Special Issue

Advances in Wastewater Biorefineries: Renewable Energy Production and Resource Recovery in Wastewater Treatment Plants

Message from the Guest Editors

In conventional municipal wastewater treatment plants using resource recovery technologies, the predominant process is sludge methane digestion, the key product of which is bioenergy in the form of biogas. This requires implementing advanced physico-chemical and biochemical processes, including biorefinery processes. In theory, most technological solutions used in conventional biorefineries can be used in wastewater treatment plants, but their implementation is determined by economic and environmental factors. The Special Issue aims to analyse the current state and technological progress in biorefinery processes used in wastewater treatment plants. Topics of interest for publication include, but are not limited to, the following:

- Carboxylic platform for biofuels and biochemicals;
- Conversion of Sewage Sludge into Biofuels;
- Wastewater treatment process integration with other energy production technology;
- Microalgae-based technology for wastewater treatment and bioenergy production;
- Bioenergy production using fermentation, dark fermentation, and microbial fuel cell technology

Guest Editors

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Message from the Editor-in-Chief

Energies is an international, open access journal in energy engineering and research. The journal publishes original papers, review articles, technical notes, and letters. Authors are encouraged to submit manuscripts which bridge the gaps between research, development and implementation. The journal provides a forum for information on research, innovation, and demonstration in the areas of energy conversion and conservation, the optimal use of energy resources, optimization of energy processes, mitigation of environmental pollutants, and sustainable energy systems.

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