



## Biochar: Preparation, Modification and Environmental Application

Guest Editor:

**Dr. Bing Wang**

College of Resources and  
Environmental Engineering,  
Guizhou University, Guiyang  
550025, China

Deadline for manuscript  
submissions:

**closed (20 April 2023)**

### Message from the Guest Editor

Biochar has been widely used in environmental remediation due to its relatively large specific surface area, abundant surface functional groups, and low preparation cost. However, pristine biochar has a relatively limited adsorption capacity for pollutants compared with activated carbon. Therefore, it is necessary to modify the biochar to improve its adsorption capacity. The properties of biochar are different depending on the feedstocks, carbonization conditions, and modification methods, which may affect its adsorption performance and application. Currently, the research on biochar on the adsorption pollutants mainly focuses on its physicochemical characteristics, influencing factors, and adsorption mechanisms. To optimize the preparation conditions of functional biochar, to clarify the adsorption behavior and mechanism of different modified biochars for different pollutants, and to systematically evaluate the problems and environmental risks in its practical application, scientists all over the world must carry out systematic research together. In particular, research on the adsorption and removal mechanism of some emerging contaminants is also highly needed.





an Open Access Journal by MDPI

## Editor-in-Chief

**Prof. Dr. Giulio Nicola Cerullo**  
Dipartimento di Fisica,  
Politecnico di Milano, Piazza L.  
da Vinci 32, 20133 Milano, Italy

## 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.

## 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, Inspec, Embase, CAPlus / SciFinder, and other databases.

**Journal Rank:** JCR - Q2 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering)

## Contact Us

---

*Applied Sciences* Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/applsci](http://mdpi.com/journal/applsci)  
[applsci@mdpi.com](mailto:applsci@mdpi.com)  
[X@Applsci](https://twitter.com/AtApplsci)