



an Open Access Journal by MDPI

## Novel Nanocomposite and Metal-Organic Framework Hybrid for the Biomedical and Environmental Applications

Guest Editors:

**Dr. Ethiraj Selvarajan**

Department of Genetic Engineering, School of Bioengineering, SRM Institute of Science and Technology, Kattankulathur, Chennai 603 203, Tamilnadu, India

**Dr. Melvin S. Samuel**

Department of Materials Science and Engineering, University of Wisconsin-Milwaukee, Milwaukee, WI 53211, USA

**Dr. Srikanth Vuppala**

Department of Civil and Environmental Engineering, Politecnico Di Milano, Piazza Leonardo da Vinci, 32, 20133 Milano MI, Italy

Deadline for manuscript submissions:

**closed (30 June 2023)**

### Message from the Guest Editors

Metal-organic frameworks are one of the trending research areas in biomedical-research-based applications that are thriving through a common key known as enzymes. The combination of nanocomposites with metal-organic frameworks will open up paths for novel research that can make use of enzymes and enzyme immobilization for various applications, including therapeutics, pharmaceuticals, biosensing, targeted drug delivery, bioimaging and the screening and detection of various disease conditions.

This issue focuses on novel nanocomposite–MOF hybrid materials, their characterization, catalytic studies, efficiency studies, various biomedical industries, the wastewater treatment sector, and research-based applications, including enzyme immobilization, doping, and multi-stimuli responsive nature.

This Special Issue aims to attract researchers actively working in the development of nanomaterials and their application in the biomedical area of biotechnology and environmental applications (e.g., wastewater treatment). We cordially invite researchers to contribute their original research work and review based on the theme areas.



[mdpi.com/si/122546](https://mdpi.com/si/122546)

**Special** Issue



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, Grosspeteranlage 5  
4052 Basel, Switzerland

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

[mdpi.com/journal/molecules](http://mdpi.com/journal/molecules)  
[molecules@mdpi.com](mailto:molecules@mdpi.com)  
[X@Molecules\\_MDPI](#)