

Special Issue

Mathematical, Physical, Chemical, and Biological Methods for Ice and Water Problems

Message from the Guest Editors

We are excited to announce a Special Issue titled "**Mathematical, Physical, Chemical, and Biological Methods for Ice and Water Problems**" in *Water*. Ice and water, though two distinct physical states of the same substance, have traditionally been studied in isolation across various disciplines. However, recent advances in cryospheric science and technology underscore their intrinsic interdependence and the need for integrated research approaches. This Special Issue aims to provide a platform for showcasing cutting-edge research on ice and water systems using diverse methodologies. We encourage submissions covering topics such as ice–water phase transition processes, phase-transition-influenced properties (e.g., thermal, mechanical, optical, and electrical), ecosystems under ice covers, ice–water thermodynamics, shipping in ice-covered waters, surface icing on structures in cold regions, and wastewater purification through freezing. Contributions employing theoretical studies, case analyses, field investigations, data analyses, physical simulations, or numerical modeling are particularly welcome.

Guest Editors

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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

Dr. Jean-Luc PROBST

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