

Preface

“Live as if you were to die tomorrow, learn as if you were to live forever”

Mahatma Gandhi

Volume 4 of this 5 volume series adds various studies on phytoremediation of organic contaminants from terrestrial and aquatic ecosystems. In this volume, some examples on applications of phytoremediation in wastewater engineering technology have been provided. Various studies on natural and constructed wetlands for phytoremediation have also been included in this volume. The importance of phytoremediation in reclamation and restoration of terrestrial and aquatic ecosystems has been described. Information on uptake, tolerance mechanisms and the role of grasses in phytoremediation of various organic contaminants has also been provided. Plant microbe interactions, bio-retention systems, phenolic compounds and enzymatic applications in phytoremediation of contaminated soil and water have been described in different chapters of this volume. The chapters in volume 4 illustrate how phytoremediation applications using constructed wetlands can also serve in the removal of pathogenic bacteria from contaminated waters. Volume 4 of this book series provides additional accounts of some selected phytoremediation research projects and case histories from specific sites and/or laboratories. The editors and contributing authors hope that one result of publishing this book will be to provide a wide range of useful experimental data derived from global applications of phytoremediation. Hopefully, like the previous three volumes of this book series this volume can also provide new insights into the advantages and disadvantages of phytoremediation to manage the continuing threat of ecosystem degradation resulting from anthropogenic inputs of environmental contaminants.

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Phytoremediation

Management of Environmental Contaminants, Volume 4

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(Eds.)

2016, XV, 409 p. 59 illus., 31 illus. in color., Hardcover

ISBN: 978-3-319-41810-0