Special Issue

Current Advances of Metal Complexes for Biomedical Applications

Message from the Guest Editors

Most biomolecules have charge-donating atoms that are capable of binding to metal ions and forming coordination complexes. One of the areas of development in bioinorganic chemistry is the study of the active centers of numerous enzymes, which, from a chemical point of view, are formally known as coordination compounds or metal complexes. Understanding the role of metal ions in these types of biological systems has led to a shift in focus, moving beyond initial classical ideas related to their toxicity to highlight their active role in regulating various metabolic processes.

This Special Issue aims to collate the current advances in this area, including both the study of different complexes as potential supplements to regulate the activity of some natural enzymes with metal centers, and the activity of metal complexes against various diseases, such as cancer, inflammation-related pathologies, or bacterial or viral infections. This Special Issue on metal complexes for biomedical applications also encompasses the development status of different compounds of this type as disease diagnostic tools.

Guest Editors

Prof. Dr. Marcelino Maneiro

Department of Inorganic Chemistry, Faculty of Sciences, Universidade de Santiago de Compostela, Santiago de Compostela, Spain

Dr. Sandra Fernández-Fariña

Gunnlaugsson Group, Trinity Biomedical Science Institute, Trinity College Dublin, Dublin, Ireland

Deadline for manuscript submissions

31 January 2026



Biomolecules

an Open Access Journal by MDPI

Impact Factor 4.8 CiteScore 9.2 Indexed in PubMed



mdpi.com/si/238776

Biomolecules
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
biomolecules@mdpi.com

mdpi.com/journal/biomolecules





Biomolecules

an Open Access Journal by MDPI

Impact Factor 4.8 CiteScore 9.2 Indexed in PubMed



About the Journal

Message from the Editorial Board

Biomolecules is a multidisciplinary open-access journal that reports on all aspects of research related to biogenic substances, from small molecules to complex polymers. We invite manuscripts of high scientific quality that pertain to the diverse aspects relevant to organic molecules, irrespective of the biological question or methodology. We aim for a competent, fair peer review and rapid publication. Please look at some of the exciting work that has been published in Biomolecules so far. We would be delighted to welcome you as one of our authors.

Editors-in-Chief

Prof. Dr. Peter E. Nielsen

Department of Cellular and Molecular Medicine, Faculty of Health and Medical Sciences, University of Copenhagen, Blegdamsvej 3C, DK-2200 Copenhagen, Denmark

Prof. Dr. Lukasz Kurgan

Department of Computer Science, Virginia Commonwealth University, Richmond, VA 23284, USA

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, Embase, CAPlus / SciFinder, and other databases.

Journal Rank:

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

