

## Special Issue

# Emerging Contaminants at the Water–Food–Energy–Climate Nexus: Exposure Pathways and Sustainable Mitigation

### Message from the Guest Editors

Emerging pollutants from water pollution—including microplastic particles, pesticide residues, and industrial wastewater—are major vectors of cross-system pollution. The transfer of toxic substances from source water to adjacent ecosystems, agricultural soils, and food chains directly threatens the integrity of the water–food–energy nexus. Pollutant emissions and deposition reduce crop yields, jeopardize water security, and increase energy demands for remediation. This multi-media exposure amplifies human health risks. Simultaneously, from the energy costs of wastewater filtration to the remediation of contaminated soils, it creates critical trade-offs between environmental health protection and climate goals.

This special issue focuses on emerging pollutants in the water–food–energy–climate nexus: exposure pathways and sustainable mitigation measures. It focuses on pollution research on emerging pollutants and assessing the diseases caused by dual exposure pathways. Papers integrating real-time water quality sensor networks, life cycle assessments, and environmental justice frameworks will promote climate-resilient health security for ecological resources.

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**Deadline for manuscript submissions**



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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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