

Book reviews

Fire and Flame Retardant Polymers, Recent Developments (Chemical Technology Review No. 122), by A. Yehaskel, Noyes Data Corp., New Jersey, 1979, 482 pp., £22.

The book is subdivided into 11 sections, each dealing with a specific polymer (or related polymer type) and supplies very detailed technical information about relevant fire and flame retardant systems (including smoke suppressants), which have been granted US patents.

The book is essentially a review with up to date information about the patents, and the author has carefully selected practical details of methods of preparation and gives standard test results. There is good cross reference of the information by patent number, inventor and the commercial organisation involved.

With the current interest in the development of polymeric material with improved fire performance, the book will appeal to researchers, particularly in commercial fields, by providing a sound guide to the US patent literature and a background for further technological innovation.

Standard methods of testing and their relationship to fires are currently being reviewed internationally. It is hoped that further editions of this review will be published as test experience grows and as the patent literature expands.

P.J. FARDELL

Toxic and Hazardous Waste Disposal, (Volume 2) — Options for Stabilization/Solidification, by R.B. Pojasek (Ed.), Ann Arbor Science Publications, Ann Arbor, Mich., 1979, 269 pp., £19.80.

A reviewer faced with a volume entitled "Options for Stabilization/Solidification", may be forgiven for assuming that the ensuing chapters will present some insight into the processes available, their long term performance and various testing procedures. Unfortunately in this book the expectation is not realised other than for testing methods.

The book commences with a chapter on legislation relating solely to the U.S.A. Chapters follow on site selection, physical testing of raw and stabilized sludges, and landfill as practiced in the U.K.; this advocates careful choice of sites and wastes, thereby, by good management, obviating the need for expensive fixation processes. A commercial landfill system is described in chapter 6. Chapters 7 to 11 evaluate various aspects of leachate production and testing, and the conclusion is reached that only general guidelines may be given. Descriptions of techniques used in the solidification or stabilization of arsenic, kepone and flue gas sludges complete the book.

I find the ensemble like the Curate's egg, good in parts. Although there is a considerable assemblage of facts, particularly on leachate, no chemical or physical background is given and no particular system is critically analysed in this volume. The information may be present in companion volumes but if so there should be some reference to this effect. Research and experience outside the U.S.A. are almost totally ignored, except for the single chapter on U.K. practice.

To sum up, the book is not a comprehensive review of fixation techniques, but nonetheless provides a readable text on general background knowledge, especially with regard to leachates. The book is attractively presented, and other than the minor annoyance of seeing the book title on every page, is well worth taking down from the library shelf.

J.D. COOK

Hazardous Chemical Spill Cleanup (Pollution Technology Review No. 59), by J.S. Robinson (Ed.), Noyes Data Corporation, Park Ridge, N.J., 1979, \$48.

When a compendium makes use of three conference proceedings volumes a reviewer has edited, and reprints almost verbatim one of the reviewer's own papers, it is difficult to objectively review the book. However, what follows is an attempt to do so.

The book, like many produced by Noyes, is a collection, collation and a reassemblage of government reports; in this book U.S. Environmental Protection Agency and U.S. Coast Guard reports form the main bulk of the material reprinted. Sprinkled liberally throughout are papers from the National Conferences on Control of Hazardous Material Spills held on alternate years from 1972 through 1978. Most of the information contained in the book could be obtained from the conference proceedings as most of the EPA and much of the Coast Guard research has been reported at the conferences and printed in the proceedings. Very little of the information in the book was new to the reviewer who has read most of the EPA reports with the exception of some Coast Guard reports on the fate of spilled chemicals.

For those who do not have the time or ability to acquire the original government reports, nor have access to the conference proceedings (at least the first two, 1972 and 1974, are out of print), I suppose this will be a useful book. However, biased as I am, I feel that the original proceedings are a better source of information. Not only are the full papers there (rather than summaries) but there is much other material not cited — including many descriptions of actual spill incidents, the accounts of which include not only the details surrounding the spill but cleanup and disposal procedure.

Due to my background, I prefer to work with the original material, but as I said, if these are not available, the book serves the purpose by summarizing and reprinting.