

Special Issue

Novel Electrochemical Technologies for Energy Applications and Wastewater Treatment

Message from the Guest Editors

The global population growth and the modern way of life result in increasing energy needs and environmental pollution due to the widespread use of fossil fuels.

Environmentally friendly alternative power sources appear as the most effective solution in order to cover the increasing energy demands while minimizing the environmental impact. Towards that direction, research interest focuses on the development of electrochemical technologies for power production. The aim of the present Special Issue is to highlight current and future electrochemical technologies concerning both energy applications as well as wastewater treatment. Topics include, but are not limited to, the following:

- New aspects in MFC technology (new materials, innovative designs, alternative feedstocks);
- Design of efficient processes for biogas upgrading through MECs;
- Production of hydrogen and chemicals in MECs;
- Electrosynthesis of hydrogen peroxide;
- Combined electro-assisted processes for water treatment (electro-Fenton, electrochemical activation of persulfate);
- Use of 3D particle electrodes for water purification;
- Electrocoagulation;
- Electrochemical reduction of carbon dioxide.

Guest Editors

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Deadline for manuscript submissions

closed (15 June 2024)



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