



## Pre-treatment of Wastewater with Carbon Materials to Achieve Efficient Treatment of Full-Strength Wastewater by Microalgae

Guest Editors:

**Dr. Qi Zhang**

State Key Laboratory of Food Science and Technology, Engineering Research Center for Biomass Conversion, Ministry of Education, Nanchang University, Nanchang 330047, China

**Prof. Dr. Yunpu Wang**

State Key Laboratory of Food Science and Technology, Engineering Research Center for Biomass Conversion, Ministry of Education, Nanchang University, Nanchang, China

**Dr. Xian Cui**

State Key Laboratory of Food Science and Resources, Engineering Research Center for Biomass Conversion, Ministry of Education, Nanchang University, Nanchang 330047, China

### Message from the Guest Editors

With growing economic development and the increase in population, the pollution and shortage of water resources has become a global problem. The annual production of wastewater from the municipal, agricultural, and industrial fields is huge, containing excessive nutrients, and improper treatment may lead to environmental problems such as the eutrophication of water bodies. Microalgae-based wastewater treatment technology can not only purify wastewater and solve environmental pollution problems but also use the nutrient elements in wastewater to produce algal biomass, which has attracted more and more attention.

Biochar has been widely studied as an adsorbent for the removal of contaminants from wastewater due to its unique characteristics, such as having a large surface area, well-distributed pores and high abundance of surface functional groups. This Special Issue of Sustainability aims to provide a feasible and sustainable approach to remediate wastewater, produce value-added microalgal biomass, and recycle used carbon materials, further promoting the industrialization of algae-based wastewater remediation.

Deadline for manuscript submissions:

**closed (31 May 2023)**



[mdpi.com/si/133369](https://mdpi.com/si/133369)



an Open Access Journal by MDPI

## Editor-in-Chief

### **Prof. Dr. Steve W. Lyon**

School of Environment and  
Natural Resources, Ohio State  
University, Columbus, OH 43210,  
USA

## Message from the Editor-in-Chief

I encourage you to contribute a research or comprehensive review article for consideration for publication in *Sustainability*, an international open access journal which provides an advanced forum for research findings in areas related to sustainability and sustainable development. The journal publishes original research articles, reviews, conference proceedings (peer reviewed full articles) and communications. I am confident you will find the journal contributes to enhancing understanding of sustainability and fostering initiatives and applications of sustainability-based measures and activities.

## Author Benefits

**Open Access:** free for readers, with [article processing charges \(APC\)](#) paid by authors or their institutions.

**High Visibility:** indexed within [Scopus](#), [SCIE](#) and [SSCI \(Web of Science\)](#), [GEOBASE](#), [GeoRef](#), [Inspec](#), [RePEc](#), [CAPlus / SciFinder](#), and [other databases](#).

**Journal Rank:** JCR - Q2 (Environmental Studies) / CiteScore - Q1 (Geography, Planning and Development)

## Contact Us

---

*Sustainability* Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

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

[mdpi.com/journal/sustainability](http://mdpi.com/journal/sustainability)  
[sustainability@mdpi.com](mailto:sustainability@mdpi.com)  
[X@Sus\\_MDPI](#)