Restaurant, 401 Park Ave., Idaho Falls
Attire: Casual dress

Hotel pickup – INL shuttle

5:15 p.m. Holiday Inn & Suites pick-up (3005 S. Fork Blvd., Idaho Falls)
Sarah Neumann, Media Relations and Digital Content manager, (208) 520-1651

5:30 Dinner discussion: INL Resources & Contacts for Science/Technology Journalists
Heavy hors d'oeuvres will be provided; cash bar.

Wednesday, May 22, 2024 (Mountain Daylight Time)
Attire: Casual dress. Closed-toe, closed-heel shoes and long pants are required.

Hotel pickup – INL shuttle

7:45 a.m. Holiday Inn & Suites pick-up (3005 S. Fork Blvd., Idaho Falls)
Sarah Neumann, Media Relations and Digital Content manager, (208) 520-1651

8:00 Depart for ATR, INL overview briefing
INL Tours

Advanced Test Reactor (ATR)

9:30 Advanced Test Reactor overview
Joe Campbell, Advanced Test Reactor communications lead

Visit the most versatile test reactor in the world. The ATR acts as a virtual "time machine" for materials and fuel testing. In just a matter of weeks or months, scientists can come to understand how different reactor materials and fuels will be affected by multiple years' worth of intense neutron and gamma radiation.

10:45 Depart for CFA

Central Facilities Area (CFA)

11:00 Windshield tour, Energy Technology Proving Ground
Presenter name coming soon

We will take a "windshield tour" of the future location of the Energy Technology Proving Ground, where construction is underway to demonstrate the integration of nuclear, wind, solar and geothermal technologies with industrial-scale hydrogen production.

11:30 Depart for EBR-I

Experimental Breeder Reactor-I (EBR-I)

11:45 Lunchtime discussion: EBR-I history and tour
Presenter names coming soon

See where it all began! The facility, a National Historic Landmark where usable electricity was first generated from nuclear energy in 1951, is the only place in America where you can see four nuclear reactors — including two aircraft nuclear propulsion prototypes, a reactor control room and much more.

1:30 Depart for MFC

INL Idaho National Laboratory

Materials and Fuels Complex (MFC)

2:15 Demonstration and Operation of Microreactor Experiments (DOME) overview
Presenter names coming soon

Take a look inside the distinctive silver dome that dominates the skyline at INL's Materials and Fuels Complex. Once home to Experimental Breeder Reactor II, the dome is undergoing a renovation inside and out, and will soon serve a new mission as a test bed for advanced microreactor projects.

3:15 Tour concludes. Shuttle returns attendees to hotel.

Thursday, May 23, 2024 (Mountain Daylight Time)
Meeting location: INL Meeting Center (775 MK Simpson Blvd., Idaho Falls)
Attire: Business casual

Hotel pickup – INL shuttle

7:30 a.m. Holiday Inn & Suites pick-up (3005 S. Fork Blvd., Idaho Falls)
Sarah Neumann, Media Relations and Digital Content manager, (208) 520-1651

8:00 **Idaho National Laboratory 101: Research overview**
John Wagner, Idaho National Laboratory director

As INL celebrates its 75th anniversary in 2024, there are big projects coming to fruition within the next decade. Lab Director John Wagner will provide an overview and his vision for the future of energy.

9:00 **Nuclear fuel safety: Road testing vs. crash testing**
Nic Woolstenhulme, Advanced Fuels Campaign Irradiation Testing lead/principle investigator
Kevan Weaver, Advanced Test Reactor chief technology officer

In order to qualify new nuclear fuels for commercial use, they must first undergo a rigorous process to test how they'll perform. This is sometimes equated to the auto industry's process for crash-testing and road-testing new vehicles before they hit the showroom floor.

10:00 **Break**

10:15 **The future is hydrogen: Full-scale demo of integrated systems**
Panelist names coming soon

For decades, power plants have been used to generate only electricity. To do so, they produce heat – sometimes a lot of it – which turns water into steam that spins a turbine to produce electricity. Roughly 40% of this heat is lost during the process. What if that heat could be harvested and used for other applications, such as industrial processes, that require thermal energy? Integrated energy systems allow the use of both electricity and heat from power plants—energy that can be stored or used to make other valuable products.

11:15 **The 'Final Frontier:' How nuclear powers missions to space**
Space Nuclear Power & Isotope Technologies division representative
Mark DeHart, Nuclear Science and Technology Directorate Fellow

Did you know that nuclear radioisotopes have been providing electricity for space missions since 1961? INL has a rich history in enabling deep space exploration, including powering the Curiosity and Perseverance rovers to Mars. Learn how INL is assisting NASA's plans for a nuclear power plant on the Moon and a nuclear-propelled rocket – an alternative approach to conventional chemical rockets that would be powerful and efficient enough to take crewed missions to Mars.

12:15 **Advancing the future of nuclear energy**

Jess Gehin, Nuclear Science & Technology associate lab director
Nick Smith, Molten Chloride Reactor Experiment project director
Justin Coleman, Special Reactor Concepts manager

Learn more about specific reactor experiments and projects that are advancing nuclear technology. Hear from the experts involved in the LOTUS and DOME test beds, get a status on the MARVEL microreactor and the Molten Chloride Reactor Experiment. Finally, what does the end of the Carbon Free Power Project mean for these projects and the future of NuScale's small modular reactor technology?