Special Issue

Preparation and Application of Biochar

Message from the Guest Editors

Biochar is a carbon-rich and porous solid material that can be produced through the thermochemical conversion of biomass (pyrolysis, hydrothermal carbonization, gasification, torrefaction) with 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, high cation exchange capacity and stability. These properties have great importance to a wide variety of applications that can address several pressing ecosystem challenges, namely, soil amendment, remediation of environmental pollutants and wastewaters, carbon capture and storage, bioenergy and et.al. Indeed, specific end-user applications have different requirements for biochar properties, and these properties are noticeably affected by production technology, process conditions, feedstock type and post modifications (e.g., activation processes).

Considering the current interest and the several positive features of biochar, 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

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Deadline for manuscript submissions

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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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