

away in the laboratories of pharmaceutical scientists. Each drug profile provides useful information and data in the following general areas: description, physical properties, synthesis, stability and degradation, metabolism, analysis (for the drug substance, in its dosage forms, and in biological fluids), pharmacokinetics, and literature references. Physical properties include IR, NMR, UV, and mass spectral data, melting point, solubility data, crystal properties, and pK values where applicable. Analytical methods encompass titrimetry, chromatography, colorimetry, spectrophotometry, elemental analysis, and related techniques.

Each profile is presented in a well-organized and systematic manner. Each is introduced by a table of contents, followed in an orderly sequence by individual categories of specifications, and concluded by an extensive listing of quoted references. This compendium is printed clearly and is replete with tables and graphical presentations. Data are readily located and concisely presented with only a minimum of descriptive information. Maximum utilization is made of the available space.

This volume brings to a total of 97 the number of drugs for which profiles have thus far been prepared, including the 18 in Volume 5. These volumes serve well as companion books to the official compendia by presenting a wealth of data that supplement and are not duplicative of material found in the compendia. As noted in the Forward to Volume 1 of this series, the delegates to the 1970 meeting of the United States Pharmacopoeial Convention adopted a resolution that consideration be given to the publication of just such a companion compendium. While the USPC did not undertake this project, it is worthy of note that a number of contributors to this series, including its esteemed editor, are, in fact, members of the USP Committee of Revision.

In view of the fact that fewer than 100 drug profiles have appeared in the first five volumes of this series, and with the mandate for USP XX to include all drugs currently official in USP XIX and NF XIV, all drugs added in their annual supplements, some 600 nonofficial drugs selected by the outgoing Subcommittee on Scope of the USP at its final meeting in January 1975, and new drugs marketed since that date, it is obvious that pharmaceutical scientists have their work cut out for them. It is worth repeating here the editor's invitation that: "All those who have found the profiles useful are earnestly requested to contribute a monograph of their own. The editors stand ready to receive such contributions." Hopefully, there will be an overwhelming response to this invitation.

This burgeoning library of "Analytical Profiles" is a must for all who are engaged in pharmaceutical research.

*Reviewed by Martin I. Blake
College of Pharmacy
University of Illinois
Chicago, IL 60612*

Aromatic and Heteroaromatic Chemistry. Vol. 4. A Specialist Periodical Report. Edited by C. W. BIRD, G. W. H. CHEESEMAN, *et al.* The Chemical Society, Burlington House, London W1V 0BN, England, 1976. 513 pp. 14.5 × 22.5 cm. Price £28.00.

This volume comprises an in-depth review of the literature abstracted between July 1974 and June 1975 and covered by volumes 81 and 82 of "Chemical Abstracts." The organization of the report follows the established pattern of previous volumes.

There are 14 chapters written by 15 international scientists who are specialists in their fields. Most of the chapters include an introduction indicating the parameters established by the author(s) and the reviews on the subject published during the time period. A particularly helpful feature is that all literature citations are included as footnotes on the page that contains the abstract, thus eliminating the time consuming and thought-interrupting process of turning to the end of the chapter when a specific reference is desired. Another helpful feature is a complete author index.

The chapter titles include: Ring Systems of Topical Interest, Inter-molecular and Intramolecular Cyclization Reactions in Ring Synthesis, Cycloaddition Reactions, Ring Transformations, Electrophilic Substitution on Carbon, Electrophilic Substitution on Heteroatoms, Nucleophilic Substitution, Aromatic Substitution by Free Radicals, Carbenes and Nitrenes, Addition Reactions, Ring Cleavage Reactions, Reactions of Substituents, Porphyrins and Related Compounds, Naturally Occurring Oxygen-ring Compounds, and Other Naturally Occurring Compounds. The volume comprises 513 pages and includes 2750 literature citations.

The book is well illustrated with many chemical structures and reaction mechanisms. These illustrations are numbered sequentially and placed in close proximity to their text reference, thus affording a free flowing continuity which contributes to the overall excellent readability of the material.

This treatise is an extremely well-organized and readable volume and should serve to stimulate fresh approaches in the ever more sophisticated areas of aromatic and heteroaromatic synthetic chemistry. It is recommended to all chemists who are actively involved in synthetic organic chemistry or who wish to be up to date and informed about research activity in aromatic and heteroaromatic chemistry.

*Reviewed by Edward F. LaSala
Massachusetts College of Pharmacy
Boston, MA 02115*

Handbook of Analysis of Organic Solvents. By VÁCLAV ŠEDÍVEC and JAN FLEK. Halsted, 605 Third Ave., New York, NY 10016, 1976. 455 pp. 16 × 23.5 cm. Price \$42.50.

Within this volume the authors have compiled an extensive aggregate of information concerning the chemical and physical properties and the analysis of organic solvents. Following a brief discussion of sampling and drying techniques, procedures are described for the determination of the physical properties and quantitative identification of unknown samples. After a presentation of methods for the analysis of two- and three-component mixtures by physicochemical methods, the basics of GC are described using a general procedure. Relative retention times are given for many common solvents using six different stationary phases.

The second part of the book deals with solvents as individual classes of organic compounds. The most frequently encountered solvents are described in depth, listing synonyms, chemical properties, usual impurities, and azeotropes. Tables containing extensive physical data are included. Detection methods, derivatives, and quantitative procedures are described in detail with corresponding literature references. Three appendixes covering 80 pages include a listing of the boiling points of solvents and their azeotropic mixtures, the major physical properties, and an alphabetical listing of universally used trade names.

This handbook represents a valuable accumulation of a myriad of facts and procedures which will be of use to the analyst, the chromatographer, and the synthetic organic chemist, all of whom frequently require data or techniques to utilize or analyze organic solvents.

*Reviewed by Allen L. Jacobs
Pharmacy and Analytical Research Department
Sandoz, Inc.
East Hanover, NJ 07936*

The National Formulary and the USP Guide to Select Drugs. Edited by W. M. HELLER, G. K. WURSTER, C. A. DICKIE, and J. W. WHEATLEY. U.S. Pharmacopoeial Convention, 12601 Twinbrook Parkway, Rockville, MD 20852, 1976. 295 pp. 10 × 14.5 cm. Price \$3.00.

This convenient pocket-size book is intended to be a companion to the official compendia and the USAN Dictionary and is the first compilation of its kind subsequent to the consolidation of the USP and NF. Its purpose is "to highlight those drugs that should receive attention and be used as preferred drugs."

The book contains an alphabetical list of both generic and brand names of effective and useful drugs, with the preferred drugs in boldface type. The entries also contain dosage forms and strength; indication of whether prescription, nonprescription, or DEA controlled; and the pharmacological classification. In addition, there is a cross-index by therapeutic classification.

This book should be useful as a personal prescribing and dispensing guide and as a basic list of preferred drugs for health facilities and various organizations.

Staff Review