



## Metal–Organic Frameworks for Separation, Catalysis and Energy Applications

Guest Editors:

**Prof. Dr. Christos Argiris**

School of Chemical Engineering,  
National Technical University of  
Athens, 15773 Athens, Greece

**Dr. Pavlos K. Pandis**

School of Chemical Engineering,  
National Technical University of  
Athens, 15773 Athens, Greece

**Dr. Georgia Sourkouni**

Clausthal Centre for Materials  
Technology (CZM), Clausthal  
University of Technology, 38678  
Clausthal-Zellerfeld, Germany

Deadline for manuscript  
submissions:

**31 December 2024**

### Message from the Guest Editors

Dear Colleagues,

MOFs offer advantages as heterogeneous catalysts due to their improved reactivity, flexibility, and facile tunability. When contrasting them with conventional inorganic porous materials, metal–organic frameworks (MOFs) exhibit a multifunctional nature, a highly porous structure, a consistent spatial distribution of constituents, adjustable pore sizes and topologies, and a hybrid organic–inorganic composition. Papers on the preparation and use of catalytically active MOFs are welcome in this Special Issue.

We ask for the submission of original research papers and reviews on the advances in the use of MOF-based materials for gaseous fuel storage, chemical hydrogen storage, solar and electrochemical energy storage, and conversion, in which challenges and opportunities related to advanced energy technologies are critically discussed. Further manuscripts on the use of MOFs for the separation of gaseous molecules are also welcome.





an Open Access Journal by MDPI

## Editor-in-Chief

### Prof. Dr. Giancarlo Cravotto

Department of Drug Science and  
Technology, University of Turin,  
Via P. Giuria 9, 10125 Turin, Italy

## Message from the Editor-in-Chief

You are invited to contribute either a research article or a comprehensive review for consideration and publication in *Processes* (ISSN 2227-9717). *Processes* is published in open access format – research articles, reviews, and other content are released on the internet immediately after acceptance. The scientific community and the general public have unlimited, free access to the content. As an open access journal, *Processes* is supported by the authors and their institutes through the payment of article processing charges (APCs) for accepted papers. We would be pleased to welcome you as one of our authors.

## Author Benefits

**Open Access:** free for readers, with article processing charges (APC) paid by authors or their institutions.

**High Visibility:** indexed within Scopus, SCIE (Web of Science), Ei Compendex, Inspec, AGRIS, and other databases.

**Journal Rank:** JCR - Q2 (*Engineering, Chemical*) / CiteScore - Q2 (*Chemical Engineering (miscellaneous)*)

## Contact Us

---

Processes Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/processes](http://mdpi.com/journal/processes)  
[processes@mdpi.com](mailto:processes@mdpi.com)  
[X@Processes\\_MDPI](https://twitter.com/Processes_MDPI)