

## Special Issue

# Chemical and Molecular Characterization of Plant Bioactive Molecules

### Message from the Guest Editor

Plants contain several secondary metabolites with health benefits. These compounds, also called phytochemicals, are widely distributed in all plant-based foods, such as vegetables, fruits, cereals and pseudocereals, seeds, nuts, and legumes, but also in aromatic and medicinal plants. Phytochemicals include phenolic compounds, vitamins, minerals, alkaloids, terpenoids, tocopherols and carotenoids, among others, and all of these compounds play an important role in managing the incidence of chronic diseases. The complex molecular structures of these phytochemicals encourage researchers to investigate different natural sources of plant-based foods, including agro-food residues. In this way, the identification and quantification of these bioactive compounds are crucial in order to understand their biological activity. The aim of this Special Issue is to present advanced analytical approaches, including the extraction, isolation and characterization of active compounds in plants and plant-based foods and their by-products. Evaluations of the bioactivity, bioavailability and bioaccessibility of these bioactive compounds are also welcome.

### Guest Editor

Dr. Vito Verardo

1. Department of Nutrition and Food Science, University of Granada, Campus of Cartuja, 18011 Granada, Spain
2. Department of Analytical Chemistry, University of Granada, Avda Fuentenuueva, 18071 Granada, Spain

### Deadline for manuscript submissions

closed (31 October 2024)



## International Journal of Molecular Sciences

an Open Access Journal  
by MDPI

Impact Factor 4.9  
CiteScore 9.0  
Indexed in PubMed



[mdpi.com/si/203957](https://mdpi.com/si/203957)

*International Journal of  
Molecular Sciences*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[ijms@mdpi.com](mailto: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/](https://mdpi.com/journal/ijms)

[ijms](https://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)