Destruction of Hazardous Chemicals in the Laboratory, by George Lunn and Eric B. Sansone, Wiely West Sussex, UK, 2nd edn., 1994, 501 pages, price UK£ 66.00, ISBN 0-471-57399-X

This book is a collection of detailed procedures that can be used to degrade and dispose of a wide variety of hazardous chemicals – both laboratory and bulk quantities. In addition, methods for cleaning up spills and solvents for wipe tests to ensure complete surface decontamination are frequently indicated.

This, the second edition of the book (the first edition was published in 1990), contains newly added chapters on the removal of metal ions and biological stains from solution and the degradation of mycotoxins, enzyme inhibitors, polycyclic heterocyclic hydrocarbons and highly reactive agents such as butyllithium, chlorosulphonic acids, peracids and phosgene. Another newly added chapter covers the alternatives to complex metal hydrides in the preparation of super-dry solvents. Finally, added to the appendix is a chapter on the treatment of complex waste streams produced by biomedical research institutions.

A total of 65 different chemicals (or classes of chemicals) are addressed. The sections contain the following information:

- An introduction that describes the various properties of the compound or class of compounds being considered.
- The principles of destruction section details, in general terms, the chemistry of the destructive procedure, the products, and the efficiency of destruction.
- The destruction procedure section may be subdivided into procedures for bulk quantities, solutions in water, organic solvents, etc.
- The analytical procedures section describes one or more procedures that may be used to test the final reaction mixture to ensure that the compound has been completely degraded.
- The mutagenicity assays section describes the data available on the mutagenic activity of the starting material, possible degradation products, and final reaction mixtures.
- The related compounds section describes other compounds to which the destruction procedures should be applied.
- References to identify the sources of information are supplied.

The introduction contains a special section on safety considerations.

GARY F. BENNETT

Understanding Radioactive Waste, by R.L. Murray, Battelle Press, Columbus, OH, 4th edn., 1994, 212 pages, price US$ 12.50, ISBN 0-935470-79-4

Having spent my carrier dealing only with chemical (hazardous) waste, a new project involving nuclear waste sent me to the literature. Before I got deeply into the very technical aspects of nuclear waste disposal, I was fortunate enough to come upon this very basic, well-written book dedicated "to seeking of sound solutions".