BOOK REVIEW

Robert V. Blanke, 1 Ph.D

A Review of Instrumental Data for Drug Analysis— Volumes 1 and 2

REFERENCE: Mills, T., III, Price, W. N., and Roberson, J. C., *Instrumental Data for Drug Analysis*, Vol. 1, 1982, \$95.00 and Vol. II, 1983, \$95.00, Elsevier Science Publishing Co., Inc., 52 Vanderbilt Ave., New York, NY 10017.

Each of these volumes contains ultraviolet (UV). infrared (IR), proton nuclear magnetic resonance (NMR). mass spectrometry (MS), gas chromatography (GC), and high pressure liquid chromatography (HPLC) data on approximately 300 drugs. In addition a brief monograph on each drug gives the title name (usually the generic name) molecular formula, molecular weights, (one acceptable by IUPAC convention and another using the most abundant naturally occurring isotope of each element), the *Chemical Abstracts* name, other common, trivial, or trade names, a therapeutic use, and the structure of the compound. HPLC data indicate the column, coded solvent composition, and retention time in minutes. GC data include a Kovats index for defined column, flow rate, and carrier gas, together with the column temperature. Other data are displayed as charts on two 8- by 11-in. facing pages. The two volumes include about 600 drugs.

In addition, to a conventional index there are several useful tables. One lists compounds by Kovats Retention Indexes, another by GC retention times. Three tables listing drugs by absorption maxima, in acidic, basic, and ethanolic solution, are given as well.

These promise to be very useful references. Different users may be annoyed by the format in which data are displayed (for example, UV plots transmittance versus wavelength) but these are largely dictated by the instrumentation used. No information on solubility or extraction procedures is included. In addition, concentrations are not given for transmittance data. Nevertheless the authors are to be congratulated for compiling these data in a clear, simple format which is easily used.

The binding is good, the printing clear, typos few, and the price appears to be reasonable. The book is recommended to analytical toxicologists as well as to drug chemists.

¹Professor of pathology, Medical College of Virginia, Virginia Commonwealth University, P.O. Box 597, MCV Station, Richmond, VA 23298.