

## Special Issue

# Computational Methods in River Hydraulics and Density-Stratified Flow

### Message from the Guest Editors

This Special Issue focuses on state-of-the-art computational methods for river dynamics and estuary processes. In an estuary, freshwater from river discharge interacts with oceanic shelf-water, giving rise to density-stratified flow. This Special Issue aims to advance numerical techniques and update effective strategies for their validations, and also covers Eulerian, Lagrangian, and artificial intelligence techniques. Interesting applications include river turbulence, river sediment transport, morphological evolution, estuary hydrodynamics, river plume, salinity transport and intrusion, tidal flushing, as well as the fate and transport of wastes and pollutants in a density-stratified estuary. This Special Issue is situated within the existing literature of river and estuary dynamics and current trends. The recent decade has witnessed an increasingly expanding research focus on extreme computing, multi-phase flow, Big Data, the GIS-based assessment of river modelling, large-scale river turbulence measurements[...]. For further reading, please follow the link to the Special Issue Website at: [https://www.mdpi.com/journal/water/special\\_issues/H8V6L50734](https://www.mdpi.com/journal/water/special_issues/H8V6L50734)

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### Deadline for manuscript submissions

closed (15 October 2023)



## Water

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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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### Editor-in-Chief

Dr. Jean-Luc PROBST

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