



Mass Spectrometry in Molecular Biology

Guest Editor:

Dr. Dragan Nikolic

Jet Propulsion Laboratory,
California Institute of
Technology, Pasadena, CA 91109,
USA

Deadline for manuscript
submissions:

closed (20 April 2025)

Message from the Guest Editor

Modern applications of mass spectrometry techniques in molecular and structural biology rely on the ability to vaporize and ionize macromolecules, which was made possible with the advent of electrospray ionization coupled to liquid chromatography or matrix-assisted laser desorption/ionization coupled to high-resolution mass spectrometers. Quantitative studies of individual macromolecules and their function in cells grown in different media were made possible by isotope-coded affinity tags technology. With the ever-growing volume of biological molecules' mass spectra data, our ability to identify them in complex mixtures relies on the continuous development of efficient algorithms to search, rank, and interpret entries in online databases. This Special Issue on "Mass Spectrometry in Molecular Biology" invites original research and reviews on all aspects of development, verification, and maturation of sample preparation protocols, measurement techniques, and supporting computational and theoretical methods to interpret the structural and functional properties of biomolecules.





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. José L. Quiles

Department of Physiology,
Institute of Nutrition and Food
Technology “Jose Mataix”,
Biomedical Research Center,
University of Granada, Avda.
Conocimiento s/n, 18100 Armilla,
Granada, Spain

Message from the Editor-in-Chief

The *International Journal of Molecular Sciences (IJMS)* 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, and molecular biophysics. *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.

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)

Contact Us

*International Journal of Molecular
Sciences* Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

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

mdpi.com/journal/ijms
ijms@mdpi.com
X@IJMS_MDPI