

## Special Issue

# Metal-Induced Neurotoxicity: From the Exposome to Mechanisms

### Message from the Guest Editor

This Special Issue examines the impact of metal exposure on the nervous system, providing a multi-layered exploration from exposure patterns to underlying biological mechanisms. Toxic metals such as lead, mercury, cadmium, and manganese, which are prevalent in the environment, can enter the human body through air, water, and food, posing a risk of long-term damage to the central nervous system. Furthermore, this Special Issue will investigate exposure pathways and delve into the molecular mechanisms involved, including oxidative stress, inflammation, and mitochondrial dysfunction, as well as gene–environment interactions. It will also address the varying susceptibility among populations and the health risks associated with prolonged exposure, emphasizing the critical role of interdisciplinary approaches in tackling the public health challenges posed by metal exposure. Through cross-disciplinary research, this issue aims to elucidate the neurotoxic mechanisms triggered by metals, propose prevention and intervention strategies, and provide scientific evidence to inform environmental health policies, thereby supporting global efforts in controlling metal pollution.

### Guest Editor

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### Deadline for manuscript submissions

closed (21 March 2025)



## Toxics

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## About the Journal

### Message from the Editor-in-Chief

*Toxics* (ISSN 2305-6304) is an international, peer-reviewed, open access journal which provides an advanced forum for studies related to all aspects of toxic chemicals and materials. We aim to publish high quality work that furthers our understanding of the exposure, effects, and risks of chemicals and materials in humans and the natural environment as well as approaches to assess and/or manage the toxicological and ecotoxicological risks of chemicals and materials. Please consider publishing in *Toxics* when preparing your next paper.

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### Editor-in-Chief

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