

The Department of Energy National Labs

























SLAC NATIONAL ACCELERATOR



Jefferson Lab





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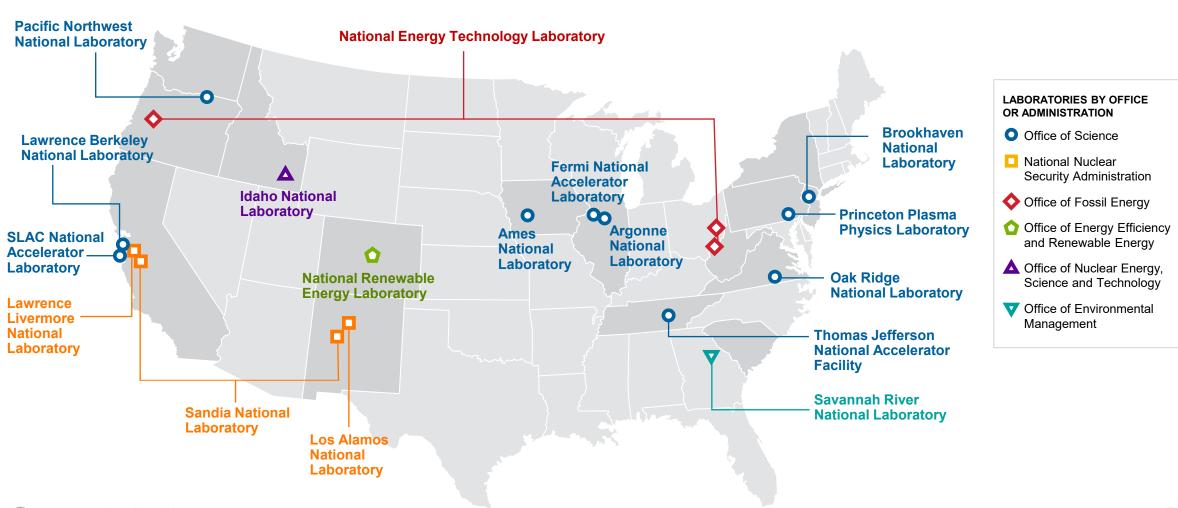
Physicist

Chemical Sciences and Engineering Division

September 4, 2025

U.S. DEPARTMENT OF ENERGY NATIONAL LABORATORIES







TYPES OF DOE NATIONAL LABORATORIES

Multipurpose Science Laboratories are home to unique research programs, core capabilities, and facilities that are key to multidisciplinary, crosscutting science.

Single-Program Science Laboratories focus on discoveries in fundamental science and the forces in the universe.

Energy Technology Laboratories enhance DOE's energy mission and develop technologies that focus on different aspects of an "all-of-the-above" energy mission.

Multipurpose Security Laboratories are key to the nuclear security mission and principally work in classified space supporting the protection of the country through cutting-edge science and engineering.

The Multipurpose Environmental Laboratory focuses on the environmental management and long-term stewardship missions of the Department.





NATIONAL LABORATORY CORE CAPABILITY CATEGORIES

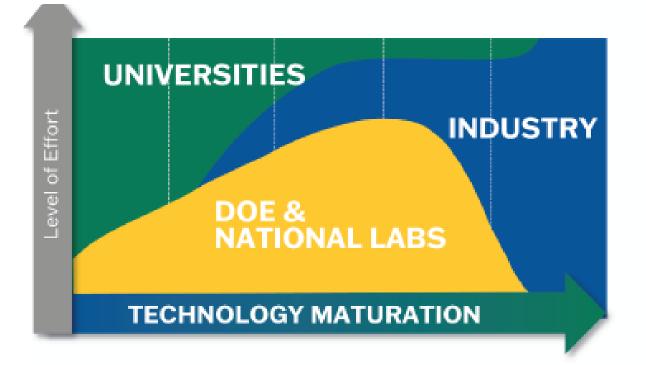
- Accelerator S&T
- Advanced Computer Science, Visualization, and Data
- Applied Materials Science and Engineering
- Applied Mathematics
- Biological and Bioprocess Engineering
- Biological Systems Science
- Chemical and Molecular Science
- Chemical Engineering
- Climate Science and Atmospheric Science
- Computational Science
- Condensed Matter Physics and Materials Science
- Cyber and Information Sciences
- Decision Science and Analysis
- Earth Systems Science and Engineering

- Electrical & Mechanical Design & Engineering
- Environmental Subsurface Science
- Large-Scale User Facilities/Advanced Instrumentation
- Materials Science, Engineering & Advanced Manufacturing
- Materials & Component Prototyping, Manufacturing,
 Production & Integration
- Mechanical Design and Engineering
- Nuclear and Radiochemistry
- Nuclear Physics, Nuclear Chemistry & Nuclear Engineering
- Particle Physics
- Plasma and Fusion Energy Science
- Power Systems and Electrical Engineering
- Systems Engineering and Integration
- Weapons Systems Design, Engineering, Integration & Testing





WHERE DO THE LABS LIE IN THE INNOVATION SYSTEM



System performance

confirmed at pilot-scale

COMMERCIALIZATION

Technology available for large-scale market use

DEMONSTRATION System demonstrated

in operational environment

DEVELOPMENT

Technology component validated/integrated

DISCOVERY

Concept identified/proven at laboratory-scale





FACTS, FIGURES, MISCONCEPTIONS

- The national laboratories have more than 65,000 employees consisting of includes a mix of scientists, engineers, and support staff.
- The vast majority of lab employees are NOT government employees. All but one lab are "GOCOs" - government owned, contractor operated. The employees at GOCO labs are contractor employees. Only employees at the National Energy Technology Lab (NETL) are government employees.
- The labs employs many foreign nationals. Foreign nationals account for 27% of Argonne's workforce. Foreign nationals are eligible to work on many projects and programs; however, there are exceptions which require either U.S. citizenship or have restrictions on which foreign nationalities are eligible. Check with the Lab(s) that you are interested in applying.
- The labs must compete for funding.



Ted Krause – My Career Path at Argonne

Education

- BS Chemistry and Physics, Ursinus College (1980)
- PhD Chemical Engineering, U. of Delaware (1987)

Work (all Argonne)

- Post-doctoral Appointee Fluid Catalysis Group (1986-1989)
- Staff Engineer Environmental Management Group (1989-1996)
- Staff Engineer Fuel Cell and Hydrogen Group (1996-1998)
- Group Leader Fuel Cell and Hydrogen Group (1998-2006)
- Department Head Basic Energy Sciences Group (2006-2007)
- Theme Leader Catalysis and Energy Conversion (2007-Present)
- Hydrogen and Fuel Cell Laboratory Program Manager (2012-Present)

