Big Science. Big Opportunities.

POSTDOCTORAL PROGRAM

Launch an Exciting Career in Science and Engineering

For more than 75 years, Oak Ridge National Laboratory has helped shape our world with discoveries in neutron science, high-performance computing, advanced materials, biology and environmental science, nuclear science and isotopes, and national security. ORNL offers dedicated mentors, world-leading scientific resources, and professional development opportunities to well-qualified PhD students and outstanding early-career scientists or engineers.

$2.4B FY20 funding

5,500+ employees

1,000+ visiting scientists in FY20

60+ nationalities represented in ORNL's workforce

2 Nobel Prizes

Contributed to the discovery of **11** elements, including #117, tennessine

818 US patents issued since 2007

2,200+ FY20 scientific journal publications

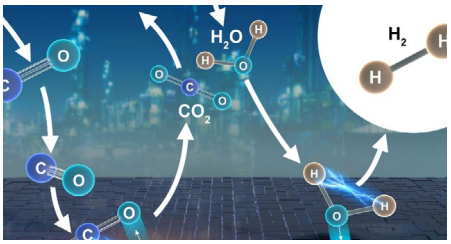
OAK RIDGE National Laboratory

Apply at www.ornl.gov/postdoc

U.S. DEPARTMENT OF ENERGY

Solve Big Problems with International Impact

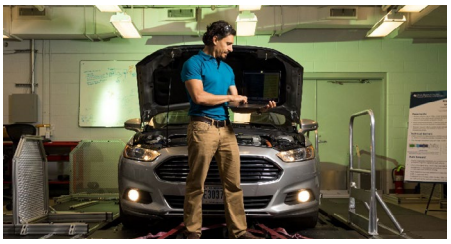
As a postdoctoral researcher at ORNL, you will have the opportunity to work with and be mentored by world-class scientists and engineers. You will work to solve today's tough scientific and engineering challenges, with international impact.



Advanced Materials: ORNL and university collaborators used neutron scattering and other advanced characterization techniques to study how a widely used catalyst enables the water–gas shift reaction to purify and generate hydrogen at an industrial scale.

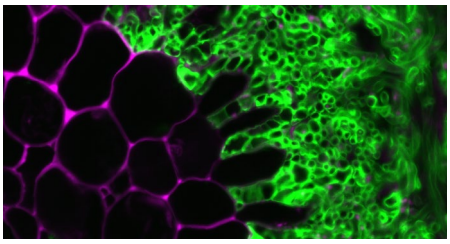
Clean Energy: ORNL and Gate Precast demonstrated that 3D-printed molds are more durable than traditional ones in producing precast concrete façades for a 42-story building at the Domino Sugar Factory site in New York.

Nuclear Science: ORNL has developed MiniFuel, a miniature irradiation vehicle for rapid nuclear fuel experiments. Conventional fuel test pellets have volumes more than 1,000 times the size of MiniFuel's pinhead-size fuel kernels.



National Security: Using ORNL's Vehicle Security Lab, researchers are pioneering a set of algorithms and technology that will detect a cyberattack on a moving vehicle and alert the driver.

Neutron Science: Using the Spallation Neutron Source, ORNL researchers observed crystalline ice phases, enabling them to challenge previous theories about super-cooled water and noncrystalline ice and promote better understanding of various ice phases found in space.

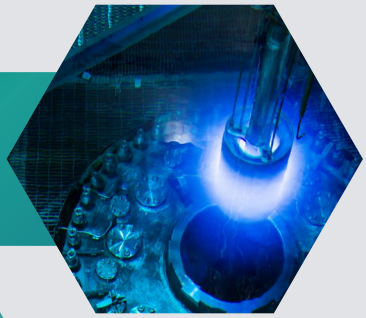


Supercomputing: Using ORNL's Summit supercomputer, scientists uncovered the specific gene that controls an important symbiotic relationship between plants and soil fungi. The discovery could lead to more productive, disease-resistant crops.

World-Leading Equipment and Facilities

Summit

The nation's most powerful supercomputer



Spallation Neutron Source and High Flux Isotope Reactor

Two of the world's most intense neutron sources

Manufacturing Demonstration Facility

A state-of-the-art advanced manufacturing facility where researchers can 3D-print almost anything

ORNL Postdoctoral Association

ORNL Postdoctoral Association fosters a sense of community among our postgraduate research staff; advocates for the postgraduate community with ORNL leadership; facilitates career development; and creates opportunities, such as the annual postdoc research symposium, for postdocs and scientists across the Laboratory to interact and share information.

