

NETL STEM EDUCATION AND OUTREACH



NETL

NATIONAL ENERGY TECHNOLOGY LABORATORY

BACKGROUND

The U.S. Department of Energy's (DOE) mission is to ensure America's security and prosperity by addressing its energy, environmental and nuclear challenges through transformative science and technology solutions. Ensuring a future workforce that is well-trained in science, technology, engineering and mathematics (STEM) is a core value of DOE and central to the Department's current and future mission. NETL supports this effort in many ways, including implementation of a robust STEM Education and Outreach program.

PROGRAM OVERVIEW

NETL's STEM Education and Outreach program supports DOE's efforts to improve energy literacy and train the next generation of American scientists, engineers and energy researchers. The initiative sparks interest in and increases the public's awareness of science, technology, engineering and mathematics (STEM) education. The program engages students, the interested public, program volunteers, and faculty and staff at regional higher education institutions.

NETL STEM EDUCATION AND OUTREACH ACTIVITIES

NETL's STEM Ambassador Program enables students to meet and interact with NETL scientists and engineers during visits to regional schools and local STEM events. The program shows students the multiple, dynamic pathways to STEM occupations and careers.

NETL's STEM Education and Outreach Team plans and executes the Western Pennsylvania and West Virginia Regional Middle and High School Science Bowl Competitions.

- The Science Bowl involves middle school and high school teams in fast-paced, 16-minute, Jeopardy-style competitions where students are tested on questions taken from a range of STEM disciplines. Teams from within each state face off until a top middle school team and a top high school team prevail.
- The top teams from each state then advance to the National Science Bowl Competition in Washington, D.C.



NETL sponsors and supports the Energy Zone Exhibit at the Carnegie Science Center, which includes the Energy Challenge game.

- The Energy Challenge is a fun, quiz-style exhibit presented in a game show format.
- Both are located on the fourth floor of the Carnegie Science Center, which attracts 1,500 students daily in peak season.
- For more information, visit: <https://carnegiesciencecenter.org/exhibits/netl-energy-zone/>





NETL is a U.S. Department of Energy national laboratory that drives innovation and delivers technological solutions for an environmentally sustainable and prosperous energy future. Through its world-class scientists, engineers and research facilities, NETL is ensuring affordable, abundant and reliable energy that drives a robust economy and national security, while developing technologies to manage carbon across the full life cycle, enabling environmental sustainability for all Americans, advancing environmental justice and revitalizing the economies of disadvantaged communities.

Leveraging the power of workforce inclusivity and diversity, highly skilled innovators at NETL's research laboratories in Albany, Oregon; Morgantown, West Virginia; and Pittsburgh, Pennsylvania conduct a broad range of research activities that support DOE's mission to ensure America's security and prosperity by addressing its energy and environmental challenges through transformative science and technology solutions.

NETL lends its expertise toward achieving a carbon-free power sector by 2035 and a net-zero economy by 2050 while catalyzing economic revitalization, creating good-paying jobs and supporting workers in energy communities, especially hard hit coal, oil and gas, and power plant communities, across the country. One of the most rewarding aspects of NETL's research is that our innovations and our technologies have the potential to improve people's lives in meaningful ways.

Social



Contacts

Ken Mechling
STEM Education and Outreach
Kenneth.Mechling@netl.doe.gov

Kate Nielsen
Program Manager, Career Management & Education Programs
Katherine.Nielsen@netl.doe.gov