



## **Microbiotechnology Tools for Wastewater Treatment and Waste Valorization**

Guest Editors:

**Dr. Shamas Tabraiz**

Section of Natural and Applied  
Sciences, Canterbury Christ  
Church University, Kent CT1 1QU,  
UK

**Dr. Evangelos Petropoulos**

Premier Tech Water and  
Environment, Peterlee, County  
Durham SR8 2RA, UK

Deadline for manuscript  
submissions:

**closed (31 December 2022)**

### **Message from the Guest Editors**

Appropriate wastewater treatment before discharge can reduce the stress on fresh water bodies. Of the biological wastewater treatment technologies, membrane bioreactors (MBRs) yield high-quality effluent and require a small area. Recent developments in membrane materials have made MBRs more viable. Fouling is one of the main hinderances in the widespread use of this technology, and has attracted the attention of many researchers. Different physical, chemical and biological strategies have been developed to reduce this and make it more sustainable.

This Special Issue aims to cover the recent biotechnological developments and advances in the area of MBRs for wastewater treatment, microbial communities present in wastewater and their role, quorum sensing and quorum quenching bacteria and their applications in MBR, new membrane materials and their interactions with biofilm communities, the role of biofilm communities in fouling, biofouling control strategies and their effect on MBR communities, biofilms and the role of suspended communities in nutrient removal, and combined and integrated MBRs and their microbial communities.





an Open Access Journal by MDPI

## Editor-in-Chief

### Dr. Badal C. Saha

Retired, National Center for  
Agricultural Utilization Research,  
USDA-ARS, Peoria, IL, USA

## Message from the Editor-in-Chief

Welcome to a new open access journal, Fermentation, which meets the growing need for a high quality peerreviewed international journal with easy access to all researchers globally. We hope that you will share our enthusiasm for this new journal and look forward to working with you to make Fermentation a leader in its field. Your contributions are vital for the success of this new journal. Proposals for editing a special issue for a particular topical area are always welcome.

## 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), PubAg, FSTA, Inspec, CAPlus / SciFinder, and other databases.

**Journal Rank:** JCR - Q2 (*Biotechnology and Applied Microbiology*) / CiteScore - Q2 (*Plant Science*)

## Contact Us

---

Fermentation Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
www.mdpi.com

mdpi.com/journal/fermentation  
fermentation@mdpi.com  
X@Ferment\_MDPI