

## Special Issue

# Synthesis and Characterization of Supported Catalysts

### Message from the Guest Editors

Supported catalysts exhibit superior stability, recyclability, and tunable reactivity compared to homogeneous systems, playing a pivotal role in advancing sustainable chemical processes. This Special Issue entitled "Synthesis and Characterization of Supported Catalysts" focuses on cutting-edge research in the design, preparation, and mechanistic understanding of supported catalytic materials for energy and environmental applications, bridging fundamental science with industrial scalability. The scope encompasses: novel synthetic strategies (e.g., single-atom catalysts, nanocluster deposition, and bifunctional metal-oxide composites), advanced characterization techniques (in situ/operando spectroscopy, IR, XPS, XRD), and their applications in catalytic reactions such as CH activation/functionalization of hydrocarbons, biomass conversion, electrocatalytic water splitting or CO<sub>2</sub> reduction.

Based on this, by considering the importance of supported catalysts in the field of green chemistry, efficiency, sustainability, and environment, we cordially invite you to submit original research papers or short reviews and communications for the Special Issue.

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### Guest Editors

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### Deadline for manuscript submissions

30 December 2025



## Catalysts

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