

Book Reviews

Dynamics, Exposure and Hazard Assessment of Toxic Chemicals, by R. Haque (Ed.), Ann Arbor Science Publishers, Inc., Ann Arbor, Michigan, 1980, 496 pp.

The American Chemical Society has sponsored many excellent seminars that have resulted in good books, and this is another one. The title of the ACS seminar paralleled that of the book: "The Dynamics, Exposure and Hazard Assessment of Toxic Chemicals in the Environment". Haque, who works for the Office of Research and Development of the U.S. Environmental Protection Agency in Washington, has collected, edited and indexed 31 papers that were presented at the ACS, September 1978, Miami Beach meeting.

The genesis of the seminar was the Toxic Substances Control Act (TSCA) of 1976. This U.S. law aims at control of chemical hazards and could potentially require expensive toxicological testing of many industrial chemicals.

Several of the initial papers deal with historic events pertaining to transport and fate studies as related to TSCA. Several others deal with the chemistry and mathematics of environmental transportation and degradation and others deal with the chemistry and mathematics of environmental transportation, degradation and dispersion. A third and final category contains papers concerned with the testing of chemicals for hazard evaluation.

Having recently reviewed two books dealing with this topic, by Thibodeaux and Neely, I found the papers particularly interesting and timely. They are well worth reading.

TSCA has not had the negative impact some believed it would, but its potential impact and benefit are well discussed in the book.

GARY F. BENNETT

First Aid Manual for Chemical Accidents, by Marc J. Lefèvre, Academic Press, New York, 1980, 218 pp., soft cover, price: £11.00, ISBN 0-12-786 938-7

The opening paragraph of the editorial preface of this volume refers to the lack of books on first aid aimed at the employee in the workplace. This is not necessarily a statement applicable in the United Kingdom where the excellent texts like Trevethick and the manuals put out by the St. John's Ambulance Brigade are readily available. However, usually either the approach is different or the scope is limited. This book was conceived by a physician active in the chemical industry.

By using an ingenious method of indexing and colour coding, first aid

procedures for almost 500 substances are collected together in one volume. This effectively overcomes much of the difficulty in teaching first aid procedures in the chemical laboratory. Topics are complicated by not only being specific to a substance but also to the route by which the poison gains entry to the body. The information base necessary for effectiveness in first aid is thus almost quadrupled in its extent.

However, clear and concise advice about measures in respect of ingestion, inhalation, skin or eye contact is readily available in this book. Similarly, a symptom schedule is extensively cross-referenced for the worker dealing with a poison case.

A glossary of commercial names and a bibliography of U.S. government publications is also included. One important addition is a section concerning the management of the case where the identity of the poison is obscure or unknown. This is an all too common, but nonetheless avoidable, situation in industry today.

I decided to put the system to the test. It took me less than a minute to extract relevant first aid procedures, given the identity of the poison. However, familiarity with the use of the text is a necessary prerequisite for this rate of extraction! It would also probably invalidate its effective use in certain situations, if one was unaware of the way to use the manual.

The publication is aimed at the American market, having undergone extensive editorial revision from its original Belgian edition. The inevitable vagaries of American terminology can be found scattered in its pages. However the book is a useful adjunct to health and safety in the workplace. I have no hesitation in recommending it highly despite these minor caveats.

DENIS D'AURIA

Safe Handling of Chemical Carcinogens, Mutagens, Teratogens, and Highly Toxic Substances, by Douglas B. Walters (Ed.), Ann Arbor Science Publishers, Inc., Ann Arbor, Michigan, 1980, 662 pp. in two volumes, £ 19.60 each volume

This two-volume work concerns the control and use of highly hazardous chemical substances in a research laboratory. The material for the work was contributed by the authors of papers presented during a symposium at the American Chemical Society/Chemical Society of Japan Chemical Congress, Honolulu, Hawaii, in April 1979.

In his preface, the editor remarks that the facilities and procedures presented could, with modification, be adapted for industrial and academic laboratories. This reviewer agrees, and recommends that this collection of excellent papers be a resource for *all* laboratories working with potentially hazardous chemicals. Many of the features of laboratory design and proce-