IFNEC
INTERNATIONAL FRAMEWORK FOR NUCLEAR ENERGY COOPERATION

AI SUMMIT AND ADVANCED REACTORS WORKSHOP

6-9 October 2025

Idaho National Laboratory,
Idaho Falls, Idaho, USA

INL Meeting Center | 775 MK Simpson Blvd, Idaho Falls, ID 83415

DAY 1: Monday, October 6th, 2025
AI SUMMIT

7:30 | Bus arrival at the Hampton Inn and Hilton Garden Inn

7:45 | Bus departure from the Hampton Inn and Hilton Garden Inn
Note: Kindly make sure to arrive punctually at the bus pick-up location.

8:00-8:30 | Badging

8:30-9:00 | Keynote on "AI and Nuclear—Nuclear and AI"
- Mr. Chris Ritter, INL Division Director of Scientific Computing & AI and DOE NE NTD for AI for Nuclear Deployment

9:00-10:30 | Industry Panel: The Energy-Data Nexus: Opportunities & Challenges in Powering AI with Nuclear
- **Moderator**: Mr. Chris Ritter, INL Division Director of Scientific Computing & AI and DOE NE NTD for AI for Nuclear Deployment
- **Speakers**:
  - Mr. Sean Young, Architecture, Engineering & Construction / Geospatial industry marketing Lead, Nvidia
  - Mr. Bryan Lopez, CISSP & CISM, Senior Director & Technology Strategist | Microsoft Federal, Microsoft
  - Mr. Marcus Nichol, Executive Director, U.S. Nuclear Energy Institute (NEI)

  ***INL Photographer scheduled from 08:30 - 09:30

10:30-10:45 | Break

10:45-11:00 | Walk to Tours

11:00-11:45 | Tours: Visualization and the Collaborative Computing Center
- High Performance Computing Center—Mr. Matt Anderson, Mr. Eric Whiting
- Visualization Laboratory—Mr. Logan Browning, Mr. Porter Zohner, Mr. Keith Wilson

11:45-12:00 | Walk Back to Meeting Center

12:15-13:00 | Lunch Presentation: Autonomous Design and Licensing

- Mr. Peter Suyderhoud, Ms. Sonali Sinha Roy, Mr. Jason Andrus, U.S. Idaho National Laboratory

13:00-14:00 | Automated & Remote Operations

- Dr. Ryan Stewart and Dr. Joe Oncken, U.S. Idaho National Laboratory

14:00-14:15 | Break

***INL Photographer scheduled from 13:15-14:15

14:15-14:30 | Walk to Tours

14:30-15:15 | Tours: Visualization and the Collaborative Computing Center

- High Performance Computing Center—Mr. Matt Anderson, Mr. Eric Whiting
- Visualization Laboratory—Mr. Logan Browning, Mr. Porter Zohner, Mr. Keith Wilson

15:15-15:30 | Walk Back to Meeting Center

15:30-15:45 | Summary and Wrap up

- Mr. Chris Ritter, INL Division Director of Scientific Computing & AI and DOE NE NTD for AI for Nuclear Deployment

15:45 -- Meeting Adjourned for Day 1

16:00 | Depart for Reception at Experimental Breeder Reactor - 1 (historical monument) from the INL Meeting Center

Note: EBR-1 is located a 50-minute drive from the INL meeting center. Participants may take photos at EBR-1

19:30 | Depart for Hotels from the Experimental Breeder Reactor - 1

***INL Photographer scheduled from 17:30 - 18:30

DAY 2: Tuesday, October 7th, 2025

ADVANCED REACTORS WORKSHOP - DRIVING INNOVATION AND DEPLOYMENT

8:30 | Bus arrival at the Hampton Inn and Hilton Garden Inn

8:45 | Bus departure from the Hampton Inn and Hilton Garden Inn
Note: Kindly make sure to arrive punctually at the bus pick-up location.

