

Essentials of Molecular Pharmacology. By ANDREJUS KOROLKOVAS. Wiley-Interscience, New York, NY 10016, 1970. xv + 339 pp. 15 × 23.5 cm. Price \$16.50.

This book, which also could have been titled *Essentials of Medicinal Chemistry*, is an attempt to integrate various unifying principles, concepts, theories, and models concerning structure-activity relationships in order to present a coherent view of the interaction between ligands and biological systems.

The introductory chapter is philosophical in nature and includes a definition of molecular pharmacology. Chapter 2 (6 pp.) provides information on elementary thermodynamics, the Ferguson principle, and the classification of drugs into those that are structurally nonspecific and structurally specific. The influence of physico-chemical properties on biological activities is discussed in Chapter 3 (23 pp.), and Chapter 4 (43 pp.) covers the role of specific moieties on biological activities. Included in Chapter 5 (32 pp.) are discussions on the principles of conformational analysis, stereoisomerism, and the role of drug geometry in drug-receptor interactions. Chapters 6 and 7 (61 pp.) treat the structure and nature of drug receptors and the forces involved in the combination of drugs with receptors. Under the title of *Topography of Receptors*, Chapter 8 (71 pp.) deals with the numerous attempts to determine the spatial requirements of different classes of receptors in excitable and non-excitable tissue. Finally, theories and mechanisms of drug action are dealt with in Chapters 9 and 10 (52 pp.). These include theories based on occupation, rate, and receptor perturbation together with discussions on enzyme inhibition and metabolic antagonism.

The organization of this book is a welcome change from some of the more traditional approaches to this subject. However, because a large volume of material is covered, many topics are discussed in an extremely abbreviated fashion. In many cases, much reliance has been placed on space-consuming tables and diagrams without adequate discussion. As a result, discussions relevant to specific tables frequently are on different pages.

Although in-depth discussion generally is lacking, this should not be a serious obstacle to the student who wishes to pursue a particular topic further, since adequate, up-to-date lead-references are supplied at the end of each chapter. This book should be useful

to the undergraduate and beginning graduate student in medicinal (pharmaceutical) chemistry as a supplement to more in-depth texts and literature studies.

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NOTICES

Crystals and the Polarising Microscope. By N. H. HARTSHORNE and A. STUART. American Elsevier, New York, NY 10017, 1970. xi + 614 pp. 15.5 × 24 cm. Price \$29.50.

Cavitation. By R. T. KNAPP, J. W. DAILY, and F. G. HAMMITT. McGraw-Hill, New York, NY 10036, 1970. xix + 578 pp. 15.5 × 23.5 cm. Price \$25.00.

The Fate of Drugs in the Organism. Vol. I and Vol. II. Under the Chairmanship of J. HIRTZ. Masson et Cie Editeurs, Paris, France, 1970. (Volume I) xiii + 168 pp. and (Volume II) xiii + 338 pp. 18.5 × 24 cm. Price 187 fr. for 2-vol. set. (*French and English*)

Formulation and Function of Cosmetics. By J. STEPHAN JELLINEK. Wiley, New York, NY 10016, 1970. xix + 586 pp. 15.5 × 23 cm. Price \$27.50.

Synthetic Peptides, Vol. I. By G. R. PETTIT. Van Nostrand Reinhold, New York, NY 10001, 1970. xii + 467 pp. 16 × 23.5 cm. Price \$19.95.

Short-term Changes in Neural Activity & Behavior. Edited by G. HORN and R. A. HINDE. Cambridge University Press, Cambridge, England, 1970. viii + 628 pp. 16 × 23.5 cm. Price \$28.50.

The Biochemical Basis of Neuropharmacology. By J. R. COOPER, F. E. BLOOM, and R. H. ROTH. Oxford University Press, New York, NY 1970. vii + 220 pp. 14.5 × 21.5 cm. Price \$4.50 paper; \$6.95 cloth.