Special Issue

Heterogeneous Catalysts for Biomass Conversions

Message from the Guest Editor

With the increasing demand for sustainable energy sources, biomass has emerged as a promising alternative to fossil fuels, despite its efficient conversion into valuable fuels and chemicals remaining a significant challenge. This Special Issue aims to provide a comprehensive overview of the latest advancements in heterogeneous catalysts for biomass conversion. We invite researchers to submit original research articles, reviews, and perspectives that focus on the development, application, and optimization of heterogeneous catalysts in various biomass conversion processes. Topics of interest include but are not limited to the synthesis and characterization of novel catalysts, catalytic mechanisms, process optimization, and economic and environmental assessments. By bringing together cutting-edge research in this field, we hope to foster further innovation and progress towards sustainable biomass utilization.

- biomass conversion
- polyol oxidation
- biofuels
- heterogeneous catalysis
- nanocatalytic materials

Guest Editor

Dr. Linggin Shen

School of Chemistry and Chemical Engineering, Jiangsu University, Zhenjiang 212013, China

Deadline for manuscript submissions

closed (15 October 2025)



Catalysts

an Open Access Journal by MDPI

Impact Factor 4.0 CiteScore 7.6



mdpi.com/si/235954

Catalysts
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
catalysts@mdpi.com

mdpi.com/journal/catalysts





Catalysts

an Open Access Journal by MDPI

Impact Factor 4.0 CiteScore 7.6



About the Journal

Message from the Editor-in-Chief

Editor-in-Chief

Prof. Dr. Keith Hohn

Carl R. Ice College of Engineering, Kansas State University, Manhattan, KS, USA

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), Inspec, Ei Compendex, CAPlus / SciFinder, CAB Abstracts, and other databases.

Journal Rank:

JCR - Q2 (Chemistry, Physical) / CiteScore - Q1 (General Environmental Science)

Rapid Publication:

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).

