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## Material Cycling's around the Sediment-Water Interface: Implications for Understanding, Assessment, Remediation of Eutrophicated and Contaminated Sediment

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### Message from the Guest Editors

Dear Colleagues,

Some water bodies have begun to improve around the world owing to effective mitigation measures, but many still suffer from the adverse effects of eutrophication and pollution. The aquatic environment and its ecosystem are strongly regulated by the material cycles happening in the water bodies. Balance in the sediment-water interface plays a critical role in controlling the dynamics of these material cycles. These processes are particularly exacerbated in a eutrophic and contaminated water environment. As many of the causative materials tend to accumulate on the bottom-most layers of the water column, consequently, a coupled impact of sediment will be expected. Hence, it is essential to understand and evaluate the precise processes that control the variability of material balances around the sediment-water interface.

In this Special Issue, we would like to compile the latest discoveries and achievements of oxygen, nitrogen, phosphorus, sulfide, and heavy metal cyclings around the sediment-water interface to provide a foundation for the advancement of future research in this particular field.

Dr. Tetsunori Inoue  
Prof. Dr. Makoto Higashino  
*Guest Editors*



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# Special Issue



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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.

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