

Special Issue

A Low Carbon Wastewater Treatment via Leveraging Energy and Resource Recovery

Message from the Guest Editors

This Special Issue explores innovative strategies for achieving low-carbon wastewater treatment through the integration of energy and resource recovery. As global sustainability efforts intensify, reducing the carbon footprint of wastewater treatment is crucial. This Special Issue highlights advanced technologies and methodologies aimed at optimizing energy recovery, minimizing emissions, and recovering valuable resources such as nutrients, carbon, and water. This Special Issue welcomes original research, reviews, and case studies that contribute to key topics, but are not limited to the following areas:

- Cutting-edge technologies for low-carbon wastewater treatment, including anaerobic digestion, bioelectrochemical systems, and energy-efficient processes.
- Strategies for enhancing resource recovery, including nutrient recycling, carbon capture, and water reuse.
- The role of circular economy principles in wastewater management and low-carbon solutions.
- Technological, economic, and environmental assessments of integrated low-carbon treatment systems.
- Policy frameworks and regulatory considerations for promoting low-carbon wastewater management practices.

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I encourage you to contribute a research or comprehensive review article for consideration for publication in *Sustainability*, an international Open Access journal which provides an advanced forum for research findings in areas related to sustainability and sustainable development. *Sustainability* publishes original research articles, review articles and communications. I am confident you will find the journal contributes to enhancing understanding of sustainability and fostering initiatives and applications of sustainability-based measures and activities.

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