9:00-9:30 | Coffee

9:30-10:00 | Opening Remarks

- Welcome from Ms. Aleshia Duncan, IFNEC Chair
- Keynote Welcomes
  - Mr. Robert Boston, Manager of the Idaho Operations Office, U.S. Department of Energy
  - Dr. Todd Combs, Deputy Laboratory Director for Science and Technology and Chief Research Officer, U.S. Idaho National Laboratory

***INL Photographer scheduled from 09:30 - 10:30

10:00-11:15 | Session 1: Overview of Ongoing U.S. Advanced Reactor, SMR, and Microreactor Demonstration Efforts

Keynote (15 minutes)

- Dr. Michael Goff, Principal Deputy Assistant Secretary, Office of Nuclear Energy, U.S. Department of Energy

Moderator

- Dr. Jennifer Gordon, Director, Nuclear Energy Policy Initiative, Atlantic Council

Panelists (40 minutes)

- Dr. Jess Gehin, Associate Laboratory Director for Nuclear Science and Technology, U.S. Idaho National Laboratory

- Dr. Abdalla Abou Jaoude, MARVEL Microreactor Lead, U.S. Idaho National Laboratory
- Mr. Marcus Nichol, Executive Director, U.S. Nuclear Energy Institute (NEI)

Q&A (20 minutes)

11:15-11:30 | Break

11:30-12:50 | Session 2 Roundtable: Global Perspectives from IFNEC Member States & Observer Organizations

IAEA's SMR Platform (10 minutes)

- Dr. Dohee Hahn, SMR Platform Coordinator, International Atomic Energy Agency

Country and Organization-led Insights into Progress, Priorities, and Collaboration on Advanced Reactors (70 minutes)

- Republic of Argentina: Dr. Ariel Hosid
- Republic of France: Dr. Sunil Felix
- Republic of Ghana: Dr. Archibold Buah-Kwofie
- Japan: Dr. Toru Nakatsuka
- Malaysia: Mr. Kamarul Ariffin Bin Mohamad
- Republic of Korea: Dr. Sungjai Lee
- Republic of Lithuania: Mr. Renatas Sumskis
- Republic of Moldova: Ms. Doina Dînga
- Republic of Singapore: Ms. Juliana Wai Yin Chow
- United Kingdom: Mr. Sam Oakley
- ENEC: Ms. Slama Bakheet Almansoori

*5 minutes per country

12:50-14:00 | Working Lunch – Collaboration Discussions

14:00-14:35 | Keynote Address

Keynote Address on the Importance of Local Community Engagement (20 minutes)

- Hon. Rebecca Noah Casper, Mayor, City of Idaho Falls, Idaho, United States of America

Q&A (15 minutes)

14:35-15:30 | Session 3 Panel: Regulatory Readiness

Keynote (15 minutes)

- Hon. Jorge Molina, Minister Secretary, Radiological and Nuclear Regulatory Authority (ARRN), Republic of Paraguay

Moderator

- Dr. Jennifer Gordon, Director, Nuclear Energy Policy Initiative, Atlantic Council

Panelists (40 minutes)

- Mr. Hung-Chih Lai, Senior Technical Specialist, Nuclear Safety Commission, Taiwan
- Mr. Oscar Fidel Portillo Aguilar, Radiation Protection Analyst, National Agency for the Implementation of Nuclear Energy Programme, Republic of El Salvador
- Mr. Scott Ferrara, Deputy Division Director Regulatory Research and Plant Optimization, DOE National Technical Area Lead

15:30-15:45 | Break

15:45-17:00 | Session 4 Panel: Supply Chain, Fuel Cycle & Waste Solutions

Keynote on MARVEL Microreactor Overview (15 minutes)

- Dr. Abdalla Abou Joude, MARVEL Microreactor Lead, U.S. Idaho National Laboratory

Moderator

- Mr. Marcus Nichol, Executive Director, U.S. Nuclear Energy Institute (NEI)

Panelists (40 minutes)

