

Special Issue

Advances in Integrated Watershed Modeling: Emerging Water Issues under Changing Land Use and Climate

Message from the Guest Editors

Systematic approach to modeling watershed systems involves a holistic integration of hydrologic and water-quality processes with data collection and model optimization. Recent advances in the understanding of physical and biogeochemical processes and novel computer technologies have brought significant attention to watershed modeling technologies and their associated applications, such as lake contamination by harmful algal blooms in the Great Lakes region in North America, excessive soil erosion and stream sedimentation in Loess Plateau of Northern China, and water scarcity in many watersheds in Africa. These emerging issues require an integrated modeling approach to support watershed management. For this Special Issue, we invite submissions from different disciplines that present latest advances in the development of watershed modeling systems, integration of hydrologic and nutrient transport processes to solve emerging water quantity and quality problems, evaluating watershed model performance under different spatial and temporal data constraints, and predicting the impacts of land use/land cover and climate change with the use of computer models.

Guest Editors

Prof. Dr. Aleksey Sheshukov

Dr. Haw Yen

Dr. Latif Kalin

Dr. Laurent Ahiablame

Deadline for manuscript submissions

closed (31 March 2019)



Hydrology

an Open Access Journal
by MDPI

Impact Factor 3.2
CiteScore 5.9



mdpi.com/si/14947

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

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





Hydrology

an Open Access Journal
by MDPI

Impact Factor 3.2
CiteScore 5.9



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



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).