

Special Issue

Innovative Approaches in Groundwater Pollution Source Identification and Quality Monitoring: Challenges and Future Directions

Message from the Guest Editor

Identifying the sources and pathways of groundwater pollution is a prerequisite for groundwater pollution remediation and prevention. Due to the concealment and complexity of groundwater burial conditions, this aspect faces formidable challenges. This Special Issue focuses on new technologies for exploring groundwater pollution sources and pathways, with the aim of promoting these technologies and advancements. There are various methods for exploring groundwater pollution sources and pathways, including field exploration methods such as drilling, geophysical exploration, and geochemical methods, as well as numerical simulation methods combining mathematical, chemical, and biogeochemical fields and multiple fields. In recent years, machine learning methods based on big data have shown great vitality. This Special Issue welcomes various case studies and theoretical research results on exploring groundwater pollution sources and pathways.

Guest Editor

Prof. Dr. Lixin Yi

College of Environmental Science and Engineering, Nankai University,
Tianjin, China

Deadline for manuscript submissions

10 December 2025



Water

an Open Access Journal
by MDPI

Impact Factor 3.0
CiteScore 6.0



mdpi.com/si/241289

Water
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
water@mdpi.com

[mdpi.com/journal/
water](https://mdpi.com/journal/water)





Water

an Open Access Journal
by MDPI

Impact Factor 3.0
CiteScore 6.0



[mdpi.com/journal/
water](https://mdpi.com/journal/water)



About the Journal

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

Centre de Recherche sur la Biodiversité l'Environnement (CRBE) UMR
CNRS/UPS/INPT/IRD, Centre National de la Recherche Scientifique
(CNRS), University of Toulouse, Campus ENSAT, Auzeville Tolosane,
Toulouse, France

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE (Web of Science), Ei Compendex, GEOBASE, GeoRef, PubAg, AGRIS, CAPlus / SciFinder, Inspec, and other databases.

Journal Rank:

JCR - Q2 (Water Resources) / CiteScore - Q1 (Aquatic Science)