

Special Issue

Geochemical Signatures for Groundwater Resource Sustainability

Message from the Guest Editors

This Special Issue welcomes manuscripts that explore and link the following themes:

- Novel approaches or improvements in the qualitative and/or quantitative assessment of groundwater status;
- Common (geo)chemical indicators (e.g., stable or radioactive isotopes, major ions) and physico-chemical parameters (e.g., electrical conductivity, total dissolved solids) for groundwater overextraction, recharge rates, age or residence times, source contamination, mixing processes, and anthropogenic influences, including emerging contaminants, such as pharmaceutical and personal care products, micro/nano plastics, and similar compounds;
- (Geo)chemical footprints of sustainable groundwater utilization in water-stressed environments and climates (e.g., semi-arid and arid climate, coastal and island areas, areas with heavy agricultural/industrial/urban pollution);
- Sustainability challenges and strategies (e.g., monitoring, detection, and mitigation) related to various groundwater uses: drinking water supply, agricultural irrigation, geothermal utilization, and industrial purposes;
- The effect of current and/or future pressures of climate change on sustainable groundwater utilization.

Guest Editors

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About the Journal

Message from the Editor-in-Chief

Hydrology is the study of the waters of the Earth. Hydrology has close ties with hydraulics, hydrogeology and the multiple sciences that study the atmosphere, the land surface, the soil and the subsoil, and ranges from complex problems of risk, forecasting and optimization of water resources to interactions with ecological, urban, social and economic systems. The purpose of *Hydrology* is then to provide a journal where research results and real-world problems can be presented and discussed in order to bridge the traditional gaps between the academic world and the professionals and decision makers. Therefore, *Hydrology*, invites authors to submit their original theoretical, field, experimental, and numerical studies on hydrology with strong emphasis on multidisciplinary approaches and interdisciplinary topics, which cross the typical boundaries of our science.

Editor-in-Chief

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JCR - Q2 (Water Resources) / CiteScore - Q1 (Oceanography)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 17.9 days after submission; acceptance to publication is undertaken in 2.8 days (median values for papers published in this journal in the second half of 2025).