Pacific Northwest
NATIONAL LABORATORY

Nuclear, Chemical, and Biological Technologies Division

At Pacific Northwest National Laboratory, the Nuclear, Chemical, and Biological Technologies (NCBT) Division integrates fundamental science, research and development, and operational strategies to counter emerging national security threats.

Within the National Security Directorate, the NCBT Division creates materials, methods, and technologies essential for detecting and mitigating potential threats and delivering effective solutions necessary for complex national security challenges. Projects span the detection of explosives and biological threats, chemical and nuclear forensics, and the management of special nuclear materials.

U.S. DEPARTMENT of ENERGY

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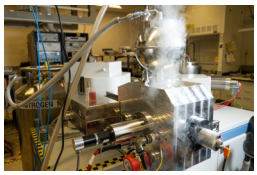
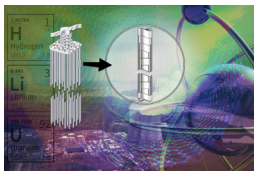
Supporting Key National Security Missions

We are discovering signatures and understanding threats by creating materials, methods, and technologies to detect and analyze them.



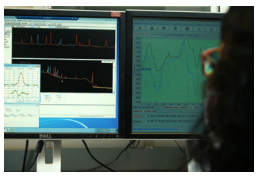
Radio and Analytical Chemistry

Establishing a nexus for chemistry and radiological materials that support important national security missions to prevent and counter acts of terrorism and the proliferation of weapons of mass effect.



Nuclear Engineering and Materials Analysis

Investing in the expansion and enhancement of our capabilities in nuclear and material technologies.



Nuclear Signatures and Nonproliferation

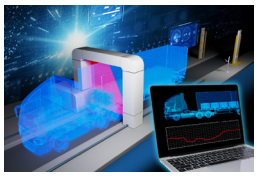
Advancing the understanding of nuclear signatures and developing new approaches to prevent the spread of nuclear weapons and related technologies.

Pathogen Biology and Biochemistry

Developing innovative strategies to combat emerging and persistent biological and chemical threats by studying host-pathogen interactions, threat-agnostic signatures, and host-based countermeasures.

Applied Radiation Detection and Imaging

Leading the development and deployment of radiation-interdiction and safeguard systems, technologies, and strategies worldwide.

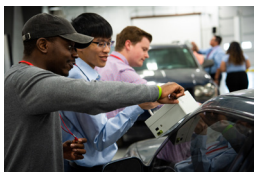


Threat Detection and Interdiction Testing and Evaluation

Leading the evaluation of complex detection systems for national and international security.

CBRNE Forensics

Providing world-leading research, technology, and operations expertise for chemical, biological, radiological, nuclear, and explosives (CBRNE) detection and forensics.



STEM Leadership Development for Mission Alignment

Committing to train, support, and inspire a diverse cadre of scientists, engineers, and other future leaders in national security, specifically in the areas of science, technology, engineering, and mathematics (STEM).

FOR MORE INFORMATION: www.pnnl.gov/nuclear-chemical-and-biological-technologies