

HANDBOOK OF SOLID WASTE MANAGEMENT

GEORGE TCHORANOGLOUS E FRANK KREITH (FD.)

BOOK DESCRIPTION

Human activities have been developing towards such a consumption of resources that everything relating this issue implies the production of wastes. When we look at the word waste we must understand that a huge set of concepts, practices and technological issues arise. Thus, a written text on solid waste management must always be a handbook, in the sense that the discussed subjects must be diverse, covering not only legislation, playing a very important role and being a significant part of this fundamental problem, but also management, facilities, treatment, planning, collection, and disposal. The whole and complete list would be long, as this book clearly shows.

This book includes a very important chapter, divided in several parts, focusing specific practical problems completely up to date, as it is the case of scrap tires, used oil, demolition and computer wastes, thus emphasizing the state-of-the-art of some of the wastes that only recently are driving attention. If one thinks about the main thing to do relating wastes yielding, that is its reduction, one

must think both in quantity reduction as well as in toxicity reduction. This implies, actually, two very different concepts, which the book clearly distinguishes. Financial issues and life-cycle cost are always explored.

We have then in this edition, the 2nd one, the contribution of several dozens of recognized experts in the municipal solid waste problem, which write about a world where incinerators have mostly banned, land-fills are full and citizens severely make pression on governments, industry and institutions to finally find a solution to solve the issue of solid wastes, in a manner that needs to be simultaneously environmentally sustainable and cost-effective. Discussed items cover a wide range of subjects, from technical and regulatory aspects, to some of the items already pointed out above. Questions like monitoring and control, safety and risk assessment are also discussed.

The book presents case studies with numerous howto illustrations, intended to help engineers in planning and managing waste treatment facilities.

ABOUT THE EDITORS

GEORGE TCHOBANOGLOUS is a civil engineer working as a Professor Emeritus in civil and environmental engineering at the University of California, Davis. He is mainly interested in research areas which include solid waste management, wastewater treatment, wastewater filtration, aquatic systems for wastewater treatment, and individual onsite treatment systems. He has a B.S. degree in civil engineering from the University of the Pacific, an M.S. degree in sanitary engineering from the University of California at Berkeley, and a Ph.D. in environmental engineering from Stanford University. His technical publications include 12 textbooks and 3 reference books. The textbook, where he is the main author, entitled Solid Waste Management: Engineering Principles and Management Issues has been extensively used by many university lecturers around the world, as it is the case of myself, over the last decade. His knowledge, skills and expertise in environmental engineering are the basis of his work as consulting editor for McGraw-Hill and as consultant in many other institutions, as well as a member in numerous professional societies.

FRANK KREITH is a Professor Emeritus of engineering, working at the University of Colorado, at Boulder, teaching Mechanical and Chemical Engineering. During the past 13 years, Prof. Frank Kreith has provided assistance on waste management, transportation and energy issues in several state governments, serving at the American Society of Mechanical Engineers (ASME). He has also been contributing to several other organizations and institutions. He has written more than a hundred peer-reviewed articles and was author or editor of 12 books. His knowledge has served for him to act as a consultant and advisor in many places in the world,

including consultancies to Government Departments, National Agencies, and also the United Nations. In 1992 he received the Ralph Coates Roe Medal, and in 1998 he received the Washington Award in behalf of his contribution to technical knowledge.

BOOK DETAILS

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