

## Special Issue

# Sustainable Modelling Approaches for Groundwater and Hydrogeologic Systems

### Message from the Guest Editors

Groundwater is vital for sustaining freshwater resources, supporting ecosystems, agriculture, and communities, especially where surface water is scarce. Yet, pressures from population growth, climate change, land-use change, and industrialization are making its sustainable management increasingly difficult. Because groundwater systems are complex and dynamic, effective management requires advanced modeling that integrates hydrogeological, geophysical, geochemical, and socio-environmental factors. This Special Issue aims to advance knowledge and practical solutions for sustainable groundwater management through innovative, interdisciplinary modeling approaches. We invite studies using numerical, empirical, or data-driven models that address issues such as depletion, contamination, climate impacts, managed aquifer recharge, and surface-groundwater interactions. By fostering cross-disciplinary collaboration, this Special Issue seeks to enhance the resilience and sustainability of groundwater systems and contribute to efficient, adaptive, and long-term management of this critical resource.

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### Guest Editors

Dr. Muhammad Hasan

Dr. Yanjun Shang

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### Deadline for manuscript submissions

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## Editor-in-Chief

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