## **Special Issue**

## Emerging Topics in Macromolecular Crystallography

## Message from the Guest Editors

Macromolecules, including proteins, nucleic acids, and carbohydrates, play vital roles in life. Macromolecular crystallography is a pivotal technique in uncovering the structures and functions of bio-macromolecules. It focuses on the study of the structure and properties of large molecular assemblies, particularly their crystal forms. It involves growing crystals and analyzing their structure using X-ray diffraction techniques. This field has witnessed remarkable advancements in recent years, driven by advancements in experimental techniques and computational methods. For example, AlphaFold3, an artificial intelligence method, was released in May 2024. It can predict a reliable 3D complex structure including proteins, nucleic acids, small molecules, ions, and modified residues. As the research in this area continues to grow and expand, it brings forth numerous emerging topics at the forefront of scientific exploration. The results from macromolecular crystallography are revolutionizing our understanding of macromolecular behavior and their roles in various biological processes and diseases.

#### **Guest Editors**

Prof. Dr. Zhongzhou Chen

State Key Laboratory of Agrobiotechnology and Beijing Advanced Innovation Center for Food Nutrition and Human Health, College of Biological Sciences, China Agricultural University, Beijing 100193, China

Prof. Dr. Giuseppe Zanotti

Department of Biomedical Sciences, University of Padua, 35131 Padova, Italy

## Deadline for manuscript submissions

20 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/220386

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





# International Journal of Molecular Sciences

an Open Access Journal by MDPI

Impact Factor 4.9 CiteScore 9.0 Indexed in PubMed





## 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)

