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Sustainable Technologies for Municipal Wastewater Treatment: Challenges and Opportunities

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Message from the Guest Editors

Dear Colleagues,

Municipal wastewater (MWW) is among the most important sources of pollution and environmental degradation, particularly affecting low- and middle-income countries (LMICs) where infrastructure for its effective treatment is underdeveloped or even undeveloped. However, when viewed under the recently introduced circular economy concept, MWW can also be an important asset for resource recovery and valorization, rather than a waste. For example, its phosphorus (P) content can be recovered as a fertilizer. MWW in an anaerobic digester will produce biogas, while it is also possible to reclaim water from MWW and this can be a game changer in water scarce areas.

This Special Issue focuses on the challenges and opportunities of sustainable treatment technologies in MWW, including, but not limited to, those that can a) minimize pollution and eliminate micro/nano-plastics and contaminants of emerging concern (CEC) such as pharmaceuticals and antibiotic resistant bacteria/genes (ARB/ARGs); b) reduce the overall environmental impact of the treatment process; c) recover energy and/or resources; and d) introduce circular economy and zero liquid discharge (ZLD) concepts.



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Special Issue



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Message from the Editor-in-Chief

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