REVIEWS

1980 United States Pharmacopeia–National Formulary. The United States Pharmacopeial Convention. 1980. 1505 pp. 21 × 28.5 cm. Price $90.00 postpaid (domestic and foreign), including all annual supplements to USP XX and NF XV; separately, $65.00 for the book and $7.00 for the first supplement. (Available from Mack Publishing Co., 20th and Northampton Streets, Easton, PA 18042; orders also may be placed with state pharmaceutical associations.)

For the first time, the United States Pharmacopeia and the National Formulary are published together in one volume. These compendia set forth legally enforceable standards for drug strength, quality, purity, packaging, and labeling.

USP XX comprises the first portion of this volume. Following a section of introductory material, additions, deletions, and title changes made since USP XIX are listed. Featured next are more than 2300 monographs covering drug substances and dosage forms. The monographs include definitions of identity, packaging and storage information, identification tests, and assays. Category, dose, sizes available, and dispensing information previously included in USP–NF monographs now appears in a separate book, USP Dispensing Information.

The 331-page section of general chapters that follows the monographs includes descriptions of microbiological tests, biological tests and assays, chemical tests and assays, and physical tests and determinations. The general chapters also include discussions of topics such as dosage form stability, controlled drug regulations, and child-resistant containers.

The next section includes descriptions of the reagents, indicators, and solutions that are required in conducting USP and NF tests and assays. The final section of USP XX contains reference tables, among which is a listing of pharmaceutical ingredients by category. A table that gives descriptive and solubility statements for USP and NF substances also is included.

The section of the book corresponding to NF XV also begins with an introductory discussion. Almost 200 monographs for inactive pharmaceutical ingredients are given in NF XV. These monographs also include identity statements along with packaging and storage information, identification tests, and assays.

A 128-page appendix to USP XX follows, which includes excerpts of Federal antibiotic regulations. The book concludes with a combined index to USP XX and NF XV.

The standards set forth by USP and NF are enforced by the U.S. government and by state governments. The USP XX–NF XV standards became official July 1, 1980.

Staff Review

United States Pharmacopeia Dispensing Information. The United States Pharmacopeial Convention. 1980. 20.5 × 28.5 cm. 816 pp. Price $18.75, including updates (quantity discounts available). (Available from Mack Publishing Co., 20th and Northampton Streets, Easton, PA 18042.)

This new companion to the United States Pharmacopeia–National Formulary presents dispensing information for both the practitioner and the patient. Over 300 experts in pharmacy, medicine, dentistry, and nursing participated in the review process, and additional review and input were provided by hundreds of other practitioners and patients.

The first of the three sections of this book contains information oriented toward the health care provider. There are nearly 600 pages of drug monographs arranged in alphabetical order by generic name. Each monograph includes a category statement, precautions to consider, side effects, patient consultation, general dosing information, and dosage forms. There are 364 general monographs providing information on almost 1200 drug substances and products which represent thousands of different brands.

The second section contains patient-oriented information presented in nontechnical language. This material should aid in reinforcing the therapy selected by the prescriber. There are 213 monographs, including 42 class monographs representing 155 drug substances. The information corresponds to that presented in the prescriber-oriented section.

The third section is an index listing drug entities by official names, categories of use, and selected medical information such as pregnancy warnings and breastfeeding warnings. There are cross-references by selected brand names (both U.S. and Canadian) and older nonproprietary names.

Bimonthly updates of this book will provide information on important new drugs as well as changes in information for previously included drugs. Updates are included in the stated price. The first update is provided with the main volume and concentrates on topical and vaginal products.

Staff Review

Fundamentals of Nuclear Pharmacy. By GOPAL B. SAHA. Springer-Verlag New York Inc., 175 Fifth Ave., New York, NY 10010. 1979. 272 pp. 15 × 23 cm. Price $19.90.

This book is meant to be used as a textbook for courses on nuclear pharmacy aimed toward nuclear pharmacists, nuclear medicine technologists, and nuclear medicine residents. It is based on courses taught to such students at the University of Arkansas for Medical Sciences. In the author's own words, "the topics included are comprehensive, ranging from the basic concept of atomic structure to practical clinical uses of radiopharmaceuticals."

Included are 12 chapters on the following topics: The Atom; Radioactive Decay; Production of Radionuclides; Radionuclide Generators; Radiopharmaceuticals; Radiolabeling of Compounds; Characteristics of Specific Radiopharmaceuticals; Quality Control of Radiopharmaceuticals; Radiopharmacy; Radiation Dosimetry, Safety, and Regulations; *In Vitro* Tests; and Radiopharmacology in Nuclear Medicine (which gives a brief description of a variety of nuclear medicine procedures). Each chapter is followed by a series of questions (answers are given in an appendix) designed to test the students' understanding of the material presented.

In general, the chapters are well written, with complex theoretical concepts explained in an easily understandable manner. The depth of the material is appropriate for the indicated audience. Especially well written are those chapters dealing with the more practical aspects of nuclear pharmacy such as the quality control of radiopharmaceuticals, radiopharmacy, safety, *in vitro* tests, and radiopharmacology. In all cases, ample illustrations and examples aid the reader in gaining a practical understanding of the material.

In summary, this is an excellent, reasonably priced textbook for the intended audience and should find widespread acceptance by both students and instructors.

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Polarography of Molecules of Biological Significance. Edited by W. FRANKLIN SMYTH. Academic, 111 Fifth Ave., New York, NY 10003. 1979. 326 pp. 15 × 23 cm. Price $47.50.

This book covers the polarography of organic molecules that have applications in pharmacy, pharmacology, basic medical sciences, environmental sciences, and agriculture. The authors review the literature published since 1965.

The first part of the book is an introduction to voltammetric analysis and consists of two chapters. The first chapter has a brief outline of the voltammetric methods and their scope and advantages, sampling, initial treatment, separation techniques of the active component, and methods to make an electroactive molecule. Chapter 2 discusses the practical aspects of the voltammetric method, including the choice of solvents, supporting electrolytes, pH, electrodes, cells, and potentiostats. The theoretical aspects of the different voltammetric techniques are discussed to allow optimum selection.

The second part of the book (eight chapters) is the application of polarography to different fields. Three chapters deal with the analysis of pharmaceuticals. The substances discussed include psychotropic, hyp-