Journal of Hazardous Materials, 26 (1991) 91–103
Elsevier Science Publishers B.V., Amsterdam

Book Reviews

Indoor Air Pollution Control, by Thad Godish Lewis Publishers, Chelsea, MI, 1989, ISBN 0-87371-098-3, pp. 401, $59.95.

Indoor air quality is an important air pollution problem in the United States of America. The author has prepared a reference book for environmental scientists working in this area. A complete understanding of indoor air quality problems requires a knowledge of several disciplines such as medicine, science and engineering. The book covers science and health related aspects of indoor air very well. A discussion on public policy and regulatory issues is also included. Lack of governmental regulations in this area is evident after reading the text.

The book is divided into nine chapters. Chapter 1 defines the problem of indoor air quality and discusses asbestos, combustion-generated pollutants, radon, formaldehyde, volatile organic compounds, pesticides and biogenic particles. Chapters 2, 3 and 4 focus on source control of inorganic contaminants, organic contaminants and biogenic particles. The use of ventilation and air cleaning for indoor air quality control is discussed in Chapters 5 and 6. Concepts/ideas related to policy and regulations are covered in Chapter 7. Identification of the indoor air problem is the subject of Chapter 8. Chapter 9 documents over 33 case histories on how to solve indoor air quality problems. The cases are based on real life situations and will assist in understanding the subject through the use of examples.

Since the area of indoor air quality is fairly new, the author has relied heavily on conference papers, reports and personal communication with other researchers. For example, the references cited in Chapter 1 from conference papers and reports are approximately 42%. Additional information on indoor air quality modeling will be helpful for readers in future editions. The book is easy to read and includes figures and tables. Each chapter ends with an extensive list of references. This book will be useful for scientists, industrial hygienists, engineers, physicians and lawyers, but may also be used as a reference book to teach about indoor air quality to engineering students. I enjoyed reading the book and will continue to keep it on may bookshelf for indoor air quality problems.

ASHOK KUMAR

Handbook of Environmental Fate and Exposure Data for Organic Chemicals, Vol. 1. Large Production and Priority Pollutants, by P.H. Howard, Lewis Publishers, Chelsea, MI, 1989, ISBN 0-87371-151-3, 490 pp., $72.00.

This new seven-volume series gives a plethora of information on the environmental fate and monitoring data that are necessary for both qualitative and quantitative exposure assessment. Chemicals are listed alphabetically in the book and are indexed by chemical name, synonym, chemical abstract number, Wiswesser notation and chemical formula.

Data given for each chemical include:

1. Substance identification by: CAS registry number, molecular formula, and Wiswesser line notation.
2. Chemical and physical properties, such as boiling point, melting point, molecular weight, dissociation constant, log (octanol/water) partition coefficient, water solubility, vapor pressure and Henry's Law constant.
3. Environmental exposure potential: following a summary, compound-specific data are given on natural and artificial sources; terrestial, aquatic and atmospheric fate; biodegradation and abiotic degradation; bioconcentration; soil absorption/mobility; volatilization from water/soil; water, effluent, sediment/soil and atmospheric concentrations; food survey values; plant, fish/seafood, animal and milk concentrations; other environmental concentrations; probable routes of human exposure; average daily intake; acceptance exposure; and body burdens.
4. References.

The first volume contains data on 74 chemicals. Further volumes are to follow on solvents, pesticides and carcinogens.

The amount of data accumulated by the author and his associate editors (W.F. Jarvis, G.W. Sage, D.K. Dasu, D.A. Gray, W. Meylan and E.K. Grosbie) is staggering, but organized and categorized as it is, the seven volumes of this series of books will be, in my opinion, a well used, often-cited reference series for many years to come. This Handbook series will be, I believe, the premier work of its kind in its field, as risk analysis takes on increasing importance in the chemical field.

GARY F. BENNETT

Handbook of Environmental Fate and Exposure Data for Organic Chemicals: Vol. 2. Solvents, by P.H. Howard, Lewis Publishers, Chelsea, MI, 1990, ISBN 0-87371-204-8, 546 pp., $72.00.

When I reviewed the first book in the series, I said the series would become one of the most used and referred set of books in most libraries. The second volume has confirmed that positive statement.

As in the first volume, a plethora of physical chemical data and data on the environmental fate and monitoring data are given. As noted above (in more