Special Issue

Anaerobic Digestion and Sustainable Integrated Biorefinery

Message from the Guest Editors

Anaerobic digestion systems have been the backbone of rural waste management in developing countries, with the incentive of utilizing the produced biogas as fuel; simultaneously, the digestate can be repurposed as a soil quality enhancer. Anaerobic digestion (AD) can degrade a large variety of organic wastes, such as food and agro-waste, due to the presence of reactor microbiome. The integration of the anaerobic digestion process with different bioprocesses (microbial, algal etc.) and thermochemical processes has led to the concept of anaerobic digestion-Based biorefineries (ADBB) being developed, strengthening the zero-waste concept of sustainable development. The utilization of liquid effluents, released from bioprocesses in microbial fuel cell for bioelectricity generation, can further strengthen the development of sustainable biorefinery. The biochar generated through pyrolysis of AD digestate can again be introduced into AD for process enhancement. This Special Issue welcomes the submission of original research articles and critical review articles incorporating anaerobic digestion process from disciplines related to sustainable biorefineries.

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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.

Editor-in-Chief

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