Special Issue

Frontiers in Hydrologic Dynamics, Analytics and Predictability

Message from the Guest Editors

Hydrology is a rich multidisciplinary field encompassing a complex process network involving interactions of diverse nature and scales. Still, it abides by the core dynamical principles regulating individual and cooperative processes and interactions, ultimately relating to the overall Earth system dynamics. This Special Issue focuses on advances in theoretical and applied studies in hydrologic dynamics, regimes, transitions, and extremes, along with their physical understanding, predictability, and uncertainty. Moreover, it welcomes research on dynamical co-evolution. feedbacks, and synergies among hydrologic and other Earth system processes at multiple spatiotemporal scales. The Special Issue further encourages a discussion on the physical and analytical approaches to hydrologic dynamics, ranging from stochastic, computational, and system dynamic analysis to more general frameworks addressing non-ergodic and thermodynamically unstable processes and interactions.

Guest Editors

Prof. Dr. Rui A. P. Perdigão

Meteoceanics Institute for Complex System Science, Washington, DC 20004, USA

Dr. Julia Hall

Meteoceanics Interdisciplinary Centre for Complex System Science; Vienna, Austria, and Lisbon, Portugal

Deadline for manuscript submissions

closed (30 December 2022)



Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 5.5



mdpi.com/si/68732

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

mdpi.com/journal/applsci





Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 5.5



About the Journal

Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multidimensional network.

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo

Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32, 20133 Milano, Italy

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, Inspec, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering)

