

## Special Issue

# Applications of Microwave-Assisted Synthesis in Catalysis

### Message from the Guest Editors

The main goal of this Special Issue on “Applications of Microwave-Assisted Synthesis in Catalysis” is to combine a variety of new and original research results in order to highlight the importance of this promising synthetic route. Thus, we invite researchers to disseminate their studies on the application of microwaves for organic transformations, including biomass valorization, hydrogen production, oil refining, as well as catalysts preparation. Studies related to improvements achieved with this method compared to conventional methods, or the scale-up of microwave-assisted reactions, are also welcome. This Special Issue welcomes contributions on (among other things):

- Microwave-assisted acid/base-catalysed reactions;
- Microwave-assisted metal-catalysed reactions;
- Microwave-assisted oxidation reactions;
- Biomass conversion under microwave irradiation;
- Microwave-assisted gas processing;
- Effects of microwave activation in hydrogenation/dehydrogenation reactions;
- Microwave-assisted reactions in non-polar solvents;
- Environmental catalysis;
- Microwave-assisted synthesis of catalytically active nanomaterials;
- Microwave-stimulated solvent-free reactions

### Guest Editors

Prof. Dr. Elisabete C.B.A. Alegria

1. Centro de Química Estrutural, Instituto Superior Técnico, Universidade de Lisboa, Av. Rovisco Pais, 1049-001 Lisboa, Portugal
2. Departamento de Engenharia Química, Instituto Superior de Engenharia de Lisboa, Instituto Politécnico de Lisboa, R. Conselheiro Emídio Navarro, 1, 1959-007 Lisboa, Portugal

Dr. Manas Sutradhar

1. Faculdade de Engenharia, Universidade Lusófona, Campo Grande 376, 1749-024 Lisboa, Portugal
2. Centro de Química Estrutural, Instituto Superior Técnico, Universidade de Lisboa, Av. Rovisco Pais, 1049-001 Lisboa, Portugal

### Deadline for manuscript submissions

closed (31 January 2022)



## Catalysts

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.8  
CiteScore 6.8



[mdpi.com/si/85069](https://mdpi.com/si/85069)

*Catalysts*  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[catalysts@mdpi.com](mailto:catalysts@mdpi.com)

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





# Catalysts

an Open Access Journal  
by MDPI

Impact Factor 3.8  
CiteScore 6.8



[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,  
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 12.9 days after  
submission; acceptance to publication is undertaken in 2.8  
days (median values for papers published in this journal in  
the first half of 2024).