Pacific Northwest
NATIONAL LABORATORY

PHYSICAL & COMPUTATIONAL SCIENCES

Pacific Northwest National Laboratory (PNNL) leads major research programs in chemistry and materials science, high performance and data-intensive computing, isotope sciences, and nuclear and particle physics. Our research is advancing the frontiers of knowledge and laying foundations for new technologies supporting the Department of Energy missions in science, energy, environment, and national security.

ADVANCED COMPUTING, MATHEMATICS & DATA

- Computational Mathematics and Statistics
- Data Analytics and Machine Reasoning
- Graph and Visual Analytics
- High-Performance Computing
- Software Engineering
- Computer Architectures

PHYSICAL SCIENCES

- Catalysis
- Chemical Physics
- Precision Materials by Design
- Materials in Extreme Environments
- Dark Matter Detection
- Neutrino Physics

PNNL BY THE NUMBERS (2024 DATA)

6,088
Number of Staff

1,980
Peer-Reviewed Publications

75
U.S. and Foreign Patents

Scientific Discovery. Global Impact.

Learn more: **pnnl.gov**

PNNL is pushing the frontiers of knowledge and taking on some of the world's greatest science and technology challenges in support of the Department of Energy's (DOE's) Office of Science.

CHEMISTRY & MATERIALS SCIENCES

Our expertise in chemical sciences covers catalysis, chemical physics, geochemistry, and separations. We focus our efforts on advancing the molecular-level understanding of complex, multi-phase systems.

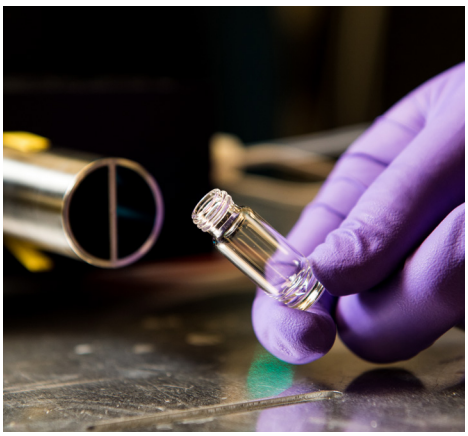
Our strengths in materials sciences include atomically precise synthesis and in situ characterization of nanomaterials, quantum materials, hierarchical materials, and materials for energy storage.

ADVANCED COMPUTING & DATA SCIENCES

PNNL applies fundamental computer science and mathematics to understand the constraints of emerging computing technologies, such as quantum information systems, and to drive the design of innovative computing solutions.

Our researchers are designing next generation data analysis and visualization tools, developing artificial intelligence and machine reasoning algorithms, and optimizing system performance and energy efficiency.

ISOTOPE PROGRAM



PNNL receives funding from the DOE Isotope Research & Development and Production Program to produce stable isotopes and radioisotopes.

The Isotope Program at PNNL supports scientific advances in the production and use of radioisotopes for research, medicine, and industrial applications.

PNNL BY THE NUMBERS (2024 DATA)

1
R&D 100 and Federal Lab Consortium Awards

$1.495B
Annual Budget

1,870+
Active Science and Technology Projects