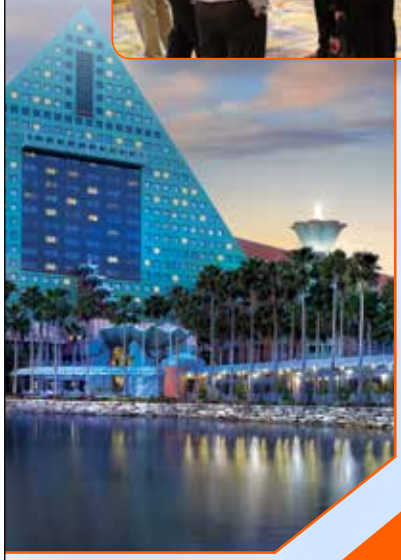
# TMS2015

**144th Annual Meeting & Exhibition**

**March 15-19, 2015 • Walt Disney World**
**Orlando, Florida, USA**

***Connecting the global minerals, metals, and materials community.***



## *Plan Now to Attend:*

### Microstructural Processes in Irradiated Materials

Radiation can produce significant degradation in the properties of materials. An understanding of the microstructural changes occurring during irradiation is critical for the development of advanced materials as well as for modeling property changes. The scope of this symposium will focus on the microstructural changes occurring in solids during ion, electron, neutron, gamma ray or x-ray irradiation. This symposium, which is the seventh in a series of symposia held every two years since 2003, is intended to bring together researchers working on different materials systems and radiation-induced phenomena so that similarities and differences in radiation effects can be compared and integrated. Materials of interest include all nuclear structural, fuel, and functional materials. Both experimental and theoretical studies are solicited with a particular emphasis on linking state-of-the-art modeling with experimental observation of materials microstructure and property evolution.

Specific topics where contributions are encouraged include:

- Defect generation, evolution, and characterization
- Radiation-induced precipitation, amorphization, and recrystallization
- In-situ studies of dislocation–radiation defect interactions
- Phase stability, segregation, and diffusion
- Radiation damage in fusion & fission reactor materials
- Mechanisms of deformation and fracture in irradiated materials
- Radiation effects simulation and evaluation techniques
- Integrated phenomena in reactor core materials
- Microstructural changes in metallic and ceramic fuels
- Advanced ODS steels, austenitic and ferritic-martensitic steels
- Refractory metals, carbon, and ceramic materials

**Sponsored by:**

- TMS Structural Materials Division
- Nuclear Materials Committee

**Organized by:**

Dane Morgan, University of Wisconsin - Madison (USA)
Thak Sang Byun, Oak Ridge National Laboratory (USA)
Yasuyoshi Nagai, Tohoku University (Japan)
Zhijie Jiao, University of Michigan (USA)
Kai Nordlund, University of Helsinki (Finland)
Ming-Jie Zheng, University of Wisconsin (USA)

**For more information on how to participate, visit:**

**www.tms.org/TMS2015**

**Questions?** Contact ***programming@tms.org***