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Biotechnology Applications in Hazardous Waste Treatment

G. Lewandowski, Editor

These articles cover biodegradation of hazardous wastes as an interdisciplinary process. They were presented at the 1988 Engineering Foundation Conference held in Longboat Key, Florida. The conference brought microbiologists, biochemists and engineers together to discuss the process of hazardous waste biodegradation.

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Problems in the Field from a Congressional Perspective. Overview of Biological Processes as Applied to Hazardous Waste Problems. Counterpoint to Conventional Wisdom. Microbial Perspectives on Biodegradation. Reactor Configurations in Hazardous Waste Treatment. Biological Remediation of Hazardous Waste Sites. The Enhancement of Microbial Activity Through Bioreactor Design. An Approach to Biocatalyst Modelling of Mixed Populations Using Pure Culture Kinetic Data. Fill-and-Draw Reactor Dynamics in Biological Treatment of Hazardous Wastes. Development of Bacteria for Biodegradation of Chloroaromatic Compounds. Recent Advances in the Microbial Degradation of Aromatic Hydrocarbons. Biological Treatment of Hazardous Wastes by *Phanerochaete chrysosporium*. Reactor Designs Employing a White Rot Fungus for Hazardous Waste Treatment. Biological Treatment of Trichloroethylene Contaminated Groundwater. Fluidized-Bed Activated Carbon and Sand-Based Reactors for Biotreatment of Complex Organics. Innovative Reactor Design to Treat Hazardous Wastes. Microbial Removal of Selenium from Agricultural Drainage Water. National Demonstration Site: *In-Situ* Bioremediation of Contaminated Aquifer. Biological Treatment of Oilfield and Petrochemical Hazardous Wastes. Composting of Explosives Contaminated Sediments.

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