Energy & Environment

Advanced Magnetic Materials for Energy and Power Conversion Applications

This symposium focuses on structure, property, processing, and performance interrelationships for emerging soft magnetic materials, permanent magnets, and magnetocaloric materials; hybrid materials, such as materials that display both a magnetocaloric and elastocaloric effect; and magnetic materials for sensors and actuators. The scope includes new material compositions, advanced manufacturing methods, novel characterization approaches, and applications. We also encourage topics that focus on the economic impacts that magnetic materials have on manufacturing and adaptation of technologies and applications.

The symposium will place particular interest on emerging and established advanced manufacturing methods such as:

- additive manufacturing
- top-down and bottom-up bulk nano-manufacturing
- thermal-mechanical and thermal magnetic processing
- energy dense processing such as RF, microwave, high pressure, and high magnetic field processing
- novel magnetic materials for sensor and actuator applications and their advanced processing

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Questions?
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