

Special Issue

Environmental Behavior and Ecological Risks of Micro- and Nanoplastics in Aquatic Environments

Message from the Guest Editors

This Special Issue focuses on advancing an integrated understanding of the environmental behaviour of micro- and nanoplastics in aquatic systems, examining their sources, transformation processes, transport pathways, and ultimate fate. The objective of this project is to compile studies that elucidate how these particles interact with key physicochemical parameters, how their surface properties evolve in natural waters, and how they influence the mobility and bioavailability of other emerging contaminants. This Special Issue also welcomes contributions that assess exposure routes and ecological effects across multiple trophic levels, from microorganisms to keystone aquatic species. In addition, the objective is to emphasise methodological innovations in detection, quantification, and modelling approaches, with a particular focus on nanoplastics. By bringing together multidisciplinary perspectives, this Special Issue seeks to bridge these gaps, identify methodological inconsistencies, and promote more coherent conceptual frameworks that enhance ecological risk assessment and support evidence-based mitigation strategies.

Guest Editors

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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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