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Bioelectrochemical Systems for Wastewater Valorization

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Deadline for manuscript submissions:

closed (30 November 2019)

Message from the Guest Editor

Bioelectrochemical systems (BES), which comprise a group of technologies derived from conventional electrochemical systems, have evolved during the past 15 years and become an alternative – and even a complement – to traditional wastewater treatment technologies (e.g., activated sludge and anaerobic digestion). They rely on the ability of certain microorganisms to exchange electrons with the solid surfaces of the electrodes, which is a significant feature as it can directly convert organic matter into electricity.

This Special Issue covers basic and applied studies on all areas involved in the development of BES. More specifically, it welcomes contributions focused on upscaling, energy efficiency, case studies, mathematical modeling, biofuel production, novel materials, alternative reactors configurations, life-cycle assessment, and technoeconomic analyses.

Keywords: bioelectrochemical systems; microbial electrochemical technologies; microbial fuel cell; microbial electrolysis cell; wastewater; wastes valorization; energy efficiency; biofue











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Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network

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