

NUCLEAR MATERIALS MATERIALS AND CHEMISTRY FOR MOLTEN SALT SYSTEMS

The use of molten salts for molten salt reactors (MSR), concentrating solar power (CSP) systems, and energy storage offers many advantages including low operating pressures, high temperatures, and favorable heat transfer. Despite the advantages, the highly aggressive molten salts present a challenging environment for salt facing materials. Further, the high temperatures presented by these systems require exceptional mechanical properties. This symposium covers all aspects of materials science, chemistry, and electrochemistry in molten salt systems for heat transfer and energy storage.

Abstracts are solicited in the following topics:

- Corrosion of salt-facing materials
- Salt effects in graphite and moderator materials
- Fission product embrittlement
- Alloy selection and design for molten salt applications
- Interaction of fission products with materials
- Mechanical and creep properties
- Electrochemistry for corrosion analysis
- Salt chemistry effects on materials including radiolysis
- Heat exchanger design
- Welding and cladding issues
- Electrochemistry for salt property evaluation

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Abstract Deadline is July 1, 2020. Submit online at www.programmaster.org/TMS2021.

Questions? Contact programming@tms.org