



Editorial

Biodegradation plays an eminent role in environmental biotechnology and is utilised for the treatment of wastewater, solid waste and gases as well as in the bioremediation of soils. Over the last few decades, an exponential amount of data has been generated on the types of compounds susceptible to biodegradation and the effect of the environmental conditions on biodegradation rates. Also the characterisation of the microbial consortia responsible for the biodegradation has become more detailed and much more related to the bioreactor environment.

Besides biodegradation, also bioconversions are important in environmental biotechnology. Some compounds, e.g., metals, cannot be mineralised. However, microbial accumulation or conversion of these compounds from one redox stage to another can be used to remove them from waste streams. In some cases the removed pollutant can be utilised as a raw material and in other cases the bioconversion process yields methane which can be used to replace fossil fuels. Both result in a decrease in the demand for natural resources.

The selection of papers in this special issue illustrates these various aspects of environmental biotechnology. These papers were presented at the 4th International Symposium of Environmental Biotechnology (ISEB 4) held on April 10–12 2000 in Noordwijkerhout (The Netherlands). ISEB 4 was organized on behalf of the European Federation of Environmental Biotechnology and its Working Party on Environmental Biotechnology. The ISEB symposium series aims to bring together scientists approaching environmental biotechnology from different basic disciplines. Moreover, it aims to gather basic environmental researchers with technologists and regulatory instances dealing with environmental quality.

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Guest Editors