

12 chapters, which cover a wide range from identification of properties, to data sources, to effective communications, to frequent updating when new information is unearthed, are each explained in detail with references. Of commendable note is the larger print, which will assist anyone with less than perfect 20/20 vision.

It is hoped that readers will review existing MSDS's to improve and update the information in this volume, and to consider the significance as new sheets are written. It must not be forgotten that not only the ultimate worker, but also supervisory, fire and rescue supporting personnel (who may need the information in true emergencies when authorities are not available), and copies should be available without overt security. This volume will be of much value in chemical health and safety and is highly recommended.

HOWARD H. FAWCETT

Transport and Remediation of Subsurface Contaminants, Colloidal, Interfacial, and Surfactant Phenomena, edited by D.A. Sabatini and R.C. Knox, ACS Symposium Series 491, American Chemical Society, Washington, DC, 1992, ISBN 0-8412-2223-1, 252 pages, \$69.95.

Chemical releases into the subsurface are pervasive environmental problems. The source may be as simple as known or unknown hazardous waste disposal sites, or as obvious as gasoline and other petroleum from leaking tanks.

This volume, based on the symposium sponsored by the ACS Division of Colloid and Surface Chemistry in June 1991 attempts with much success to analyze the problems, which are compounded by the nature of the material, type of soil, strong hydrophobic chemicals (such as PCB's) or separate phases of non-aqueous phase liquids, such as TCE (trichloroethylene).

Colloidal, interfacial, and surfactant phenomena are all important in finding specific answers to real-world problems. Chapters discuss both inorganic as well as organic pollution. The volume is technical in nature, and the roundtable discussion after the last chapter speculates on the future of such operations. Chapter 6, on colloid remediation in groundwater by polyelectrolyte capture, in view of the widespread presence of radioactive colloids (radiocolloids), believed to accelerate the transport of radioactive species in groundwater, should be of interest in view of the wide concern over radioactivity contamination in and around the 17 government-owned nuclear facilities in the U.S. This volume is an important documentation and reference on a very important subject area, and should have wide readership in that area of pollution control.

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