



Promoting Sustainable and Innovative Waste Management in the 4th Industrial Revolution (4IR) Era

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Message from the Guest Editors

Since 2015, the United Nations (UN) Member States have adopted a set of 17 Sustainable Development Goals (SDGs) that have become a reference agenda for addressing a variety of global challenges.

The emergence of the 4th Industrial Revolution revolutionizes the way we address the solid waste problem by improving environmental protection using innovative solutions. In recent years, novel technologies such as artificial intelligence, machine learning, deep learning, and digitization have been developed as intelligence supports to transform the problem of solid waste management into zero-waste by applying a resource recovery paradigm towards a circular economy (CE). The benefits of such smart technologies should be based on the nexus of sustainability and cost-effectiveness to minimize potential harmful impacts to the environment and maximize benefits.

To complement the body of knowledge, we welcome contributions that include solid waste management, water treatment, and air pollution control that particularly apply (but are not limited to) the following technologies: artificial intelligence, machine learning, deep learning, cloud computing, or digitization.





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