Environmental Engineering

Phytoremediation aids to augment bioremediation as it uses broad range plants to remediate soil, sediment, surface water and ground water that have been contaminated with toxic metals, organic, pesticides and radionuclides. This book serves to disseminate detailed up to date knowledge regarding the various aspects of phytoremediation and plant-microbe interaction. The book highlights process and molecular mechanisms for industrial waste detoxification during phytoremediation in wetland plants, role of endophytic bacteria for phytoremediation of environmental pollutants, constructed wetland treatment system for treatment and recycling of hazardous wastewater, amongst other relevant topics.

Key Features:

- Focuses on phytoremediation process for different pollutants, mainly heavy metal detoxification in the presence of other co-pollutants
- Includes plant-soil-microbe interactions in phytoremediations and remediation of contaminated water
- Explores life cycle assessment of industrial waste contaminated site with organic pollutants
- Discusses hyperaccumulator versus non-hyperaccumulator plants for environmental waste management
- Includes bacterial assisted phytoremediation and siderophore formation in specific environmental conditions



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5.	Effects of Heavy-Metal Accumulation on Plant Internal Structure and Physiological Adaptation
6.	Role of Rhizospheric Mycobiota in Remediation of Arsenic Metalloids
7.	Bacteria-Assisted Phytoremediation of Industrial Waste Pollutants and Ecorestoration
8.	Nutrient Availability and Plant–Microbe Interactions in Phytoremediation of Metalliferous Soils
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