- Dr. Sunil Felix, Nuclear Counselor, Embassy of France in the U.S., Republic of France
- Dr. Toru Nakatsuka, Director of Washington Office, Japan Atomic Energy Agency, Japan
- Mr. Sam Oakley, Head of Multilateral Civil Nuclear, Department for Energy Security & Net Zero, United Kingdom
- Dr. Dohee Hahn, SMR Platform Coordinator, International Atomic Energy Agency (IAEA)

Q&A (20 minutes)

17:00 | Meeting Adjourned for Day 2

17:10 | Depart for Hampton Inn and Hilton Garden Inn

DAY 3: Wednesday, October 8th, 2025

ADVANCED REACTORS WORKSHOP - ACCELERATING GLOBAL READINESS

8:30 | Bus arrival at the Hampton Inn and Hilton Garden Inn

8:45 | Bus departure from the Hampton Inn and Hilton Garden Inn
Note: Kindly make sure to arrive punctually at the bus pick-up location.

9:00-9:15 | Coffee and Arrival

9:15-11:05 | Session 5 Moderated Group Discussion: Building the Workforce of Tomorrow

Keynote - Ghana's Regional Energy Training Center (RETC) Efforts on Workforce Capacity Building (10 minutes)

- Dr. Archibold Buah-Kwofie, Director, Nuclear Power Institute, Ghana Atomic Energy Commission, Republic of Ghana

Moderator

- Dr. Jennifer Gordon, Director, Nuclear Energy Policy Initiative, Atlantic Council

Panelists (80 minutes)

- Ms. Ana Marquez, Chemical Analyst, National Agency for the Implementation of Nuclear Energy Programme, Republic of El Salvador
- Ms. Aleshia Duncan, Deputy Assistant Secretary for International Cooperation, Office of Nuclear Energy, U.S. Department of Energy
- Mr. Sam Oakley, Head of Multilateral Civil Nuclear, Department of Energy Security & Net Zero, United Kingdom
- Dr. Ariel Hosid, Nuclear Engineer, National Atomic Energy Commission, Republic of Argentina

Q&A (20 minutes)

11:05-11:30 | Break

11:30-12:55 | Session 6: Successes & Challenges in Stakeholder Engagement and Public Acceptance

Keynote (15 minutes)

- Ms. Christine King, Director of the Gateway for Acceleration in Nuclear (GAIN) initiative, U.S. Idaho National Laboratory

Kick-off Intervention

- Mr. Etornam Akaho, Programme Associate, Ghana Atomic Energy Commission, Republic of Ghana

Moderated Group Discussion (60 minutes)

- Ms. Christine King, Director of the Gateway for Acceleration in Nuclear (GAIN) initiative, U.S. Idaho National Laboratory
  ***INL Photographer scheduled from 11:30 - 12:30

13:00-14:00 | Working Lunch – Collaboration Discussions

14:00-15:00 | Session 7: Financing, Global Synergies and Market Opportunities

Keynote (20 minutes)

- Ms. Aleshia Duncan, IFNEC Chair

Moderator

- Dr. Jennifer Gordon, Director, Nuclear Energy Policy Initiative, Atlantic Council

Panelists (40 minutes)

- Mr. Marcus Nichol, Executive Director, U.S. Nuclear Energy Institute
- Dr. Eduardo Galiano Riveros, Director, Radiological and Nuclear Regulatory Authority (ARRN), Republic of Paraguay
- Dr. David Galeano, Senior Engineer, Medellin Public Utility (EPM), Republic of Colombia
- Dr. Ariel Hosid, Nuclear Engineer, National Atomic Energy Commission, Republic of Argentina

15:00-15:15 | Break

15:15-16:00 | Closing Session: Key Takeaways and Next Steps

- Ms. Aleshia Duncan, IFNEC Chair

16:00 | Meeting Adjourned for Day 3

16:10 | Depart for Hampton Inn and Hilton Garden Inn

Day 4: Thursday, October 9th, 2025

TECHNICAL TOURS AT IDAHO NATIONAL LABORATORY

9:00 | Bus departure from the Hampton Inn and Hilton Garden Inn
Note: Kindly make sure to arrive punctually at the bus pick-up location.

