Despite the above criticism, the book contains a wealth of very useful information on environmental risk assessment, which will help to demystify the subject. It will be a useful addition to the library of anyone wanting to get to grips with the scientific basis of the subject.

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PII: S0304-3894(99)00159-4

Separation Methods for Waste and Environmental Applications, Jack S. Watson, Marcel Dekker, New York, NY, 1999, US$195.00, 600 pp., ISBN: 0-8247-9943-7

It is a pleasure to review an environmental book on separation processes written by a chemical engineer and one who references the chemical engineering literature well. Watson discusses virtually all of the methods of separating (i.e. removing) contaminants from solids and water. The removal of pollutants from contaminated air is not discussed; consequently, he might have retitled the text to refer more specifically to water and solids pollutant separation, but this is a minor criticism.

Discussed in detail are the following separation processes:

- adsorption
- ion exchange
- absorption
- air stripping
- membrane processes
- leaching
- extraction
- distillation
- evaporation
- steam stripping
- filtration
- sedimentation
- precipitation
- magnetic separation
- screening

In the preface, Watson writes:

''The purpose of this book is to bring together information and concepts needed by those concerned with selection and/or design of separation process equipment for treating wastes or environmental streams.''

Indeed, to explain the difference between his book and other texts, he notes:

''The strong focus on separation methods for waste and environmental treatment is intentional. The most obvious sign of this focus is probably in the examples given,

which are mostly drawn from environmental or waste problems. However, the most important aspect of the focus is reflected in the selection of the separation methods covered and the space devoted to each separation method. This is most evident when one compares the topics and the space allotted to each topic with the coverage in other separation books. This is important because many separation methods that are important in environmental and waste problems are not covered extensively in standard separations texts, usually texts aimed at chemical engineers working in the process industries; this is especially notable in texts used at the undergraduate level.''

Watson discusses each separate process well, giving the background theory and real world examples of applications. Fair enough. But at the risk of diluting my praise of the book (but I believe improving it), I would suggest he might have added:

1. numerically worked examples using the theoretical equations
2. numerical examples of design aspects of the applications discussed

These criticisms aside, my evaluation is that this is a very good book and that it will serve waste treatment engineers well.

G.F. BENNETT

PII: S0304-3894(99)00161-2