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 physicochemical 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 nonexcitable 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.