



## Application of Nuclear Magnetic Resonance (NMR) Spectroscopy in Bioorganic Chemistry

Guest Editor:

**Prof. Dr. Cristina Airoidi**

Department of Biotechnology  
and Biosciences, University of  
Milano-Bicocca, Piazza della  
Scienza 2, 20126 Milano, Italy

Deadline for manuscript  
submissions:

**30 July 2024**

### Message from the Guest Editor

Dear Colleagues,

Nuclear magnetic resonance (NMR) spectroscopy is one of the techniques of choice employed by bioorganic chemists. Indeed, it finds application in the study of the structure and conformation of bioorganic molecules and their molecular interactions. Notably, it can be used for the characterization of both large and small biomolecules, as well as for the structural resolution of large supramolecular complexes. Furthermore, its intrinsically quantitative nature can be exploited to determine the purity of the organic molecules present in a sample, as well as for the identification and quantification of metabolites present in complex mixtures, such as biofluids, cells, tissues and natural extracts. Finally, NMR spectroscopy makes it possible to elucidate the mechanisms of organic reactions, also monitoring them in real time, including those involving enzymatic catalysis.

Original research articles and review papers elucidating how NMR spectroscopy can provide new insights and/or original methodological approaches to the study of bioorganic chemistry are very welcome from outstanding experts of the topic.

Prof. Dr. Cristina Airoidi  
*Guest Editor*





an Open Access Journal by MDPI

## 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

## 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.

## 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 & Molecular Biology*) / CiteScore - Q1 (*Inorganic Chemistry*)

## Contact Us

*International Journal of Molecular  
Sciences* Editorial Office  
MDPI, St. Alban-Anlage 66  
4052 Basel, Switzerland

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

mdpi.com/journal/ijms  
ijms@mdpi.com  
X@IJMS\_MDPI