

Special Issue

Advances in Catalysis for Fuel and Chemical Production from Biomass Feedstocks

Message from the Guest Editors

The production of chemicals and fuels from biomass is seen as the holy grail for abandoning fossil feedstocks and building a society based on renewable resources. Catalysis plays a key role in converting biomass into high value chemicals and fuels. Often, these catalysts are based on metals, metal oxides, or porous materials such as zeolites, or a combination thereof. Studies investigating catalytic systems converting real biomass streams into chemical products are of high value, as well the influence of biomass pretreatment methods on the final catalytic performance. This Special Issue, titled “Advances in Catalysis for Fuel and Chemical Production from Biomass Feedstocks”, focusses on new insights and developments in the field catalytic systems for biomass conversion into chemicals and fuels. This can range from a fundamental understanding of the reaction mechanism and catalytic material development, to new procedures for biomass pretreatment and post-catalysis chemistry in order to reach final chemical end-products.

Guest Editors

Dr. Christiaan Tempelman

Department of Chemical Engineering, Rotterdam Mainport Institute, Rotterdam University of Applied Science, Lloydstraat 300, 3024 EA Rotterdam, The Netherlands

Dr. Volkan Degirmenci

School of Engineering, University of Warwick, Coventry CV47AL, UK

Deadline for manuscript submissions

closed (20 February 2022)



Catalysts

an Open Access Journal
by MDPI

Impact Factor 4.0
CiteScore 7.6



mdpi.com/si/73308

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

[mdpi.com/journal/
catalysts](https://mdpi.com/journal/catalysts)





Catalysts

an Open Access Journal
by MDPI

Impact Factor 4.0
CiteScore 7.6



[mdpi.com/journal/
catalysts](https://mdpi.com/journal/catalysts)



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 15.9 days after submission; acceptance to publication is undertaken in 3.5 days (median values for papers published in this journal in the second half of 2025).