Special Issue

From Catalyst Design to Sustainable Catalytic Processes: Advances in Reactor Engineering

Message from the Guest Editors

This Special Issue focuses on recent advances that bridge catalyst design with catalytic reactor engineering to develop sustainable chemical or biological processes. We welcome contributions that explore the full spectrum, from the design, development, and evaluation of catalysts to the scale-up of catalytic reactors. Both experimental and theoretical studies are encouraged. This Special Issue aims to provide a platform for cross-disciplinary research that combines catalysis, reaction engineering, and process system engineering to foster innovation in sustainble technologies.

The upcoming Special Issue will feature selected works presented at the International Energy Conference (IEC) 2025, to be held in Mexico City, Mexico, and the International Conference on Mathematics in (bio/food) Chemical Kinetics and Engineering (MaCKiE) 2025, to be held in Izmir, Turkey. This Special Issue will also welcome additional high-quality contributions in related fields, with a focus on innovative research at the intersection of sustainability, chemical engineering, biochemical engineering, food engineering, experimentation, and mathematical modeling.

Guest Editors

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Deadline for manuscript submissions

31 May 2026



Catalysts

an Open Access Journal by MDPI

Impact Factor 4.0 CiteScore 7.6



mdpi.com/si/247748

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Editor-in-Chief

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manuscripts are peer-reviewed and a first decision is provided to authors approximately 16.6 days after submission; acceptance to publication is undertaken in 2.7 days (median values for papers published in this journal in the first half of 2025).

