Special Issue

Sediment Pollution: Methods, Processes and Remediation Technologies

Message from the Guest Editors

Sediments serve as both sinks and secondary sources of environmental contaminants, exerting critical influence on aquatic ecosystem health and sustainability. This Special Issue aims to present recent advances in sediment science, including but not limited to the following five major topics:

- Innovative methods and techniques for characterizing sediment properties and contaminant behavior;
- Biogeochemical processes and mechanistic insights into contaminant transformation, mobility, and ecological risk;
- Remediation technologies, including both in situ and ex situ approaches, for the treatment of contaminated and degraded sediments;
- Applications of artificial intelligence, machine learning, and big data for monitoring, modeling, and managing sediment pollution;
- Emerging contaminants, such as microplastics, pharmaceuticals, and other novel pollutants, and their complex interactions within sediment–water systems.

We welcome contributions offering innovative scientific theories, methodological advances, and applied solutions that bridge environmental geochemistry, ecological engineering, and risk science.

Guest Editors

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Prof. Dr. Ming Kong

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Deadline for manuscript submissions

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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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