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Sommario/riassunto

The book aims to provide a comprehensive view of advanced environmental approaches for wastewater treatment, heavy metal removal, pesticide degradation, dye removal, waste management, microbial transformation of environmental contaminants etc. With advancements in the area of Environmental Biotechnology, researchers are looking for the new opportunities to improve quality standards and environment. Recent technologies have given impetus to the possibility of using renewable raw materials as a potential source of energy. Cost intensive and eco-friendly technology for producing high quality products and efficient ways to recycle waste to minimize environmental pollution is the need of hour. The use of bioremediation technologies through microbial communities is another viable option to remediate environmental pollutants, such as heavy metals, pesticides and dyes etc. Since physico-chemical technologies employed in the past have many potential drawbacks including higher cost, and lower sustainability. So there is need of efficient biotechnological alternatives to overcome increasing environmental pollution. Hence, there is a need for environmental friendly technologies that can reduce the pollutants causing adverse hazards on humans and surrounding environment. .