



## Electrochemistry in Molten Salts

Guest Editors:

**Dr. Haiyan Zhao**

Chemical and Biological  
Engineering Department,  
University of Idaho, Moscow, ID,  
USA

**Dr. Prabhat K. Tripathy**

Pyrochemistry and Molten Salt  
Systems Department, Nuclear  
Science and Technology  
Directorate, Idaho National  
Laboratory, Idaho Falls, ID 83401,  
USA

Deadline for manuscript  
submissions:

**closed (20 October 2023)**

### Message from the Guest Editors

Molten salt-based electrochemical processes are known to be challenging and yet technologically rewarding. Specific topics include, but are not limited to, the science and technology of molten salts, the synthesis and characterization of advanced materials, electrowinning/refining/coating/deposition, sustainable manufacturing, materials recycling, electrochemistry of nuclear materials, materials compatibility, and electrolyte chemistry, as applicable to nuclear reactor technologies and used nuclear fuel reprocessing.

### Keywords

- rare earth elements and nuclear materials
- separation
- electrodeposition
- novel materials for deployment in ionic liquids and molten salt systems
- eutectic melts
- modeling and simulation in electrolytic processes
- sustainable manufacturing
- green processing

