

## Special Issue

# Coupled Numerical Modeling of Groundwater Flow and Surface Water Interactions

### Message from the Guest Editors

Understanding the dynamic interactions between surface water and groundwater systems is critical for effective water resource management, especially in climate change, land use shifts, and increasing anthropogenic pressures. This Special Issue aims to highlight recent advances in developing and applying integrated modeling approaches that simulate the complex exchange processes between surface and subsurface hydrological domains. We welcome contributions but are not limited to (1) employing innovative numerical techniques, (2) exploring multi-scale coupling strategies, and (3) incorporating real-world data to improve the accuracy and predictability of water flow models. Studies focusing on river–aquifer interactions, wetland hydrodynamics, lake–groundwater systems, seawater–groundwater interactions, and the influence of anthropogenic or climatic factors on surface–subsurface connectivity are particularly welcome. Through this collection, we seek to foster interdisciplinary insights and practical solutions to guide sustainable water resource management across diverse hydrogeological settings.

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### Guest Editors

Dr. Shengchao Yu

Department of Civil and Resource Engineering and Center for Water Resources Studies, Dalhousie University, Halifax, NS, Canada

Dr. Xiaolang Zhang

Department of Geosciences, Florida Atlantic University, 777 Glades Road, Boca Raton, FL 33431, USA

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### Deadline for manuscript submissions

20 November 2025



## Water

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*Water*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[water@mdpi.com](mailto:water@mdpi.com)

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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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### Editor-in-Chief

Dr. Jean-Luc PROBST

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Toulouse, France

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