Special Issue

Electrocatalysis in Action: From Clean Water to Green Energy

Message from the Guest Editors

Water pollution remains a critical environmental challenge that needs novel treatment methods for the removal of organic pollutants. Electrocatalysis has emerged as a promising approach, offering high efficiency in degrading contaminants while minimising secondary pollution. Parallel to water treatment, electrocatalysis for green energy generation is gaining significant attention, particularly in water electrolysis and fuel cell technologies. Hydrogen evolution reaction (HER) via water splitting is the key component of the transition to sustainable energy systems, while oxygen evolution reation (OER) is usually the limiting step and should be investigated. At the same time, H2O2 production is increasingly valued for its applications in green chemical synthesis and disinfection ability. Submissions to this issue have to focus on the design of novel electrode materials and their performance in water and wastewater treatment and H2 or H2O2 production for energy conversion. Research contributions should focus on optimising kinetic parameters to enhance catalytic efficiency, stability, and selectivity.

Guest Editors

Dr. André Torres-Pinto
LSRE-LCM, University of Porto, Porto, Portugal

Dr. Hanane Boumeriame
LSRE-LCM/ALiCE, University of Porto, Porto, Portugal

Deadline for manuscript submissions

20 September 2025

Water

an Open Access Journal by MDPI

Impact Factor 3.0
CiteScore 6.0

mdpi.com/si/232572

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