

states are included). This Guide contains both verbal and written reporting requirements for oil, hazardous substance, hazardous waste, hazardous materials, excess air emissions, wastewater excursions, underground tank leakage and SARA Title III.

The author of this guide notes that a spiller must comply with both the State and Federal reporting requirements. This book makes those requirements clear.

GARY F. BENNETT

*Explosives*, 3rd revised and extended edn., by Rudolf Meyer, Sponsored by WASAGCHEME - Essen/Germany, Published by VCH Verlagsgesellschaft, Weinheim (Germany) and VCH Publishers, New York, NY, 1987. ISBN 3-527-26599-6 (German) and ISBN 0-895753-600-4 (English), 452 pages, price not available.

This is a concise handbook covering the entire field of explosives, including the replacement of the "classical" nitroglycerine-nitroglycol-based gelatines by emulsion slurries. New values have been calculated for the heat of explosion of explosives, and previous editions are brought up-to-date.

The volume is truly a quick-reference, in alphabetical order (from Abel Test to zweibasige Pulver, or double-base propellants) and includes many tables and references. Where indicated, German, French and English names are side-by-side. The literature section is 9 pages, but includes major references from a wide variety of sources. The index is especially thorough, consisting of 38 pages. Fundamental terms are given in six languages in the front of the book, and an excellent conversion study of European vs. English/American measurements is included in the rear folds. Any library or research workers who wants authoritative data quickly will find this book most valuable where explosives or propellants are involved.

HOWARD H. FAWCETT

*Encyclopedia of Environmental Control Technology: Vol. 1. Thermal Treatment of Hazardous Wastes*, by P.N. Cheremisinoff (Ed.), Gulf Publishing Co., Houston, TX, 1988, ISBN 0-87201-241-7, 827 pp., \$135.

This book is the first of eight planned volumes in a series dealing with all aspects of environmental control.

This first volume is advertised as dealing with the thermal destruction of

hazardous and toxic wastes; and, indeed, several chapters do relate directly to incineration, but many do not.

The editor has solicited contributions from a wide variety of people (36 in all) working in the field of incineration. I know several of the contributors and can attest to their expertise. Their contributions and several of the other chapters are quite good. However, the editor appears simply to have solicited manuscripts without regard to a cohesiveness that would yield a comprehensive book on the topic of hazardous waste incineration. What has resulted is a "conference proceedings-type" volume, with each author "doing-his-own thing", i.e. the book is really a "selected topics publication" and not a comprehensive book on thermal treatment. Worse than that, several papers are well on the edge of incineration in the field and other papers appear to bear no relationship to it at all, but that relationship could have been made relevant by "tying" the papers together.

GARY F. BENNETT

*Acute and Sub-Acute Toxicology*, by Vernon K. Brown, paperback published by Edward Arnold Division, Hodder & Stoughton Ltd., London, 1988, ISBN 0-7131-2974-3, price not available.

The author notes in the preface that the primary objective of this monograph is to provide a balanced and detailed account of the scientific basis of predictive acute and sub-acute toxicology, together with a detailed bibliography. He notes the "three R's" in relation to predictive acute toxicology: *replacement* of sentient animals in investigations by the use of alternate methodology whenever possible, *reduction* in the numbers of animals when this can be done without invalidating the investigation, and *refinement* of methods to improve the outcome of the experimentation.

This volume gives many definitions, highlighted by boldface type, and an appreciable number of diagrams illustrating various toxicologic principles. However, it offers little guidance on how to conduct experiments in toxicology. The reader must consult the 697 references to learn exactly what procedures to follow. The concept of reducing the number of animals is commendable, but responsible toxicologists have always done so when possible. Statistical and regulatory guidelines necessitate the use of sufficient animals to meet certain requirements, not the whims of the toxicologist. The paperback format is reassuring in the search for lower costs in place of more expensive bindings.

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