

The briefness of each example expertly incorporating the vital data and reaction conditions together with editorial notes where necessary, enables the reader to make selections according to his needs at a glance. The separate bibliography for each section is also very helpful for tracing the original papers.

A literature search for less known reactions causes frequently more difficulties and frustration when long hours of work in the library are rewarded by only a handful of informative sentences. The present book offers an up-to-date encyclopedia of selected reactions which have been widely employed in steroid chemistry. However, examples of those reactions have been omitted which have not received wide attention, such as reactions at the C₁₇ side chain, *cis-trans* modifications of ring junctions, addition of alicyclic and heterocyclic rings to the steroid nucleus, etc. Any reader of this book who is familiar with steroid chemistry will miss such examples which could have been easily incorporated in an additional section dealing with miscellaneous reactions, without exceeding the limits of this book. Inclusion of such additional sections would have made this publication even more valuable and comprehensive.

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Spectrophotometric Analysis of Drugs Including Atlas of Spectra.

By IRVING SUNSHINE and S. R. GERBER, Cuyahoga County Coroner's Office, Cleveland, Ohio. Charles C Thomas, Springfield, Ill., 1963. xvii + 235 pp. \$10.50.

The introduction of spectroscopic techniques for qualitative and quantitative analyses in clinical and forensic toxicology will be greatly assisted by the appearance of this book. A detailed experimental procedure for the preparation of samples for ultraviolet and infrared spectra determination from blood, urine, and stomach-content specimens should prove useable even by those previously untrained in spectroscopic techniques. As the authors indicate, a catalog of reference spectra must be kept by each analyst since the appearance of new drugs is too rapid to allow for publication of atlases of spectra. A very excellent start has been provided in this book, however, for ultraviolet absorption spectra of 143 common drugs in acidic and basic solvent are presented, along with 268 infrared spectra. In most cases spectra of the therapeutic agent as a KBr pellet and in chloroform solution are given. In all cases the spectra are easily read and are sufficiently large for each comparison with experimentally obtained curves.

For no apparent reason, the authors indicate specifically that a "Perkin-Elmer Model 221 recording infrared spectrophotometer" is necessary equipment for the infrared analyses while the fact that the ultraviolet absorption spectra were determined using a "Beckman DK2 recording ultraviolet spectrophotometer" was mentioned only on the dust cover. This may prove misleading to the toxicologist wishing to initiate these techniques, for a number of infrared spectrophotometers are available with "scale expansion," the special feature required by this analysis.

A table beginning on page xi lists the ultraviolet spectra in order of increasing wave length of major absorption bands. This provides a rapid method for finding the curves for comparison with the unknown. Unfortunately, the authors made no attempt to provide some similar procedure for expediting the comparison of infrared spectra. A modification of the "Sadler" procedure might prove valuable.

The presentation of the infrared curves is excellent; however, the ultraviolet spectra were not replotted from the instrument curve and thus are not linear in wave length, providing some difficulty in determining the exact wave length of long wave length maxima. Furthermore, the curves are plotted in optical density which limits their usefulness to the chemical spectroscopist.

The index indicates the generic names of all agents by presentation in all capitals, but synonymous names are included. Unlike many indexes this one indicates the page number of the curves by both the generic and synonymous names providing the reader a rapid reference to the atlas of spectra.

In spite of the few disadvantages mentioned above, the book

will prove of interest to any scientist who is concerned with infrared and/or ultraviolet absorption spectroscopy of organic compounds.

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Physiologic Pharmacology. Volume 1. WALTER G. ROOT and FREDERICK G. HOFMANN, Ed. Academic Press, New York, N. Y., 1963. xvi + 703 pp. 15.5 × 23.5 cm. 158s.6d (\$22.00).

This is the first volume in a proposed series of ten volumes and the first of three volumes on drugs acting predominantly on the central nervous system. Volume 1, a multi-authored work, is concerned with depressant drugs. The emphasis on "physiologic" in the title and Foreword for the series may be somewhat misleading in its implication. This first volume is no more "physiologic" and, in view of the definition of pharmacodynamics or pharmacology, could be no more "physiologic" than a standard, authoritative textbook, such as Goodman and Gilman.

Most multi-authored books suffer from an unevenness in quality of presentation which can only be circumvented, to some degree, by rigid editorial policy and review. The wide range in quality of the twelve chapters of the first volume lead one to hope that the editors will exercise stricter supervision of contributions to the forthcoming volumes. The chapter on alcohols and that on tolerance and physical dependence are worthwhile contributions to the pharmacologic literature. The material in the two chapters on general anesthetics is more extensive than that usually found in textbooks, but one could wish for greater analytical treatment. The three chapters on the tranquilizers provide a much needed, comprehensive source of material not available in standard textbooks. However, the three chapters on the sedatives and hypnotics and the chapter on strong analgesics are neither as complete nor as well presented as similar chapters in currently available textbooks. Editorial review of the chapter on the nonnarcotic analgesics failed to correct a number of inconsistencies. The breadth of literature covered in the latter chapter, although very extensive, is treated with a minimum of critical evaluation. In the reviewer's opinion this lack of analytical criticism is to be regretted.

The chief value of "Physiologic Pharmacology, Vol. 1" is that it collects in one book broad, factual, and somewhat critical review articles on related subjects. In view of some of the shortcomings of this first volume, and the cost of the whole series, it is to be recommended for the departmental library rather than for personal desk use.

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Pharmaceutical Firms U. S. A. & Canada, 1964. 72 pp., paperback, 27 × 21 cm. \$12.00. **European Pharmaceutical Firms, 1964.** 84 pp. \$18.00. Noyes Development Corp., Pearl River, N. Y.

These publications list major and minor pharmaceutical firms in the U. S. A. and Canada, 4000 firms in 15 European countries, and major and minor ones in India and Japan, with their addresses. Many, though not the majority of American listings, also contain the names of the officers of the companies, their subsidiaries, and their 1962 annual sales. Those not treated as extensively may be suspected to consist of a president, a telephone, and an office-salesroom-manufacturing plant combination. This description certainly holds for many of the European listings. This latter set also presents short market research surveys, valuable for overseas trade.

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