

Waste Management in Japan

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Preface

This book contains the contributions presented in the special session “*Advanced Waste Treatment and Management in Japan*” at the 2nd International Conference on Waste Management and the Environment, held in Rhodes, Greece, from 29 September - 1 October 2004. The conference was organized by the Wessex Institute of Technology with collaboration of University of Thessaly, Greece and EcoTopia Science Institute, Nagoya University, Japan.

Waste treatment and management in Japan are increasing in importance especially during the past decade, because the country is highly industrialized, and large amounts of fossil fuel and mineral resources are imported, converted to many kinds of products and energy, and then consumed in a geographically small area. A great deal of waste is produced as a result, and serious issues have arisen on waste minimization, environmental pollution control, proper incineration, safe final disposal, and material recovery.

The book introduces advanced waste treatment technology of Japan to the international community. It includes 18 revised and accepted contributions, and it covers (1) the novel utilization of wasted materials for glass-ceramics or pollutant absorbers, (2) the detoxification and extraction techniques of hazardous wastes, (3) the new waste treatment techniques by super- or sub-critical hydrothermal treatment and the waste decomposition by wet ball-mill, sonication and plasma treatments, (4) the recycling of organic or agricultural wastes and (6) the advanced incineration technology for thermal recycling.

The readers of this book will appreciate the current issues in Japanese waste management and their technical solutions. The information described here will be helpful for the colleagues to promote international cooperation toward the sustainable world.

The Editor of this book would like to express sincere thanks to all authors for their high quality contributions and in particular to the members of the International Scientific Advisory Committee for reviewing the papers.

The Editor
Hideaki Itoh
Rhodes, 2004

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