Special Issue

Preparation and Application of Biochar (Second Edition)

Message from the Guest Editors

As of late, the production of sustainable biochar has received notable interest, mostly because biochar presents very versatile physicochemical properties, is easily produced with potential to use several feedstocks, and has large applicability in various fields.Biochar is a carbon-rich and porous solid material that can be produced through the thermochemical conversion of biomass in the presence of little or no oxygen. This material has very unique qualities, including a large surface area, calorific value, hydrophobicity, high porosity, valuable functional groups, a high cation exchange capacity, and stability. These properties have great importance for a wide variety of applications that are able to address a number of pressing ecosystem challenges: soil amendment, the remediation of environmental pollutants and wastewaters, carbon capture and storage, bioenergy, renewable gas production, metal production, catalysts, and general gas cleaning. This Special Issue is dedicated to collecting high-quality research on biochar preparation technologies and applications, including technical, scientific, economic, and environmental topics.

Guest Editors

Dr. Catarina Nobre
Dr. Bruna Rijo
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Deadline for manuscript submissions

closed (31 March 2026)

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Message from the Editor-in-Chief

Environmental issues are quickly becoming central political, economic and academic topics of the twenty-first century. A large number of modern challenges are directly or indirectly caused by complex interactions between environmental issues. Such issues require interdisciplinary research, knowledge and insights to understand and, ultimately, for solutions to be found. Through the journal Environments, we strive to create a platform for meaningful discourse by accepting contributions from a wide range of fields. We sincerely hope you will consider publishing your distinguished work in this highly-accessible, peer-reviewed journal.

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