Special Issue

Pumped-Storage Hydropower: Flexible Giants for the Energy Transition

Message from the Guest Editors

Pumped-storage hydropower (PSH) is the flexible giant among the current energy storage technologies. This Special Issue aims to highlight recent achievements in the development of pumped-storage hydropower, especially with regards to its flexibility with several potential applications in ongoing energy transition.

Review papers for special solutions or experiences from long-term operation from existing pumped storage plants are welcome. Papers may include results from physical scale models, numerical investigations, field measurements and operational experience. Contributions focusing on environmental issues and sector coupling for multipurpose application of pumped storage are welcome. Additional requested topics include power grid balancing, digital twins, and predictive maintenance. We look forward to recieving your interesting contributions on the increasingly important topic of pumped storage hydropower. For further reading, please follow the link to the Special Issue Website at: https://www.mdpi.com/journal/water/special_issues/hydro_power

Guest Editors

Dr. Wolfgang Richter
Institute of Hydraulic Engineering and Water Resources Management, Graz University of Technology, 8010 Graz, Austria

Dr. Kaspar Vereide
Department of Hydraulic and Environmental Engineering, Norwegian University of Science and Technology, 7491 Trondheim, Norway

Deadline for manuscript submissions

closed (30 April 2023)

Water

an Open Access Journal by MDPI

Impact Factor 3.0
CiteScore 6.0

mdpi.com/si/92672

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

mdpi.com/journal/water

Water

an Open Access Journal by MDPI

Impact Factor 3.0
CiteScore 6.0

mdpi.com/journal/water

About the Journal

Message from the Editor-in-Chief

In the context of global changes, the sustainable management of water cycles, going from global and regional water cycles to urban, industrial and agricultural water cycles, plays a very important role on the water resources and on their relationships with food, energy, biodiversity, ecosystem functioning and human health. *Water* invites authors to provide innovative original full articles, critical reviews and timely short communications and to propose special issues devoted to new technological and scientific domains and to interdisciplinary approaches of the water cycles. We ensure a critical review process and a quick turnaround between submission and final decision.

Editor-in-Chief

Dr. Jean-Luc PROBST
Centre de Recherche sur la Biodiversité l'Environnement (CRBE) UMR CNRS/UPS/INPT/IRD, Centre National de la Recherche Scientifique (CNRS), University of Toulouse, Campus ENSAT, Auzeville Tolosane, Toulouse, France

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, GEOBASE, GeoRef, PubAg, AGRIS, CAPlus / SciFinder, Inspec, and other databases.

Journal Rank:

JCR - Q2 (Water Resources) / CiteScore - Q1 (Aquatic Science)

MDPI