NUCLEAR MATERIALS

ACCELERATED MATERIALS EVALUATION FOR NUCLEAR APPLICATION UTILIZING TEST REACTORS, ION BEAM FACILITIES, AND INTEGRATED MODELING

The response of fuels and materials to radiation is critical to the performance of advanced nuclear systems. Key to understanding material performance in a nuclear environment is the analysis of materials irradiated using test reactors and ion beam facilities.

This symposium will focus on recent results produced from irradiation programs around the world and will cover fundamental and applied science aspects of accelerated nuclear materials testing for fission and fusion reactors. Presentations combining experiment with theory, modeling, and simulation to enhance our understanding of radiation-induced degradation in materials are especially encouraged.

Abstracts are solicited for (but not limited to) the following irradiation program topics:

- Fundamental science of radiation damage and defect processes
- · Mechanical and fracture behavior of irradiated materials
- · Current and advanced nuclear fuels
- Current and advanced structural materials
- Fluence effects in materials

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