



Metal–Organic Frameworks with Environmental and Biomedical Applications

Guest Editor:

**Dr. Constantina
Papatriantafyllopoulou**

School of Chemistry, National
University of Ireland Galway,
Galway, Ireland

Deadline for manuscript
submissions:
closed (31 January 2023)

Message from the Guest Editor

MOFs have witnessed a vast development in recent years due to an intense focus on the discovery of efficient materials for technological, biomedical and environmental applications. MOFs display appealing structural features, such as high porosity, large surface area, flexible and tuneable structures, and are suitable for encapsulating a large variety of guest molecules with a wide range of applications. Among others, MOFs are suitable candidates for addressing major contemporary challenges in the environmental and biomedical fields. Concerning the latter, the use of MOFs in drug delivery, drug purification, imaging, photodynamic therapy, targeted drug therapy, etc., could improve fundamental issues in drug development and therapeutic processes. Furthermore, the application of MOFs as adsorbents and sensors for toxic species could be beneficial for environmental challenges, including the greenhouse effect, the pollution of the air and the aquatic ecosystems. This Special Issue aims to present research that focuses on the biomedical and environmental applications of MOFs, and identify and review the recent developments and breakthroughs in these fields.





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Thomas J. Schmidt

Institute of Pharmaceutical
Biology and Phytochemistry,
University of Münster,
Corrensstrasse 48, D-48149
Münster, Germany

Message from the Editor-in-Chief

As the premier open access journal dedicated to experimental organic chemistry, and now in its 25th year of publication, the papers published in *Molecules* span from classical synthetic methodology to natural product isolation and characterization, as well as physicochemical studies and the applications of these molecules as pharmaceuticals, catalysts and novel materials. Pushing the boundaries of the discipline, we invite papers on multidisciplinary topics bridging biochemistry, biophysics and materials science, as well as timely reviews and topical issues on cutting edge fields in all these areas.

Author Benefits

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

High Visibility: indexed within [Scopus](#), [SCIE \(Web of Science\)](#), [PubMed](#), [MEDLINE](#), [PMC](#), [Reaxys](#), [CaPlus / SciFinder](#), [MarinLit](#), [AGRIS](#), and [other databases](#).

Journal Rank: JCR - Q2 (*Chemistry, Multidisciplinary*) / CiteScore - Q1 (*Chemistry (miscellaneous)*)

Contact Us

Molecules Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/molecules
molecules@mdpi.com
[X@Molecules_MDPI](https://twitter.com/Molecules_MDPI)