



Advances in Hydrological Modelling, Quantitative Analysis and Prediction for a Changing Environment

Guest Editors:

Dr. Yunqing Xuan

Zienkiewicz Centre for
Computational Engineering,
College of Engineering, Swansea
University, Singleton Park,
Swansea SA2 8PP, UK

y.xuan@swansea.ac.uk

Dr. Zhiyong Liu

Center for Water Resources and
Environment, School of Civil
Engineering, Sun Yat-sen
University, Guangzhou,
Guangdong 510275, China

liuzhiy25@mail.sysu.edu.cn

Prof. Dr. Hongyan Li

College of Environment and
Resources, Jilin University, No.
2519 Jiefang Road, Changchun
130021, China

lihongyan@jlu.edu.cn

Deadline for manuscript
submissions:

31 December 2021

Message from the Guest Editors

Over the last two decades, there has been a huge increase in hydrological model applications with a focus on global changes, particularly on water resources and the impact on regional hydrological processes, among which the evaluation of the climate change impact has been a major area.

We are organizing this Special Issue and cordially invite researchers and practitioners in the wider modelling community to submit research papers related (but not limited) to the following aspects:

1. Progress in modelling hydrological processes in a changing environment
2. New model structure and design to address the social dimensions and interactions when building societal resilience to the changing environment
3. Utilization and mining of large environment datasets to support environment change prediction and planning using data-centric techniques
4. Identification and prediction of abrupt environment changes, e.g., from floods to droughts.
5. The role of hydrological modelling in mitigating and building resilience to the hazards caused by environmental change
6. Hydrological prediction and hydrological uncertainty analysis based on probabilistic perspectives.





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Marc A. Rosen

Faculty of Engineering and
Applied Science, University of
Ontario Institute of Technology,
Oshawa, ON L1G 0C5, Canada

Message from the Editor-in-Chief

I encourage you to contribute a research or comprehensive review article for consideration for publication in *Sustainability*, an international Open Access journal which provides an advanced forum for research findings in areas related to sustainability and sustainable development. The journal publishes original research articles, reviews, conference proceedings (peer-reviewed full articles) and communications. I am confident you will find the journal contributes to enhancing understanding of sustainability and fostering initiatives and applications of sustainability-based measures and activities.

Author Benefits

Open Access:— free for readers, with [article processing charges \(APC\)](#) paid by authors or their institutions.

High visibility: indexed within [Scopus](#), [SCIE](#) and [SSCI \(Web of Science\)](#), [GEOBASE](#), [Inspec](#), [AGRIS](#), [RePEc](#), [CAPlus / SciFinder](#), and many [other databases](#).

Journal Rank: [JCR](#) - Q2 (*Environmental Sciences*) / [CiteScore](#) - Q1 (*Geography, Planning and Development*)

Contact Us

Sustainability
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
Fax: +41 61 302 89 18
www.mdpi.com

mdpi.com/journal/sustainability
sustainability@mdpi.com
[@Sus_MDPI](https://twitter.com/Sus_MDPI)