- Please bring your passports and travel documents.
- Taking pictures is not allowed on the INL premises.
- Laptops, cell phones, and other personal items may be left on the bus during tours. The bus will be locked/monitored by driver at all times.

ATTIRE FOR TODAY: Business casual. Long pants and closed toe, closed heel shoes required.	
Bus 1- Hilton Garden Inn, 700 Lindsay Blvd, Idaho Falls Bus 2- Hampton Inn, 645 Lindsay Blvd, Idaho Falls	
Bus 1: Shelly Norman, Christie Collier, Bonnie Hong	Bus 2: Taylor Wilhelm, Kaylee Brogan

Day 4: Thursday, October 9th, 2025

TECHNICAL TOURS AT IDAHO NATIONAL LABORATORY

TIME	Bus 1- Hilton Garden Inn	TIME	Bus 2 - Hampton Inn
8:30-9:00	Pick Up at Hilton Garden Inn	8:30-9:00	Pick Up at Hampton Inn
9:00-9:45	Travel to Materials and Fuels Complex	9:00-9:45	Travel to Materials and Fuels Complex
9:45-10:00	Ingress, walk to HFEF	9:45-10:00	Ingress, walk to IMCL
10:00-10:45	Tour Hot Fuel Examination Facility (HFEF) Fabiola Cappia; Division Director, FuelsPost- Irradiation Examinations Spencer Atkin; Senior Manager - Nuclear Remote Systems Engineering	10:00-10:45	Tour Irradiated Material Characterization Laboratory (IMCL) Dan Murray; Characterization Department Manager Nate Dice; Post-Irradiation Examination (PIE) Research Scientist
10:45-11:30	Tour Irradiated Material Characterization Laboratory (IMCL) Dan Murray; Characterization Department Manager Nate Dice; Post-Irradiation Examination (PIE) Research Scientist	10:45-11:15	DOME overview, walk to Till Conference Room Brady Orchard; Director, MFC Projects
11:30-12:00	DOME Overview Brady Orchard; Director, MFC Projects	11:15-12:00	Lunch-Materials and Fuels Complex (MFC) Overview Timothy Hyde; Director, Fuel Fabrication and Nuclear Material Management
12:00-12:15	Walk to Till Conference Room	12:00-12:15	Egress, load bus
12:15-1:00	Lunch-Materials and Fuels Complex (MFC) Overview Timothy Hyde; Director, Fuel Fabrication and Nuclear Material Management	12:15-12:45	Travel to Advanced Test Reactor Complex

Day 4: Thursday, October 9th, 2025

TECHNICAL TOURS AT IDAHO NATIONAL LABORATORY

TIME	Bus 1- Hilton Garden Inn	TIME	Bus 2 - Hampton Inn
1:00-1:15	Egress, load bus	12:45-1:00	Ingress, split into 2 groups, walk to first location
1:15-1:45	Travel to Advanced Test Reactor Complex	1:00-1:30	Group 1: ATR Overview, Conference room 145/146, Joe Campbell; Communications Specialist Group 2: Reactor Tour Kevan Weaver; ATR Chief Technology Officer
1:45-2:00	Ingress, split into 2 groups, walk to first location	1:30-2:00	Group 1: Reactor Tour Kevan Weaver; ATR Chief Technology Officer Group 2: ATR Overview Conference room 145/146 Joe Campbell; Communications Specialist
2:00-2:30	Group 1: ATR Overview, Conference room 145/146 Joe Campbell; Communications Specialist Group 2: Reactor Tour Kevan Weaver; ATR Chief Technology Officer	2:00-2:30	Egress, travel to MFC
2:30-3:00	Group 1: Reactor Tour Kevan Weaver; ATR Chief Technology Officer Group 2: ATR Overview Conference room 145/146 Joe Campbell; Communications Specialist	2:30-2:45	Ingress, walk to HFEF
3:00-3:15	Egress, load bus	2:45-3:30	Tour Hot Fuel Examination Facility (HFEF) Fabiola Cappia; Division Director, FuelsPost- Irradiation Examinations Spencer Atkin; Senior Manager - Nuclear Remote Systems Engineering
3:15-4:15	Return to Hilton Garden Inn, 700 Lindsay Blvd	3:30-4:15	Return Hampton Inn, 645 Lindsay Blvd.
4:15	Conclude	4:15	Conclude

