

## Special Issue

# Advances in Waste Treatment, Bioremediation and Decarbonization Research

### Message from the Guest Editor

This Special Issue seeks to bring together original research articles, reviews, and case studies that explore the latest advancements in waste treatment and decarbonization strategies. By disseminating innovative research and practical solutions, this Special Issue aims to contribute to global efforts to mitigate environmental pollution and promote sustainable development.

Topics include, but are not limited to, the following: Innovative waste treatment processes and technologies; Advances in anaerobic and aerobic bioprocess optimization and scale-up strategies; Bioaugmentation and biostimulation techniques; Synergies between biochar and microbial activity in waste treatment; Environmental and economic assessments of waste treatment methods; Case studies demonstrating successful waste treatment projects; Microbial biotechnology for decarbonization through gas fermentation; Biodegradation of hazardous waste and emerging contaminants; Development and application of bioplastics and biodegradable materials; Bioremediation of heavy metals and toxic chemicals; Integrated waste management systems and life cycle assessments (LCAs).

### Guest Editor

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### Deadline for manuscript submissions

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