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Novel Electrochemical Technologies for Energy Applications and Wastewater Treatment

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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.

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Message from the Editor-in-Chief

Processes (ISSN 2227-9717) provides an advanced forum for process/system-related research in chemistry, biology, material, energy, environment, food, pharmaceutical, manufacturing and allied engineering fields. The journal publishes regular research papers, communications, letters, short notes and reviews. Our aim is to encourage researchers to publish their experimental, theoretical and computational results in as much detail as necessary. There is no restriction on paper length or number of figures and tables.

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