Ideal Location

Located near the Great Smoky Mountains, ORNL's campus is just 1 hour away from the national park. Within a day's drive of all major cities on the East Coast, ORNL provides the best of both worlds: proximity to the great outdoors and urban centers with diverse cultural attractions.

The city of Oak Ridge, Tennessee, has 150 miles of shoreline for water recreation, rowing, and boating, and nearby Knoxville, Tennessee, is home to the thriving research campus of the University of Tennessee and a historic downtown known for its dining, theaters, shopping, and festivals. In addition, East Tennessee is affordable, with a cost of living over 17% lower* than the national average and no state income tax.

* bestplaces.net

Total Rewards and Amenities

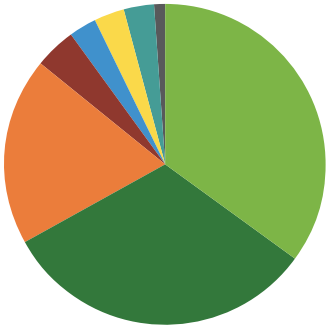
Combined with competitive salaries, ORNL offers postdocs and their families a comprehensive and valuable benefits program. ORNL also has numerous on-site amenities that make life more convenient.

- Relocation Assistance
- Medical Plan (Dental, Vision, and Health Savings Accounts)
- Flexible Working Hours
- Generous Vacation and Holidays
- Parental Leave
- Employee Assistance Program
- Wellness Programs
- Employee Discounts
- Life Insurance
- Disability Benefits
- Legal Insurance with Identity Theft Protection
- Bank
- Coffee Shop
- Cafeteria
- Gym
- Exercise Classes
- On-Site General Medical Clinic
- Walking Trails

ORNL is a sustaining member of the National Postdoctoral Association (NPA), which entitles our postdocs to individual NPA membership. For more information, visit nationalpostdoc.org.

Success After ORNL*

Postdoctoral researchers from ORNL are highly sought after by government institutions, industry, academia, and nonprofits. Postdocs from ORNL have been hired by:



- Industry 35%
- University or Research Institution 32%
- ORNL 19%
- State and Local Government 4%
- DOE National Labs 3%
- Federal Government 3%
- Self-employed 3%
- Other 1%

Upon completion of their postdoctoral appointment, over

98%

of ORNL postdocs find paid employment.

80%

earn more than

$75,000

a year, while only 50% of other postdocs in the United States earn as much.

* based on a survey by Oak Ridge Associated Universities

"I enjoy working at ORNL because it is culturally diverse and located in a beautiful and affordable area with lots to do—and because I have the opportunity to learn from and collaborate with leading scientists and visiting researchers from around the world. Nowhere else could I spend my day shooting lasers and x-rays at uranium materials to gain new insights and solve challenging problems related to its fundamental chemistry while being exposed to new science, fresh ideas, and potential connections for my next career step."

—Tyler Spano, Postdoctoral Researcher

"The world of high-performance computing moves incredibly fast, but as a postdoc at the Oak Ridge Leadership Computing Facility, I am at the cutting edge. Not only do I have access to Summit, the fastest supercomputer in the nation, I also work with a team of expert scientists who are already looking forward to research challenges that can only be met with next-generation exascale supercomputers. As an early-career researcher, I cannot think of a better place to learn from industry leaders and to develop my skills as a computational scientist."

—Justin Gage Lietz, Postdoctoral Researcher

"My work as a postdoc at SNS allowed me to apply powerful neutron techniques to study battery materials. This invaluable experience enhanced my skill set and really allowed me to find a job in industry, where I could apply my knowledge to solve real-world problems."

—Bohang Song, Solid State Synthesis Team Leader, BASF Corporation

Find your **Big Science Opportunity** with a postdoctoral appointment at ORNL!

Apply at www.ornl.gov/postdoc

Questions? Contact recruiting@ornl.gov

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January 2021

OAK RIDGE National Laboratory

ORNL is an equal opportunity employer. All qualified candidates, including individuals with disabilities and protected veterans, are encouraged to apply. ORNL is an E-Verify employer.

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