

## Book review

**Irena Twardowska, Herbert E. Allen, Antonius A.F. Kettrup, William J. Lacy (Eds.), Solid Waste: Assessment Monitoring and Remediation, vol. 220, Elsevier, Amsterdam, The Netherlands, 2004, 1160 pp., £146.50, US\$ 220.00, €220, ISBN: 0-08-044321-4.**

This multi-authored text contains a massive amount of information on a broad group of wastes from biowaste to hazardous wastes. There are contributions from more than 50 scientists and engineers from 10 different countries. The editors represent three of those countries. Consequently, the book contains a wealth of information on waste production and management worldwide. Especially interesting to me was the information from countries other than the United States.

The book has seven major sections, titles of which are noted below. Each section has multiple subsections:

- Introduction
- Legislation, regulations and management strategies
- Chemical pollution potential from solid waste: short- and long-term effects
- Advances in solid waste characterization and monitoring
- Evaluation and prognosis of the vadose zone and groundwater pollution and protection at solid waste disposal sites
- Advanced/emerging solid waste use, disposal and remediation practices
- New developments in solid waste information and environmental control strategies

The editors note, in the preface, the following: "In the field of solid waste management, treatment and disposal, one faces enormous (but still not sufficient) amount of information concerning specific problems of different hazardous wastes and surprisingly limited data on the seemingly harmless great portions of the waste stream entering the environment." This book goes a long way towards filling that informational void, especially in discussing solid waste problems (worldwide).

The senior editor, Dr. Twardowski and two of the co-editors set the stage in the first two sections: (1) solid waste: what is it? and (2) legislation, regulations and management strategies. A multitude of data are given in tabular form. In addition, part 2 has two sections. The first section discusses the regulatory frameworks as an instrument of waste-management strategies. The second section contains a good deal of information unfamiliar to this U.S.-based reviewer on the Basel Convention and its implementation.

The third section of the book discusses problems posed by specific waste streams: solid waste, agricultural waste, agrochemicals, sewage sludge, dredged material, mining waste and coal combustion waste.

The problems caused by prior inadequate disposal practices are among many other topics presented in the book. There are chapters discussing hazardous waste site remediation as well as specific focus on innovative soil and groundwater remediation as reported by the U.S. EPA SITE Program.

The book ends on a promising note for the future with two chapters by U.S. contributors: (1) advanced/emerging solid waste use, disposal and remediation practices and (2) solid waste-management policies for the 21st century.

In summary, I recommend this book for its great amount of previously unreported information on solid wastes as well as excellent discussion of the impact of waste handling and disposal.

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