

National User Facilities play a major role in the education of the next generation of this country's scientists and innovators. The Facilities inspire young people to consider careers in science and engineering. Laboratories support educational programs for students in grades K-12, host hands-on workshops for teachers and college educators, and provide research programs for high school and college-level students.

STEM EDUCATION at National User Facilities

National High Magnetic Field Laboratory



Education and Outreach

The lab is deeply committed to educating the next generation of American scientists. Through its Center for Integrating Research & Learning, the lab supports educational programming at all academic levels: K-12, technical, undergraduate, graduate and postdoctoral. 10,000 students are reached annually through classroom outreach.

Molecular Foundry



Nanoscience Workshop for Science Educators

Local teachers and community college educators visit the Molecular Foundry for a daylong workshop designed to bring nanoscience breakthroughs to physics, chemistry and math classrooms. The teachers discuss the role this emerging field has in computation, electronics, living systems and next-generation solar cells. Each participant receives science kits to take back to their classroom.

Thomas Jefferson National Accelerator Facility



Hands-on Learning

Jefferson Lab has a robust science education program that provides benefits to students and teachers. Hundreds of students work and conduct research at the lab each year. Approximately one-third of all nuclear physics Ph.D.s awarded in the United States are based on research performed at Jefferson Lab.

Advanced Test Reactor National Scientific User Facility



Unique Student Experience

Advancing the knowledge of the structural materials used in current and future nuclear reactors and nuclear waste storage is the goal of this University of Wisconsin-Madison (UW) project. The project team, comprised mainly of student researchers, is working to determine how a wide range of materials respond to radiation. According to one of the team's researchers, UW student Alicia Certain, "the ATR NSUF provides access to materials that have been exposed to an authentic reactor environment. This kind of opportunity is unique to the ATR NSUF."

Omega Laser Facility



Science Education

The Laboratory conducts a comprehensive science education program on several levels. LLE holds workshops and summer schools on high-energy-density science. Some 80 graduate and 30 undergraduate students are actively participating in laboratory research programs. A highly competitive high-school student program enables 16 high school juniors to conduct independent research programs. More than 280 high school students have participated in this annual LLE program and 10% of these attained finalist or semifinalist status at the Intel Science Talent Search.

Atmospheric Radiation Measurement Climate Research Facility



An Informed Public

Climate science is complex and can be a controversial topic. Through its education and outreach activities, ARM provides tools for classrooms and communities to learn more about Earth's climate system. In addition to participating in public science fairs, ARM hosts visitors at its research sites and makes available numerous resources online at education.arm.gov.

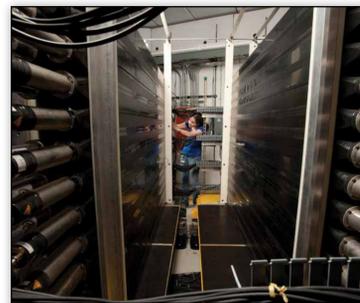
Proton Radiography at LANSCE



Building Bridges

pRad is training the next generation of national security scientists. Every year, high school, undergraduate, and graduate students, as well as postdocs, visiting scientists, and professors join the pRad team to conduct experiments. The Los Alamos Proton Radiography facility attracts new talent to research in shock physics, weapons physics, dynamic materials, and stockpile stewardship.

National Superconducting Cyclotron Laboratory



Laboratory of Learning

NSCL educates more than 125 students at any given time. NSCL produces ~10 percent of the nation's nuclear science Ph.D.s every year. The graduate program in nuclear physics at Michigan State University recently was ranked #1 in the nation by the U.S. World and News Report.