NETL Internship Programs

At The U.S. Department Of Energy's — NATIONAL ENERGY TECHNOLOGY LABORATORY

Where will your path take you?



Discover your full potential. Put yourself on the path to a bright future.



www.netl.doe.gov/education/internships

ABOUT NETL

NETL is a dynamic national laboratory that produces cutting-edge technologies that are respected around the world. Its Pittsburgh, Pennsylvania; Morgantown, West Virginia; and Albany, Oregon; technical sites are uniquely vibrant places for people to connect, learn, and become inspired. Our research is focused on the use of fossil fuels to economically power our nation's homes, industries, businesses, and transportation with responsible stewardship of the environment and enhancement of America's energy dominance.

The Lab's Core Competencies

Why choose NETL?

· Access to world class

- Computational Science & Engineering
- Materials Engineering & Manufacturing
- Geological & Environmental Systems
- Energy Conversion Engineering
- Systems Engineering & Analysis
- Program Execution & Integration

- researchers & scientists
- Use one-of-a-kind equipment & facilities
- Collaborate with subject matter experts
- Author/co-author papers, presentations, & other publication materials
- Attend/present at conferences & workshops
- Connect with other professionals in your field

INNOVATION AT THE LAB



Rare Earth Elements

Development of an economically competitive domestic supply of REEs will help to maintain our nation's economic growth and national security.



High Performance Materials

Scientists research material solutions to enable efficient and effective power cycles and resource recovery. New alloys are created in the Alloy Fabrication Lab that are suited to a variety of applications, from gas turbines to medical stents.



Radio Chemical Simulation

Modular and flexible reactors in the Reaction Analysis and Chemical Transformation (ReACT) Facility allow researchers to study a variety of reactions for energy conversion.



Innovative Energy Concepts

Researchers in the Hybrid Performance (HYPER) Lab focus on hybrid systems that pair fuel cells with gas turbines for more efficient power generation.

Geological & Environmental Analysis

Researchers quantify and develop technologies that can reduce the environmental risks of ultra-deepwater oil and gas development, including research to improve the competency of casing cement jobs.

Multiphase Flow Analysis

The Multiphase Flow Science research program is a strategic combination of computational and physical models of reacting multiphase flows whose purpose is to provide these validated sciencebased modeling tools.

High Performance Computing

Researchers apply analysis and visualization tools to gain scientific insight into complex data sets from experiments and simulations conducted in support of fossil energy technology development.

Solid Oxide Fuel Cells

Researchers work to enhance the reliability and the robustness of the SOFC systems through the development and demonstration of MW-class natural-gasbased systems while exploiting their marketability in distributed generation applications.









THE PARTICIPANT EXPERIENCE



"I want to work in the future with the Department of Energy and this experience will help me accomplish this goal. As an engineer, I want to focus on the development of technologies for energy production that takes into consideration the welfare of the environment and society, while helping solve current problems in our power grid."

- Michelle Soto, Consortium for Integrating Energy Systems in Engineering and Science Education and former Mickey Leland Energy Fellowship participant "Because of my multiple experiences at NETL, I 100% recommend getting involved with the programs offered by the Internship Program. Excellent opportunities like this are limited and need be taken when they are presented to us. The benefits are endless, and you will learn while you have fun in the field you most enjoy."

- Jose Colon-Rodriguez, Oak Ridge Institute for Science and Education and former Consortium for Integrating Energy Systems in Engineering and Science Education participant "My internship was a unique opportunity to bridge the gap between classroom instruction and real-life experience... I am keen on learning the various and novel ways we are addressing the current energy crisis."

- Kaylen Ocampo, Mickey Leland Energy Fellowship participant



"My Research Associate experience at NETL was greater than I had ever expected. I learned so much in the lab as well as strengthening my professional skills. I didn't just gain a mentor for the summer, I gained a mentor for life."

- Catherine Spencer, Mickey Leland Energy Fellowship participant

"I chose NETL because of its cuttingedge research in fossil energy and its broader national and global impact on the scientific community. NETL provided me access to brilliant researchers who have broadened my perspective, laboratory instruments, and hands-on research experience. Gaining this hands-on research experience has made me a better chemist and materials researcher."

- James Egbu, Oak Ridge Institute for Science and Education and former Mickey Leland Energy Fellowship participant



MENTORS GUIDING YOUR PATH



"Mentoring people who are eager to learn is certainly a rewarding experience. But, mentoring people with the drive to explore new ideas and concepts with a goal of improving the nation's energy future is a particularly enriching experience. I feel an urgency and responsibility to engage students because if they are not engaged in energy research at the beginning of their careers, the future will be bleak indeed."

- David Tucker, PhD, Thermal Sciences NETL Mentor



"The NETL Internship Program allowed me to expand the skills I learned in graduate school and apply them to a new technology that further extended my education and training. Ultimately, my experience provided me with the valuable knowledge and skills needed to launch my professional research career."

- Kirk Gerdes, PhD, Science & Technology Strategic Plans & Programs Former Internship Program participant

"I feel it is my duty to engage in STEM education. Not only does being an NETL mentor allow me to grow as an individual, but it is also so rewarding to encourage the next generation of scientists."

- Circe Verba, PhD, Geo-Analysis & Monitoring NETL Mentor and former Internship Program participant



"I think it's really important for people in STEM to have mentors. In a lot of science and technology types of careers you don't work alone. You learn from what other people have done, you build from other people's ideas, you work in a team. Mentoring is an important part of that."

- Natalie Pekney, PhD, Geo-Analysis & Monitoring NETL Mentor and Former Internship Program participant



CHOOSE YOUR PATH

NETL INTERNSHIP PROGRAMS

Professional Internship Program (PIP)

Eligibility: Be an undergraduate or graduate student in good standing at a regionally accredited college/ university, or a postbaccalaureate within two years of graduation; have an overall minimum GPA of 2.5/4.0; and be at least 18 years old at the time of appointment.

Benefits: Weekly stipend; limited travel assistance

Postgraduate Research Program (PGRP)

Eligibility: Be a graduate who received their master's degree within the last three years or received their doctorate within the last five years.

Benefits: Monthly stipend based on degree level; limited travel/moving assistance; limited stipend supplement for medical insurance

Faculty Research Program (FRP)

Eligibility: Be a full-time regular permanent faculty member at an accredited college/university with a research interest in NETL core R&D areas.

Benefits: Monthly stipend based on base academic salary; limited travel assistance

TAKE THE NEXT STEP FORWARD



FOR MORE INFORMATION VISIT www.netl.doe.gov/education/internships







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