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Biocatalysts Advancement for Optimum Performance in Microbial Fuel Cells and Their Sub-types

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Message from the Guest Editors

Microbial fuel cells are novel devices that could be used for wastewater treatment and power generations simultaneously using electrochemically active bacteria as biocatalysts. The subtypes of MFCs, such as sediment MFCs, soil MFCs, sludge MFCs, and benthic MFCs, have attracted the attention of many researchers recently due to different electron transfer pathways in the solid medium rather than aquatic medium of MFCs. Many challenges in the subtypes of MFCs are addressed to obtain maximum performance. These subtypes could be employed as biosensors in their respective mediums. This Special Issue will focus on recent advancements in MFCs and their subtypes, such as efficient anode materials, coupling with other technologies, innovative applications, optimum designs, pollutant removal, and pilot scale-up.

The Special Issue will publish experimental and review papers, as well as short communications, discussing recent developments in microbial fuel cells and their subtypes for optimum performance.