

Book Reviews

Separation of Heavy Metals and Other Trace Contaminants, by R.W. Peters and B.M. Kim (Eds), American Institute of Chemical Engineers, New York, NY, 1985, 207 pages, \$40 (\$20 to AIChE members).

The editors had selected and reviewed 18 papers presented at three AIChE National meetings held late 1983 and 1984. With growing public concern with hazardous chemicals in general, and trace chemicals in particular, this publication on the separation of heavy metals and other trace contaminants from wastewaters is timely and relevant.

This symposium volume is divided into the following chapters, with the number of papers in each chapter shown in brackets:

- Precipitation (3)
- Detoxification (1)
- Electrochemical Operations (2)
- Ion Exchange (2)
- Adsorption (1)
- Filtration (1)
- Biological Treatment (2)
- Fixation (1)
- Membrane Operations (1)
- Thermal Treatment (1)
- Physical Chemical Treatment (1)

One of the most useful papers in the book was written by the editor himself in collaboration with two other researchers. This paper is a 30-page review (with 166 references) evaluating recent metal removal techniques. The authors began with the well-known hydroxide precipitation process; they progressed through carbonate and sulfide treatment; they followed that section by coagulation and separation; and finally ended with emerging technologies. This paper is an excellent addition (and appropriate end) to this excellent state-of-the-art treatment of heavy metal separation problems and processes.

G.F. BENNETT

Innovative Thermal Hazardous Organic Waste Treatment Processes, by H. Freeman, Noyes Publications, Park Ridge, NJ, 1985, 125 pages, \$32.

Written by a member of the U.S. Environmental Protection Agency's (USEPA) Office of Research and Development, Hazardous Waste Engineering Research Laboratory (HWERL), Alternative Technologies Division, Thermal Destruction Branch, in Cincinnati, Ohio, this book contains discussion of 21 thermal processes identified by the USEPA as innovative processes