

# JOM Call for papers

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**Manuscript Deadline:** *June 1, 2024*

## ***Cutting Edge In Situ Characterization Techniques***

In situ characterization techniques are critical for precisely characterizing materials and physiochemical processes. Typical techniques are in situ thermogravimetry (TG), in situ thermal imaging (TI), in situ optical microscope (OM), in situ scanning electron microscopy (SEM), in situ transmission electron microscopy (TEM), in situ X-ray diffraction (XRD), in situ X-ray photoelectron spectroscopy (XPS), in situ near-edge X-ray absorption fine structure spectroscopy (NEXAFS), in situ X-ray tomography, in situ neutron diffraction (ND), in situ neutron depth profiling (NDP), in situ Raman spectroscopy, in situ nuclear magnetic resonance (NMR), and in situ nuclear magnetic resonance imaging (MRI). This topic covers recent advancements in the applications of cutting edge in situ characterization techniques for all aspects of minerals processing, physical and process metallurgy, and materials science and engineering.

Original research papers should be 3,000-9,000 words with up to 12 figures maximum; review papers should be 6,000-11,000 words with up to 20 figures maximum.

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

**Keywords for this topic:** In Situ Characterization; Thermogravimetry; Imaging; Microscopy; X-Ray Technology; Neutron Technology; Spectroscopy

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