

Special Issue

Macroscopic and Microscopic Thermodynamics: From Fundamentals to Present Applications

Message from the Guest Editors

As in the case of other “frontier” areas of knowledge, thermodynamics stand out, along with other sciences, in taking on new challenges in solving problems, and ultimately in the transfer of knowledge. But for these purposes, it is necessary to identify the fields of interest in which there are demands and to close the communication gaps that currently exist between experimental and theoretical researchers.

In recent decades, the incorporation of the molecular point of view of matter, combining laws of classical and statistical thermodynamics with chemical-physical models of the structure of matter and intermolecular forces, has allowed the development of procedures that are very useful to solve a wide variety of problems in fields so diverse as those of chemistry, chemical engineering, materials, energy, food or health sciences.

This Special Issue represents an invitation to researchers on the field of molecular thermodynamics and other related fields to contribute their works, gathering together and promoting their research lines and building bridges between the basic aspects of science and the new developments on technological processes and materials.

Guest Editors

Prof. Dr. José S. Urieta

Group of Applied Thermodynamics and Surfaces (GATHERS),
Universidad de Zaragoza, Zaragoza, Spain

Dr. Ana M. Mainar

Physical Chemistry, Universidad de Zaragoza, Zaragoza, Spain

Deadline for manuscript submissions

closed (31 May 2022)



International Journal of Molecular Sciences

an Open Access Journal
by MDPI

Impact Factor 4.9
CiteScore 9.0
Indexed in PubMed



mdpi.com/si/58202

*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](https://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



[mdpi.com/journal/
ijms](https://mdpi.com/journal/ijms)



About the Journal

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)