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Biotreatment

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INDUSTRIAL

EFFLUENTS

Biotreatment of Industrial Effluents

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Biotreatment of Industrial Effluents

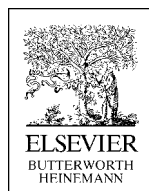
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To my parents

M.D.

To Bhagawan Sri Sathya Sai Baba

A.K.

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Foreword

Industrialization has led to growth of manufacturing industries and the associated waste generated by them. Although green technologies that are devoid of waste would be the ideal solution, it is certain that industries will continue to generate effluent well into the foreseeable future. Environmental activism, stricter legislation, and improved awareness of environmental issues on the part of industries have collectively led to a serious effort to identify best solutions to the problem of waste management. Biochemical means of effluent treatment provide an attractive option that makes use of mild biological conditions for the treatment of the waste and does not produce new effluents. Moreover, identification of new microbial systems, including extremophiles, has opened up new possibilities for such treatment, and concerted efforts are being made in industries, academic institutions, and research labs in the areas of bioremediation and biodegradation of waste.

This book covers the treatment of effluents from manufacturing industries as diverse as chemical and electronic. It also looks at other complex wastes such as hospital waste. Comparisons are drawn between current chemical methods and biochemical methods of treatment, including their economics. Several of the biotreatment techniques are still in the infant stage and need sustained research and development before they will be accepted as viable technology options. The book also discusses succinctly the synergies between various effluent treatment techniques, a particularly useful contribution. I compliment the authors for the efforts they have made to bring out this timely publication.

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