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Biochar Application in Remediating Salt/Metal Affected Soils and Water

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Message from the Guest Editors

Soil salinization is a significant threat to the productivity of soil in croplands. Excessive amounts of soluble salts can occupy the ion exchange sites, thus impacting the soil quality and, hence, crop yield. Elevated salt concentrations in water also have deleterious environmental effects, altering the composition and functions of aquatic ecological systems. Similarly, the contamination of soil and water with metals poses a major threat to human and ecological health.

Biochar is a promising source of carbon-rich material that is produced from organic feedstock/waste materials under high-heat and limited oxygen conditions. Owing to its numerous advantages, such as a large surface area, high carbon content, and abundance of functional groups, this material has been utilized abundantly in recent years to enhance the physical, chemical, and biological properties of salt/metal-affected soils and water. This Special Issue will focus on high-quality scientific research, case studies, and review works in the aforementioned topic.

Keywords:

biochar; salts; metals; soil remediation; water treatment; phytotoxicity; sustainability











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Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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