

MATERIALS PROCESSING HIGH TEMPERATURE ELECTROCHEMISTRY IV

High-temperature electrochemical processes are known to be technically challenging and yet technologically rewarding. Over past several decades, these processes have been deployed in many capital-intensive-power-generating industries, such as nuclear, fossil-fuel and geothermal. Besides, these processes are being routinely designed to synthesize advanced engineering materials and recover critical elements from a diverse range of waste materials. A resurgent interest in the arena of advanced nuclear reactor technologies has generated fresh impetus to the development of molten salt technologies. Exciting research results in used nuclear fuel reprocessing, fossil energy conversion, reversible fuel cells, gas separation and purification, emission(s) reduction, inexpensive materials manufacturing and recycling are being increasingly reported.

The organizers feel that the time is now appropriate to hold the fourth biennial symposium, titled, "High Temperature Electrochemistry IV" in 2021 to discuss some of the recent advancements made in the field of materials electrochemistry. Topics covering all aspects of molten salt electrochemistry are being solicited. Specific topics include, but are not limited to:

- science and technology of molten salts as well as oxides
- synthesis and characterization of advanced materials
- molten salt electrowinning/refining
- materials recycling,
- performance characteristic of nuclear/structural materials in nuclear reactors and electrolyte chemistry as applicable to molten salt rector technologies and used nuclear fuel reprocessing.

ORGANIZERS

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