

## Special Issue

# Melanin Pigmentation: Physiology and Pathology

### Message from the Guest Editors

Melanins are a group of biopolymeric phenolic pigments ubiquitously present in most organisms. In mammals and birds, two types of melanin are found, the brown-to-black insoluble eumelanin and the reddish-brown, sulfur-containing pheomelanin. Contributions to this Special Issue may cover any aspect of the chemistry of natural and synthetic melanins with potential practical applications; melanogenesis inhibition through the definition of its mechanism of action; approaches to the amelioration or control of any type of melanin-based pigmentary disorder, as well as photoprotection strategies; innovative methodologies for the analysis of pigmented tissues and for diagnostic purposes; structure and function of extracutaneous melanins including neuromelanin in the brain; molecular engineering methodologies for melanin production in microorganisms; and novel functions of melanins that are of potential interest for applications, drug targeting, and exploiting the specific affinities of melanins. Experimental papers and up-to-date review articles are welcome.

### Guest Editors

Prof. Dr. Shosuke Ito

Department of Chemistry, Fujita Health University School of Health Sciences, Toyoake, Aichi, Japan

Prof. Dr. Manickam Sugumaran

Department of Biology, University of Massachusetts Boston, 100 Morrissey Blvd, Boston, MA 02125, USA

### Deadline for manuscript submissions

20 October 2025



## International Journal of Molecular Sciences

---

an Open Access Journal  
by MDPI

---

Impact Factor 4.9  
CiteScore 9.0  
Indexed in PubMed



[mdpi.com/si/238706](https://mdpi.com/si/238706)

*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/  
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)