Materials Science of Actinides
Peter C. Burns (University of Notre Dame)

The Materials Science of Actinides EFRC seeks to understand and control, at the nanoscale, materials that contain actinides (radioactive heavy elements such as uranium and plutonium) to lay the scientific foundation for advanced nuclear energy systems.

RESEARCH PLAN AND DIRECTIONS

This EFRC blends experimental and computational approaches to study highly complex actinide materials (such as materials for fuels, waste forms, or separations), with an emphasis on the nanoscale. The behavior and properties of such materials in extreme environments of radiation and pressure is a major focus of this research.

an Office of Basic Energy Sciences
Energy Frontier Research Center