

*The west room in FASB contains processing areas, work control areas, offices and a characterization area under the mezzanine, as well as the new Irradiation-Assisted Stress Corrosion Cracking hot cells.*



## Fuels and Applied Science Building

The Fuels and Applied Science Building (FASB) is a radiological facility that houses small hot cells, gloveboxes, hoods, and other equipment that supports nuclear energy research and development. This equipment complements a host of capabilities within the Materials and Fuels Complex at Idaho National Laboratory, the nation's lead nuclear energy research lab. FASB provides the resources needed to support research and development related to low-enrichment nuclear fuel as an alternative for research reactors, used fuel treatment options, nuclear waste management and other scientific activities.

The FASB west room contains inert atmosphere gloveboxes used for developing low-enrichment fuels, treating waste from glovebox operations, working with corrosive materials, and testing equipment that will be used in other facilities. The most recent addition is the

*Continued next page*



*The recently added Irradiation-Assisted Stress Corrosion Cracking hot cell supports several program customers through the Advanced Test Reactor National Scientific User Facility.*

*The Energy of Innovation*



**For more information**

**Joseph Campbell**  
 (208) 526-7785  
 joseph.campbell@inl.gov

**A U.S. Department of Energy  
 National Laboratory**



*In addition the Gamma Irradiation Test Loop shown here, FASB contains inert atmosphere gloveboxes used for fuel development, treating waste from other glovebox operations, and testing equipment that will be used in other facilities.*

*Continued from previous page*

Irradiation-Assisted Stress Corrosion Cracking hot cell. This addition supports several program customers through the Department of Energy’s Advanced Test Reactor National Scientific User Facility and adds an important materials science capability to INL’s existing array of unmatched nuclear energy research infrastructure.

The east room contains processing areas, work control areas, offices and a characterization area under the mezzanine.

**Key Capabilities**

- Irradiation-Assisted Stress Corrosion Cracking hot cell
- 4 inert atmosphere gloveboxes: East Development Glovebox,

- West Development Glovebox, Large and Small High-Performance Research Reactors Gloveboxes
- 5 radiological hoods
- Thermal characterization instruments (laser flash, dilatometer, differential scanning calorimeter)
- Hot isostatic press



*FASB houses small hot cells, gloveboxes, hoods, and other equipment that supplement the post-irradiation examination, and fabrication and other nuclear energy research capabilities at the Materials and Fuels Complex.*