


Recent advances and prospects for industrial waste management and product recovery for environmental appliances

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Abstract

Any material when utilized for a required period of time and segment, the leftover residues of those materials are known as waste. Enormous waste is generated during such wear and tear process of materials depending on the usage and functions in a routine lifestyle. Those generated waste when overloaded beyond the capacity of natural recycling processes, would influence the environment and human health. Hence, the waste generated from used materials should be managed according to the environmental impact. Even though wastes are also sometimes rich in organic compounds, nutrients, and energy resources, they are not experimented and managed appropriately. Recently, different feasible techniques are invented and followed to recover and reuse the efficient resources that can create and support sustainable livelihood by creating green economy effects by reducing waste. In this chapter, the emphasis has been given to providing an overview of recent advancements on bio-based waste management and product recoveries such as microbes mediated approaches, biorefineries for waste valorization, and bioenergy from industrial waste.

Keywords: [bioenergy](#); [industrial effluents](#); [microorganisms](#); [product recovery](#); [waste management](#)

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