

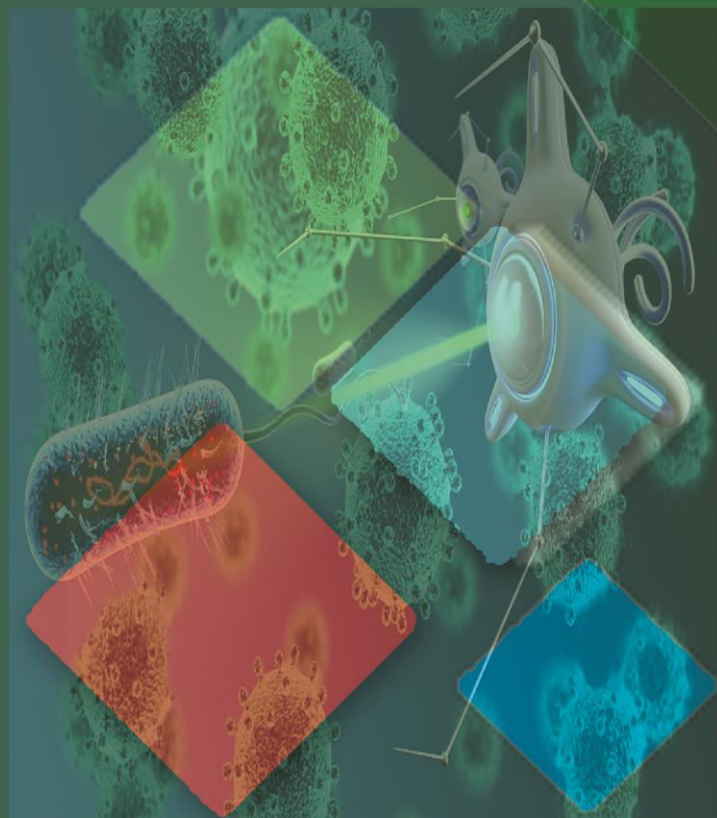
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Status, Trends and Advances in Bioremediation

Editors

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Editors

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Preface

The present days, environmental situation posed by anthropogenic activities require right technology for achieving sustainability in respect of remediating various kinds of environmentally unsafe contaminants. There is a need for more research in this area because it seems to be a sustainable approach for managing environmental pollution. As part of the environmental impact on the fate and behavior of environmental contaminants, efforts must be made to promote a synergistic interaction between them, as well as selecting and applying the most appropriate bioremediation techniques and other relevant technologies that can sustain the effective and successful operation and monitoring of these processes. The method of bioremediation involves using living organisms to eliminate contaminants, pollutants, and toxins from soil, water, and other environments. According to cost, site dimensions, contaminants types, and concentrations, bioremediation can be conducted both *in situ* and *ex situ*. In comparison to other methods of cleanup, bioremediation has numerous advantages. Natural processes are used exclusively so that ecosystems are not damaged. In order to clean up contaminants in soil and groundwater, bioremediation is often conducted underground using amendments and microbes. Attractively, biostimulation, bioaugmentation, and intrinsic bioremediation efforts have been addressed world-wide for mitigating the issues. At this juncture, there is an urgent requirement to provide different aspects of bioremediation to eliminate different kinds of pollutants in the environment, source elimination and attractive biological methods. Hence, the present context of current information pertaining to bioremediation measures have been compiled to provide upto date knowledge on bioremediation processes. We hope the chapters of this book definitely would provide a platform for sharing research innovations, solutions to environmental issues and advanced knowledge on bioremediation techniques.

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- (1) *Vermitechnology I* (2009), GSB, Japan.
- (2) *Vermitechnology II* (2010), GSB, Japan.
- (3) *Vermitechnology III* (2012), GSB, Japan.
- (4) *Status, Trends, and Advances in Earthworm Research and Vermitechnology* (2010), Hindawi Publications, UK.

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- (1) Aerobic and Anaerobic Digestion of Agro-Industrial and Livestock Wastes: A Green and Sustainable Way toward the Future (2021) – Journal: *Agronomy* (MDPI, Ongoing).
- (2) Environmentally safe management strategies for biowaste and emerging pollutants (2022) – Journal: *Environmental Research* (Elsevier, Ongoing).

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