

## Special Issue

# Cellular and Molecular Mechanisms of Heavy Metal Toxicity: From Death to Immortality

### Message from the Guest Editor

Pivotal to the cellular response to heavy metal toxicity are reactive oxygen species (ROS), which lead to DNA damage, lipid peroxidation, alteration of signaling and transport proteins or modulation of enzyme activities. Heavy metals may alter the cellular redox status by increasing ROS generation or damaging ROS-scavenging defenses, both resulting in elevated ROS levels, and impacting physiological ROS signaling as well as downstream signaling pathways involved in cellular life and death decisions. In this context for this Special Issue, investigators and experts in the field are invited to submit high quality original articles reporting novel findings regarding molecular and cellular mechanisms of heavy metals (single or mixtures) or review articles summarizing the status-quo and postulating updated and stimulating hypotheses.

Keywords:

- oxidative stress
- cell death
- carcinogenesis
- mutations
- toxicology
- molecular mimicry
- signal transduction
- redox status

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### Guest Editor

Prof. Dr. Wing Kee Lee

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### Deadline for manuscript submissions

closed (28 February 2023)



## International Journal of Molecular Sciences

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### 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.

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### Editor-in-Chief

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