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Optimizing the Energy and Carbon Footprint in Wastewater Treatment Plants

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Deadline for manuscript
submissions:

closed (31 December 2023)

Message from the Guest Editors

The Guest Editors are inviting submissions to a Special Issue of *Energies* on the subject area of “Optimizing the Energy and Carbon Footprint in Wastewater Treatment Plants”. Municipal wastewater treatment is a significant energy consumer. It is estimated that in developed countries, approximately 1–3% of the total electrical energy consumption on a country level is allocated to wastewater treatment. Furthermore, it is expected that these energy requirements will increase over time due to population growth and the employment of advanced treatment technologies to achieve the increasingly stringent treated effluent limit values. Therefore, the optimization of the energy footprint of wastewater treatment plants (WWTPs) is a major driver toward the achievement of zero-energy or energy-positive plants.

This Special Issue will focus on studies targeted at novel processes which aim at a decrease in energy consumption and/or increase in energy production either directly from wastewater or through sewage sludge treatment, thus promoting the optimization of the total energy footprint of WWTPs.



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Special Issue



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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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