

BOOK REVIEWS

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Bioremediation. Applied Microbial Solutions for Real-World Environmental Cleanup

AMS Press, American Society for Microbiology: Washington, DC, 2005. XI + 366 pages. Format 178 x 253 mm. Binding: Hardcover. Price: USD 109.95.
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The authors are affiliated with the Napier University of Louisville, Louisville, Kentucky, USA, and with the Napier University, Edinburgh, United Kingdom. The list of contributors comprises 18 international experts in the areas of biology, microbiology, ecology and hydrology, environmental and earth sciences – from USA, United Kingdom and Australia. It is stated in the preface that described are environmental applications of microorganisms to remediate contaminated soils and waters. Bioremediation involves techniques using biological processes to treat contaminated soil and groundwater. It is a field that combines basic microbiology, advanced biotechnology, and environmental engineering, and does so within the context of public demands for clean waters and soils. It presents still a developing field, one that will be driven by scientific and technological developments, as well as public policy developments. The volume is composed of 9 chapters.

Chapters 1 through 4 provide insights into environmental pollution and restoration, characterizing contaminated land, legal

and regulatory frameworks for bioremediation, and modeling bioremediation of contaminated groundwater. Subsequent chapters 5 through 8 analyse bioremediation of contaminated soils and aquifers, monitoring bioremediation, bioremediation of marine oil spills, metals and radionuclides. Final chapter is devoted to applying biotechnology for clean industrial products and processes. In addition to the current text, there are separate textual and figure boxes containing supplemental information. The volume is extensively illustrated by photographs and schematic line drawings featuring ecological aspects, laboratory equipment and procedures, miscellaneous diagrams, etc. Each chapter is concluded by a comprehensive list of references.

This new volume covers foundational material, including the importance of bioremediation and present information on legal, scientific, and engineering principles for environmental cleanup.

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