Special Issue

Advancements in Metal-Organic Frameworks: Synthesis, Properties, and Applications

Message from the Guest Editor

Metal–organic frameworks (MOFs) have gained exceptional attention from the scientific community because of their highly ordered crystalline properties, tunable pores, incredibly large surface area, and specific functionalities. In the last 30 years, MOFs have established their position as one of the hottest topics in the fields of material science and chemistry. At the same time, MOFs' synthesis approaches, node and ligang adjustments, and different secondary building units' utilization have enhanced MOFs' structural characterizations. The hybrid nature of MOFs provides an almost infinite set of building blocks that can be manipulated to target specific application as either sensors, environmental materials, catalysts, biomedical materials, and/or many others. Their adjustable architectures and functionalized pores are the most notable features, which can be attained using functional groups with certain ligands and metal ions. MOFs provide ample space for guest species while remaining stable. Consequently, the necessity of platforms where scientist can present and discuss their latest research in the field of metal–organic frameworks is evident.

Guest Editor

Prof. Dr. Maria Milanova

Laboratory for Chemistry of Rare and Rare Earth Elements, Department of Inorganic Chemistry, Faculty of Chemistry and Pharmacy, University of Sofia, 1164 Sofia, Bulgaria

Deadline for manuscript submissions

30 September 2025

International Journal of Molecular Sciences

an Open Access Journal by MDPI

Impact Factor 4.9
CiteScore 9.0
Indexed in PubMed

mdpi.com/si/236434

International Journal of Molecular Sciences
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
ijms@mdpi.com

mdpi.com/journal/ijms

MDPI

International Journal of Molecular Sciences

an Open Access Journal by MDPI

Impact Factor 4.9
CiteScore 9.0
Indexed in PubMed

mdpi.com/journal/ijms

MDPI

About the Journal

Message from the Editor-in-Chief

The International Journal of Molecular Sciences (*IJMS*, ISSN 1422-0067) is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, molecular biophysics, molecular medicine, and all aspects of molecular research in chemistry. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

Editor-in-Chief

Prof. Dr. Maurizio Battino
Department of Odontostomatologic and Specialized Clinical Sciences, Sez-Biochimica, Faculty of Medicine, Università Politecnica delle Marche, Via Ranieri 65, 60100 Ancona, Italy

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, PMC, MEDLINE, Embase, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q1 (Biochemistry and Molecular Biology) / CiteScore - Q1 (Organic Chemistry)