Special Issue

Design and Performance Optimization of Heterogeneous Catalysts

Message from the Guest Editors

Significant efforts have been made in the design and optimization of heterogeneous catalysts, which play a role in catalytic science. Catalytic activity, selectivity, and stability are improved by tuning the composition, morphology, particle size, and surface properties of the active components. Advanced characterization techniques and theoretical computations offer insights into surface reaction mechanisms and the behavior of catalysts under different reaction conditions.

This Special Issue aims to collect and showcase the latest research achievements in the design, activity control, and stability enhancement of heterogeneous catalysts. The expected topics include, but are not limited to, the following:

- Design and synthesis of novel heterogeneous catalysts;
- Optimization of catalytic activity, selectivity, and stability:
- Surface structure and reaction mechanism studies of catalysts;
- Applications of heterogeneous catalysts in energy conversion, environmental purification, and industrial catalysis;
- Modeling, simulation, and computational studies of catalyst performance;
- Techno-economic analysis and industrial application evaluation of heterogeneous catalysts.

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Deadline for manuscript submissions

31 March 2026



Processes

an Open Access Journal by MDPI

Impact Factor 2.8 CiteScore 5.5



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You are invited to contribute either a research article or a comprehensive review for consideration and publication in *Processes* (ISSN 2227-9717). *Processes* is published in open access format – research articles, reviews, and other content are released on the internet immediately after acceptance. The scientific community and the general public have unlimited, free access to the content. As an open access journal, *Processes* is supported by the authors and their institutes through the payment of article processing charges (APCs) for accepted papers. We would be pleased to welcome you as one of our authors.

Editor-in-Chief

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