

Microbe Mediated Remediation of Environmental Contaminants

Microbe Mediated Remediation of Environmental Contaminants is a comprehensive overview of the use of microorganisms for the remediation of environmental contaminants. The book covers the fundamentals of microbial remediation, including the different types of microorganisms used, the mechanisms of remediation, and the factors that affect the effectiveness of microbial remediation. The book also discusses the applications of microbial remediation to a variety of environmental contaminants, including heavy metals, pesticides, hydrocarbons, and explosives.



Microbe Mediated Remediation of Environmental Contaminants (Woodhead Publishing Series in Food Science, Technology and Nutrition) by Pardeep Singh

★★★★☆ 4.5 out of 5

Language : English
File size : 72637 KB
Text-to-Speech : Enabled
Screen Reader : Supported
Enhanced typesetting : Enabled
Print length : 340 pages
Paperback : 73 pages
Item Weight : 4.3 ounces
Dimensions : 6 x 0.19 x 9 inches
X-Ray for textbooks : Enabled



The Fundamentals of Microbial Remediation

Microbial remediation is the use of microorganisms to remove or transform environmental contaminants. Microorganisms can be used to remediate a wide variety of contaminants, including heavy metals, pesticides, hydrocarbons, and explosives. The mechanisms of microbial remediation vary depending on the type of contaminant and the microorganism used. Some microorganisms can degrade contaminants directly, while others can transform contaminants into less harmful substances.

The effectiveness of microbial remediation is affected by a variety of factors, including the type of contaminant, the concentration of the contaminant, the type of microorganism used, and the environmental conditions. In general, microbial remediation is most effective when the contaminant is present in low concentrations and the environmental conditions are favorable for microbial growth.

The Applications of Microbial Remediation

Microbial remediation has been used to remediate a variety of environmental contaminants, including heavy metals, pesticides, hydrocarbons, and explosives. Heavy metals are a major source of environmental pollution, and they can be toxic to humans and animals. Microbial remediation has been used to remove heavy metals from soil, water, and sediment. Pesticides are also a major source of environmental pollution, and they can be harmful to humans, animals, and plants. Microbial remediation has been used to degrade pesticides in soil, water, and air.

Hydrocarbons are a major component of petroleum products, and they can be released into the environment through spills, leaks, and discharges. Microbial remediation has been used to degrade hydrocarbons in soil,

water, and sediment. Explosives are used in a variety of military and industrial applications, and they can be released into the environment through spills, leaks, and explosions. Microbial remediation has been used to degrade explosives in soil, water, and sediment.

Microbe Mediated Remediation of Environmental Contaminants is a comprehensive overview of the use of microorganisms for the remediation of environmental contaminants. The book covers the fundamentals of microbial remediation, the applications of microbial remediation, and the factors that affect the effectiveness of microbial remediation. The book is a valuable resource for scientists, engineers, and policymakers who are involved in the remediation of environmental contaminants.

References

- Alexander, M. (1999). Biodegradation and Bioremediation. Academic Press.
- Atlas, R. M., & Philp, J. C. (2005). Bioremediation of Contaminated Soils and Aquifers. CRC Press.
- Gavrilescu, M., & Macoveanu, M. (2005). Microbial



Microbe Mediated Remediation of Environmental Contaminants (Woodhead Publishing Series in Food Science, Technology and Nutrition) by Pardeep Singh

★ ★ ★ ★ ☆ 4.5 out of 5

Language : English
File size : 72637 KB
Text-to-Speech : Enabled
Screen Reader : Supported
Enhanced typesetting: Enabled
Print length : 340 pages
Paperback : 73 pages

Item Weight : 4.3 ounces
Dimensions : 6 x 0.19 x 9 inches
X-Ray for textbooks : Enabled

FREE

DOWNLOAD E-BOOK



Take Control of Your Stress with Paul McKenna

Stress is a major problem in today's world. It can lead to a variety of health problems, including high blood pressure, heart disease, and...



Sizzling At Seventy: Victim To Victorious: A Transformational Journey of Triumph Over Trauma

At seventy years old, most people are looking forward to a quiet retirement, enjoying their grandchildren, and taking up hobbies. But not Barbara Becker. After a lifetime of...