

Special Issue

Effects of Biochar Additions on Soil Hydraulic Properties

Message from the Guest Editor

This Special Issue aims to advance a geotechnical engineering-oriented understanding of the effects of biochar additions on soil hydraulic properties. We welcome contributions that investigate biochar-modified soils from the perspectives of soil mechanics, unsaturated soil theory, and multi-physical coupling. Topics include, but are not limited to, changes in saturated and unsaturated hydraulic conductivity, soil–water characteristic curves, pore structure evolution, fabric anisotropy, consolidation–seepage interaction, and hydro–mechanical coupling under loading, wetting–drying cycles, or environmental aging. Experimental, numerical, and theoretical studies relevant to earthworks, liners, barriers, slopes, and ground improvement are particularly encouraged. This Special Issue seeks to clarify mechanisms, establish engineering-relevant parameters, and assess the feasibility and limitations of biochar in geotechnical practice.

Guest Editor

Dr. Yang Chen

School of Civil Engineering, Sun Yat-sen University, Zhuhai, China

Deadline for manuscript submissions

closed (20 July 2026)



Water

an Open Access Journal
by MDPI

Impact Factor 3.5
CiteScore 6.7



mdpi.com/si/265539

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 3.5
CiteScore 6.7



[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)