Additional Visit Information (1/2)

Energy Innovation Laboratory (EIL)	The Energy Innovation Laboratory (EIL) at Idaho National Laboratory is a 148,000-square-foot facility that supports advanced clean energy and environmental science research.
Human Systems Simulation Laboratory (HSSL)	The Human Systems Simulation Laboratory (HSSL) studies how humans interact with technology, utilizing digital control screens to mimic a nuclear control room.
Measurement System Laboratory (MSL)	The High Temperature Test Laboratory (HTTL) develops instrumentation capable of functioning inside a nuclear reactor while it's running. This facility advances real-time monitoring and diagnostic technologies for high-temperature environments.
Experimental Breeder Reactor-I (EBR-I)	The Experimental Breeder Reactor-I (EBR-I) is a historic reactor that was the world's first to produce usable amounts of electricity from nuclear energy. Now a museum, it serves as an educational resource and a reminder of the origins of nuclear power.
Advanced Test Reactor Complex	The Advanced Test Reactor (ATR) Complex at Idaho National Laboratory includes multiple specialized buildings and areas dedicated to the Advanced Test Reactor. ATR supports high-flux neutron irradiation, essential for studying the effects of radiation on reactor materials and fuels
Advanced Test Reactor (ATR)	The Advanced Test Reactor (ATR) is a one-of-a-kind research reactor that provides large-volume, high-flux thermal neutron irradiation. It plays a critical role in extending the life of current nuclear power plants and developing future reactor designs.
Materials and Fuels Complex (MFC)	The Materials and Fuels Complex (MFC) at Idaho National Laboratory is a premier facility for nuclear materials research, including post-irradiation examinations, fuel fabrication, and advanced characterization of irradiated fuels and materials
Hot Fuel Examination Facility (HFEF)	The Hot Fuel Examination Facility (HFEF) conducts detailed nondestructive and destructive examinations of highly irradiated nuclear fuels and materials. It is the largest Inert hot cell in the world.

Additional Visit Information (2/2)

Sample Preparation Laboratory (SPL)	The Sample Preparation Laboratory (SPL) will provide sample preparation, mechanical testing, and structural analysis for nuclear materials research. SPL began construction in 2020.
Demonstration of Microreactor Experiments (DOME)	Demonstration of Microreactor Experiments (DOME) will be a testbed for Advanced Microreactor Experiments up to 20MW thermal power. The fueled experiments will be installed in the DOME through a large loading zone that can accept trailer-mounted containers. DOME is expected to be ready for testing in 2026.
Energy Systems Laboratory (ESL)	The Energy Systems Laboratory (ESL) is a 91,000-square-foot facility focused on integrated energy systems, energy storage, electric transportation, hydrogen production, biomass conversion, and microgrid projects.
Real-Time Power and Energy Systems	Real-Time Power and Energy Systems highlight grid resiliency projects, including the establishment of commercial microgrids that can operate independently from the larger grid, ensuring continued operation during emergencies.
Microgrid Test Bed	The Microgrid Test Bed explores ways to enhance grid flexibility and resilience by integrating supplementary microgrids, protecting against disruptions such as natural disasters and cyberattacks.
Hydrogen Production	Idaho National Laboratory's Hydrogen Production efforts focus on producing clean hydrogen by separating steam molecules generated by nuclear plants, providing a crucial energy source for a carbon-free future.
Battery Testing Center	The Battery Testing Center at Idaho National Laboratory tests over 200 batteries, ranging from small cells to full-sized battery packs used in light-duty vehicles, to advance energy storage technologies.