Call for papers

An official publication of The Minerals, Metals & Materials Society



Publication Date: *November 2023*Manuscript Deadline: *May 1, 2023*

Additive Manufacturing for High Temperature Energy Systems: Harvesting Material Data and Modeling

Additive manufacturing (AM) techniques within energy sectors need an accelerated pace for demonstration and full adoption to market in all energy sectors. AM techniques provide a unique advantage for the energy industry due to the shortened development and fabrication times, product quality, and process repeatability. Papers are invited covering: Material data in extreme energy environments (e.g., high-temperature mechanical testing, creep, creep-fatigue, wear, irradiation behavior, material aging, oxidation, corrosion); Qualification/acceptance protocols for high-temperature energy systems; Design, process, and material modeling to support rapid qualification; Functionally graded and multi-material/multi-functional structures; Sensor applications in energy systems; Demonstration and case studies in energy industry; Non-destructive evaluation.

Detailed author instructions are available at: http://www.tms.org/AuthorTools/

Keywords for this topic: Additive Manufacturing; Advanced Materials; Computational Materials Science & Engineering; High-Temperature Materials; Nuclear Materials

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Committee Sponsor(s): Additive Manufacturing; Nuclear Materials

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