

Special Issue

Recent Developments on Ionic Liquids in Catalysis

Message from the Guest Editor

Ionic liquids are a class of compounds broadly described as salts that are liquids at ambient temperature and characterized by low vapor pressure and flammability and high thermal and electrochemical stability. Ionic liquids can be fine-tuned to possess the required properties by choosing suitable components from a wide range of available cations and anions. This allows for the design of ionic liquids to be either hydrophobic or hydrophilic, either protic or aprotic, and bearing Brønsted or Lewis acidity or both. All of these properties make ionic liquid particularly interesting for its application in catalysis as a green solvent (as an alternative to volatile organic compounds (VOCs)), as a catalyst, or both. To date, ionic liquids have been successfully applied in dozens of chemical reactions, including oxidation, alkylation, acylation, esterification, hydrogenation, oligomerization, and polymerization. Additionally, the successful commercial application of ionic liquids in processes such as BASIL, HycaPure Hg, and IsoAlky inspires continuous research in this field.

Guest Editor

Dr. Karolina Matuszek
School of Chemistry, Clayton, Monash University, VIC 3800, Australia

Deadline for manuscript submissions

closed (1 October 2021)



Catalysts

an Open Access Journal
by MDPI

Impact Factor 4.0
CiteScore 7.6



mdpi.com/si/52866

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).