# **AGEP-T Project Descriptions**

### Brookhaven National Laboratory Nuclear Science and Technology Department

## Project Title: Advanced Materials for Energy Systems

This document describes the work on materials science research including radiation damage and new materials development for nuclear applications in requesting applications from science or engineering post docs for the Stony Brook University – Brookhaven National Laboratory AGEP-T Program.

#### **Project Description**

The Nuclear Science and Technology Department at Brookhaven National Laboratory is currently soliciting applications for a Postdoctoral Research Associate to work on materials science research including radiation damage and new materials development for nuclear applications. Materials of interest include steels, zirconium alloys, ceramics and nuclear fuels. Most importantly, the successful applicant will demonstrate an ability to work independently within broadly defined research directions, and to collaborate between research areas.

#### **Qualifications of Ideal Candidate**

Post Doc: Ph.D. in nuclear engineering, materials science or applied physics. Experience in using or developing ion-beam irradiation techniques is desirable. The research involves applying synchrotron techniques including diffraction, spectroscopy and imaging for investigating radiation damage in materials. Strong analytical and computational skills are required for data analysis. Experience with other characterization techniques and microscopy (TEM, SEM and sample preparation) is highly desirable. Candidates must have good written and oral communication skills, be willing to take direction, and be able to work with others as part of a project team.

#### For More Information contact:

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