



an Open Access Journal by MDPI

# Mechanisms of Heavy Metal Toxicity 2.0

Guest Editor:

### Prof. Dr. Toshiyuki Kaji

Department of Environmental Health, Faculty of Pharmaceutical Sciences, Tokyo University of Science, Noda 278-8510, Japan

Deadline for manuscript submissions: closed (20 May 2024)

# Message from the Guest Editor

The toxicity of heavy metals has been a popular research topic for a long time. In the past, it was important to elucidate the actual health hazards caused by environmental pollution, accidents, and crimes involving metals, metalloids, and metal compounds, but now the main issues are related to the elucidation of the mechanisms of their toxicity and defense mechanisms against said toxicity.

This SI is under production with the aim of addressing this contemporary issue. In this Special Issue, we welcome the submission of full reviews, original research papers, short communications, and perspectives that cover the following topics:

- Cellular and molecular mechanisms underlying heavy metals, metalloids, and metal(loid)containing compounds;
- Mechanisms underlying the induction of metallothionein;
- Cellular defense systems against the toxicity of heavy metals, metalloids, and metal(loid)containing compounds;
- The regulation and mechanisms of the expression of metal transporters such as SLC39A8.
- Research that does not fit into the above topics but may contribute to them is also welcome.

By sharing these studies, we aim to make significant progress in metal toxicology.





mdpi.com/si/160127





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 (Organic 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