of the steroids determined in methanol against a solvent blank. Reduction of chlormadinone acetate with borohydride leaves the 4,6-diene conjugated system intact, providing an absorption band at 246 nm. (a = 49.5 l./g.cm.). However, differential determination of chlormadinone acetate at its 284-nm. maximum shows no interference, because the reduced species has no absorbance in this area of the spectrum.

The reaction medium was changed to tetrahydrofuran because lithium borohydride reacts vigorously with methanol. The necessity for changing solvent, however, introduced another variable factor in the comparison of the borohydride counter ions. An experiment was conducted with hydrocortisone as the test compound, substituting sodium borohydride for the lithium salt in the proposed procedure. The differential absorbance value found was less than 25% that obtained using lithium borohydride or by use of Görög's (5) conditions, sodium borohydride in methanol.

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LESTER CHAFETZ▲
DIMITRI C. TSILIFONIS
JOANNE M. RIEDL

Pharmaceutical Research and Development Laboratories
Warner-Lambert Research Institute
Morris Plains, NJ 07950

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▲ To whom inquiries should be directed.

BOOKS

REVIEWS

Fundamentals of Biochemical Pharmacology. Edited by Z. M. BACQ, R. CUPEK, R. PAOLETTI, and J. RENSON. Pergamon Press, Ltd., Headington Hill Hall, Oxford OX3 OBW, England, 1971. xiv + 659 pp. 18 × 26 cm. Price $27.00.

The aim of this work is described by the editors as the provision of a textbook emphasizing the biochemical roles and sites of action of drugs and aimed at nonpharmacologists wishing to enter this field. To achieve this aim, the editors have called upon the services of some 50 experts to contribute individual chapters or essays. The editors have set themselves a difficult task at which, I fear, they have not entirely succeeded. The major fault in the book lies in a general lack of cohesiveness between the various contributions; the result is that the book resembles a patchwork of essays with rather minimal interconnections. This detracts from its proposed value as a text unless supplemented by appropriate bridging and coordinating material.

The first section of the book consists of a number of necessarily cursory surveys of experimental techniques that are utilized, not exclusively, in biochemical pharmacology. These individual discussions will probably be of value only to workers thoroughly unfamiliar with a given technique. A second section deals with subcellular structures and includes short but good discussions of bacterial cell walls, mitochondria, and lysosomes. A regrettable omission is the absence of any discussion of the structural and molecular basis of mammalian cell membranes, although membrane transport does receive some discussion in a later section. The remainder of the book deals with neuropharmacology, chemotherapy, drug metabolism, and, very briefly, pharmacogenetics and comparative pharmacology. These sections are the most successful of the book and contain a number of very useful discussions. Neuropharmacology and drug–receptor kinetics and interactions are nicely treated; in particular, the discussion of adrenergic transmission provides a very thorough and readable introduction to the subject. Similarly successful are the various sections dealing with the modification and modulation of the various nucleic acid pathways (including a brief discussion of hormone action) and the newcomer to the field will find that these chapters, with the appended references, will provide a quite useful introduction to the biochemical basis of chemotherapy. The section on drug metabolism, although short, is very clearly written and will also provide a valuable introduction to this important area.

In general, the book is clearly written and respectably printed although some of the drawings could be clearer. It should be of general value to undergraduate and graduate students in pharmacology and biochemical pharmacology in providing a rapid survey of the biochemical basis of drug action and should be of substantial value to the nonbiochemically oriented scientist who wishes to acquaint himself with this area.

Reviewed by David J. Triggle
State University of New York at Buffalo
Buffalo, NY 14214 ■