Special Issue

Biochar's Role in Water-Stable Soils and Remediation

Message from the Guest Editor

Biochar has gained significant attention as a multifunctional soil amendment with the potential to enhance soil health, water retention, and carbon sequestration. Its porous structure and surface properties make it a promising tool for improving soil hydraulic properties, including water holding capacity, infiltration, and permeability. However, the effects of biochar on these properties are highly variable and depend on biochar type, application rate, soil texture, climate conditions, and management practices. This Special Issue aims to bring together cutting-edge research that explores the influence of biochar additions on soil hydraulic dynamics across diverse agroecosystems and land uses. We welcome contributions that address experimental, modeling, and theoretical approaches to understanding biochar–soil–water interactions. Topics may include, but are not limited to, the impacts of biochar on water retention curves, infiltration and drainage behavior, soil water repellency, and implications for water-use efficiency, crop productivity, and resilience to drought or flooding.

Guest Editor

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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

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