Special Issue

The Biogeochemical Behavior and Innovative Remediation of Contaminants

Message from the Guest Editors

Pollutants, including pharmaceuticals, heavy metals, microplastics, and industrial chemicals, these contaminants compromise water and soil quality, endanger biodiversity, disrupt ecosystem services, and threaten human health via food chains and drinking water. Despite progress in detection and remediation, critical gaps persist in understanding their environmental fate, synergistic impacts, and scalable mitigation strategies. Therefore, it is necessary to summarize studies on the impacts of pollutants on aquatic and soil ecosystems. This Special Issue of *Water* calls for papers that address the biogeochemical behavior of contaminants, ecological risk assessments, and innovative remediation strategies including, but not limited to, the following topics:

- The dynamic transport mechanisms and chemical/biological transformation pathways of contaminants.
- The impacts of pollutants on organisms, ecosystem functions, and long-term ecological resilience.
- The design and application of functional materials, microbial consortia, and hybrid systems for contaminant elimination.
- Risk assessments of pollutants in aquatic and soil ecosystems.

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Message from the Editor-in-Chief

In the context of global changes, the sustainable management of water cycles, going from global and regional water cycles to urban, industrial and agricultural water cycles, plays a very important role on the water resources and on their relationships with food, energy, biodiversity, ecosystem functioning and human health. *Water* invites authors to provide innovative original full articles, critical reviews and timely short communications and to propose special issues devoted to new technological and scientific domains and to interdisciplinary approaches of the water cycles. We ensure a critical review process and a quick turnaround between submission and final decision.

Editor-in-Chief

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