Special Issue

Advanced Perspectives on the Water-Energy-Food Nexus

Message from the Guest Editors

Water-energy-food (WEF) nexus plays an important role in addressing such sustainability challenges. Traditional sectoral policies often exacerbate WEF trade-offs—for instance, bioenergy expansion may compromise water security or irrigation intensification may increase energy scarcity—while climate change amplifies these tensions through cascading risks across scales. Emerging technological and methodological advances offer transformative potential. Transdisciplinary approaches bridge the divide between technical solutions and sociopolitical realities. This Special Issue of Interest include, but are not limited to, the following:

- Bridging policy silos: cross-sectoral governance for the WEF nexus management;
- Efficiency-equity synergies: metrics and governance pathways in WEF nexus systems;
- Climate-resilient WEF systems: adaptive strategies under uncertainty;
- Cascading risk in WEF networks: modeling interdependencies and mitigation strategies;
- Al-integrated decision support systems for WEF tradeoffs:
- Circular bioeconomy innovations associated with wastewater and bioenergy.

Guest Editors

Dr. Qiong Yue

Dr. Guohua He

Dr. Mengyang Wu

Prof. Dr. Xinchun Cao

Deadline for manuscript submissions

20 December 2025



Water

an Open Access Journal by MDPI

Impact Factor 3.0 CiteScore 6.0



mdpi.com/si/241422

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



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)

