

lengthy listing of various occupations and the irritants one may be exposed to in those occupations. Such a compilation can be helpful to a clinician trying to identify a causative agent.

Household products, cosmetics, and fragrances are just a few of the subjects covered in the discussion of topical products. The authors include a short description of tests used to verify irritant reactions, which is redundant in light of the fact that a review of these tests provides the basis for most of the third section of the book.

Both *in vitro* and *in vivo* tests to evaluate the ability of a chemical compound to cause irritation are discussed in detail. This information should be of interest to the clinician and researcher alike. Presented is a detailed summary of test procedures (patch tests, provocative use tests, and open tests), what each test entails, variations of these tests, and how results are read.

What isn't included is information on how to prepare suspected irritant material for testing. The author does, however, provide references to serve as sources of information for testing. If their goal, as cited in the preface, is for this work to be a source of information to both clinicians and researchers, the authors should provide guidelines for vehicles and concentrations to test the irritants that are mentioned throughout the book. Also, a more extensive index should be furnished. The abbreviated index for this book makes it difficult to locate a particular subject of interest. If a specific irritant is being searched, it is difficult to determine if it is described in the book or not.

Overall, this book contains a substantial amount of pertinent and useful information, though the presentation is at times redundant. To their credit, the author's references are generally current. Also, the editors and authors chosen are generally well recognized in their field as qualified in this subject matter. Expectations of an all inclusive discussion on the topic of irritant contact dermatitis in a series volume may be unrealistic, yet its lack of some of the important qualities found in more comprehensive texts is incogitable.

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Modern Pharmaceutics. Edited by Gilbert S. Banker and Christopher T. Rhodes. Marcel Dekker, New York, 1990, 902 pp., ISBN 0-8247-7499-X, \$125.00.

This book is one of the few that is able to cover most of the pharmaceutics topics in one volume. In this second edition, the contents are revised and expanded. The format and arrangement of the topics are similar to those of the first edition, with a few additional chapters. In the first edition solid oral dosage forms were covered in one single chapter. In the new edition, the same topic is now dealt with in more

detail, and the subject is subdivided into three different chapters: separating tablets, capsules, and specialty tablets. A similar approach was taken with the controlled-release product section. In the first edition these products were covered in one chapter entitled, "Depot Medication." The second edition deals with the same topic but in greater detail, as two chapters, 16 and 17, namely, "Sustained and Controlled Release Delivery Systems" and Site Specific Drug Delivery Systems."

Chapter 1 is an introduction to the concepts of pharmaceuticals and drug products. In Chapter 2, the general principles of drug absorption and the factors governing drug absorption are reviewed with updated references. Chapter 4 also deals with drug absorption and bioavailability, but from the dissolution point of view. Pharmacokinetics and Drug Stability are given in a brief, but well-organized form, in Chapters 3 and 6, respectively. The section of Chapter 5 dealing with the Rate of Administration and Distribution on Drug Action is almost the same as in the previous edition. However, the "Preformulation" aspects dealt with in Chapter 7 are completely rewritten by a new author.

The first seven chapters of the book, as explained above, give general concepts and principles and prepare the reader to understand the actual pharmaceutical dosage forms that are covered in the following eight chapters (Chapters 8-15). In these chapters, topical, disperse, solid, parenteral, ophthalmic, and aerosol pharmaceutical systems are discussed in great detail, each having its own chapter. In all cases the formulation, manufacturing, and application of the dosage forms are covered. Packaging of all different dosage forms are summarized in one separate chapter, Chapter 18. The important information on the regulatory aspects of pharmaceutical formulation and processing is covered in Chapters 20 and 21 in a brief, but sufficient manner. The recent developments in biotechnology and their impact on pharmaceuticals are only briefly touched in the last chapter. This topic needs to be covered in greater detail in the next edition. Each chapter has its own reference list. In some chapters the titles of articles are given in the references, whereas the majority of the chapters lack this information. The second edition is printed in larger type, which makes it easier to read, and some of the figures are enlarged. An adequate subject index is included at the end of the book.

The book is recommended as a pharmaceutics textbook for colleges of pharmacy for B.S., Pharm.D., and graduate students. It should also prove valuable as an information source for industrial pharmaceutical scientists.

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Rational Therapeutics: A Clinical Pharmacologic Guide for the Health Professional. Edited by Roger L. Williams, D. Craig Brater, and Joyce Mordenti. Marcel Dekker, New York, 1990, xiii + 787 pp., ISBN 0-8247-7946-0, \$150.00.

The purpose of this textbook is to provide clinical pharmacology information of a selected group of drugs and dis-