



Enhancing NSUF University of Florida Partner Facility Capabilities

PI: Yong Yang, University of Florida

Collaborators: Assel Aikaliyev and Nathalie Wall, University of Florida

Program: GSI

ABSTRACT:

The proposal aims to significantly enhance the capabilities of the Integrated Nuclear Fuel and Structural Materials (INFSM) research center, a partner facility of the Nuclear Science User Facilities (NSUF) at the University of Florida (UF). By revitalizing the MTS 100 kN Landmark Servohydraulic Test System for radiological work and acquiring state-of-the-art SEM/EBSD sample preparation equipment, specifically the Gatan PECS II system, the project seeks to establish capabilities for high-temperature mechanical testing of neutron-irradiated structural materials and enhance microstructural characterization. This initiative will support DOE-Nuclear Energy (NE) mission goals, address the critical national need for advanced testing facilities, and provide essential training for the next generation of nuclear engineers. Additionally, the enhancements will bolster ongoing and future research projects at UF and facilitate collaborative efforts with researchers nationwide, ultimately contributing to the development of innovative structural and fuel materials for advanced reactor systems.