Special Issue

Novel Procedures and Methodologies for Surface and Underground Water Quality Analysis: Theory and Application

Message from the Guest Editors

Water quality is a critical factor for sustaining human activities and ecological balance. Both surface and underground water resources are subject to significant influences from natural and anthropogenic activities, which affect the maximum allowable concentrations of various water quality parameters. This Special Issue tends to collect papers dealing with surface and underground water quality chemical and physical parameter analysis using time series modeling, artificial intelligence and machine learning to assess the impact of meteorological parameters.

- Predictive modeling for future water quality levels;
- Assessment of the current water quality conditions;
- Integration of time series analysis techniques;
- Utilization of artificial intelligence in water quality assessment:
- Application of machine learning methods;
- Analysis of surface water quality parameters;
- Examination of underground water quality parameters;
- Consideration of anthropogenic impacts on water resources:
- Incorporation of meteorological factors in water quality assessment;
- Improving understanding of natural and humaninduced effects on water quality.

Guest Editors

Dr. Bojan Đurin

Dr. Osman Fetoshi

Dr. Gabriel-Ionut Plavan

Deadline for manuscript submissions

31 March 2026



Hydrology

an Open Access Journal by MDPI

Impact Factor 3.2 CiteScore 5.9



mdpi.com/si/210717

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

mdpi.com/journal/ hydrology





an Open Access Journal by MDPI

Impact Factor 3.2 CiteScore 5.9





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

Prof. Dr. Ezio Todini

Italian Hydrological Society, Piazza di Porta San Donato 1, 40126 Bologna, Italy

Author Benefits

High Visibility:

indexed within Scopus, ESCI (Web of Science), PubAg, GeoRef, and other databases.

Journal Rank:

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

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 15.7 days after submission; acceptance to publication is undertaken in 2.8 days (median values for papers published in this journal in the first half of 2025).