

Special Issue

Precision Irrigation Management and Soil Moisture Optimization in Agroecosystems

Message from the Guest Editors

In face of the the increasing water scarcity, climate viability and the demand of higher agricultural productivity, precision irrigation and soil moisture optimization is crucial for sustainable agricultural production. Exploring the the cutting-edge advances in precision management technologies, smart soil moisture sensing systems and precise sensors to assess the plants internal water status with integrated irrigation management strategies which supports a climate resilient and sustainable agroecosystems. We invites global researchers to submit novel research articles, reviews, meta-analysis and case-studies , including but not limited to:

- Precision irrigation strategies for sustainable crop production
- Sensors technologies for precision irrigation scheduling
- Soil moisture sensor based, ET based and plant based irrigation scheduling
- Site specific and variable rate irrigation management
- Deficit and regulated deficit irrigation management
- Irrigation system design, evaluation and performance
- IoT, AI and remote sensing integration for irrigation scheduling

Guest Editors

Dr. Nawab Ali

Department of Biosystems and Agricultural Engineering (BAE), College of Agriculture and Natural Resources, Michigan State University, East Lansing, MI, USA

Dr. Younsuk Dong

Department of Biosystems and Agricultural Engineering (BAE), College of Agriculture and Natural Resources, Michigan State University, East Lansing, MI, USA

Deadline for manuscript submissions

20 January 2026



Water

an Open Access Journal
by MDPI

Impact Factor 3.0
CiteScore 6.0



mdpi.com/si/246108

Water

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

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





Water

an Open Access Journal
by MDPI

Impact Factor 3.0
CiteScore 6.0



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