



an Open Access Journal by MDPI

Recent Developments on Protein–Ligand Interactions: From Structure, Function to Applications 2.0

Guest Editor:

Dr. Alexandre G. De Brevern

Department of Biological Research on the Red Blood Cells, INTS, INSERM UMR_S 1134, Université de Paris, Université de la Réunion, 75739 Paris, France

Deadline for manuscript submissions: 20 March 2025

Message from the Guest Editor

Dear Colleagues,

Protein-ligand interactions play a fundamental role in most major biological functions, but also in drug discovery. With the increasing structural information of proteins and protein-ligand complexes, molecular modeling, molecular dynamics, and chemoinformatics approaches are often required for the efficient analysis of a large number of such complexes and to provide insights. Similarly, numerous computational approaches have been developed to characterize and use the knowledge of such interactions, which can lead to drug candidates. For instance, one main application is to identify tractable chemical start-points that non-covalently modulate the activity of a biological molecule. This new information brings questions that affect chemistry, biology, and even pose specific computer problems. Papers related to any aspect of protein-ligand analysis and/or prediction using computational approaches, as well as new developments dedicated to these tasks, will be considered for this Special Issue.









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 and Molecular Biology) / CiteScore - Q1 (Inorganic 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