

Book Reviews

Progress in Drug Research. Volume 8. Edited by E. JUCKER. Birkhäuser Verlag, Basel. 1965. 530 pp. 16 × 24 cm. Fr./DM 96.

The eighth volume of this important series contains six articles distinguished, with one exception, by unusual clarity of presentation and excellent writing. A review of the state of antiamebic drugs by G. Woolfe leads off the book. The chemotherapeutic activity, pharmacology, and clinical uses of each major modern antiamebic drug is given, correct structural and conformational formulas are shown, and the effect of molecular modification is discussed where enough data are available. The chapter emphasizes the need for an orally active well-tolerated agent which could control both the intra- and extraintestinal forms of *Entamoeba histolytica*. L. Decsi writes 140 pages on the biochemical effects of drugs acting on the CNS. As a salutary and very welcome background, 48 pages are devoted to the biochemistry of the CNS, including energy-yielding processes, intermediary metabolic cycles, nerve cell metabolism, and chemical transmitters. This portion of the chapter is well written and affords concise and carefully selected information. This cannot be said about the actual discussion of the biochemical effects of CNS-active drugs. This section is full of deletions, errors in fact and in spelling, and in the midst of the other fine chapters makes a poor impression. The extensive bibliography (1841 references) somewhat counterbalances these shortcomings.

The third chapter by H. Uehleke (in German) deals with the biological oxidation and reduction at the nitrogen atom of aromatic amines and nitro compounds, and the *in vivo* consequences (especially methemoglobin and verdoglobin formation) of these reactions. There are good sections on the mechanisms of N-oxidation and reduction in biological systems, although free-radical studies have not been considered. Each section of this chapter, including one on the carcinogenicity of some aromatic amines and hydroxylamines, is followed by its own list of references. A thoughtful and even witty chapter on antiinflammatory drugs by M. W. Whitehouse tries to summarize the causes of inflammation, the pharmacological assays for antirheumatic activity, the biochemical action, and SAR of the unwieldy array of drugs which have filled the burgeoning literature during the last two decades. Obviously, 96 pages cannot cover this vast subject, but the author has made a brave attempt to look at these compounds from every possible point of view. This chapter should be read as background material by everyone working in this field.

The highlights of the volume are the chapters on narcotic antagonists by S. Archer and L. S. Harris, and that on cancer chemotherapy by J. A. Montgomery. Written by three of the best American medicinal chemists, these chapters cover accurately and with well-chosen selectivity all of the significant facets of these two important, timely, and overworked areas of research. These two chapters should become and remain the classic summaries of these fields for some time to come.

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ALFRED BURGER

Selective Toxicity. By ADRIEN ALBERT. 3rd ed. John Wiley and Sons, Inc., New York, N. Y., and Methuen and Co., Ltd., London. 1965. xiii + 394 pp. 22.5 × 15 cm.

"Selective Toxicity" has long been a favorite with interdisciplinary readers in the fields of chemistry, pharmacology, chemotherapy, nutrition, animal husbandry, plant growth control, and other areas in which a therapeutically or economically beneficial effect is to be achieved in one cell species without toxic attack upon other cells. The new edition retains the structure of previous editions but has grown in size. It now includes new sections on comparative biochemistry and molecular biology, and the mode of action of antibiotics. Sections which have been much enlarged include applications to pharmacodynamics and steric factors. The author's own considerable

contributions to effects of ionization and chelation upon biological phenomena justify the prominence of the chapters devoted to these topics.

Professor Albert is not only one of the clearest thinkers in the fields of medicinal chemistry and allied sciences, but also a great teacher and raconteur. His style is lucid and easy to follow, and his arguments and explanations are appreciated equally by the student and the advanced reader. There is an adequate bibliography with many recent entries and a good subject index. This book should be an inspiration and delight to all those of us who want to learn and reread the fundamentals of our field.

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Cyclophosphamide (Cytoxan). Edited by G. HAMILTON FAIRLEY and J. M. SIMISTER. The Williams and Wilkins Co., Baltimore, Md., exclusive U. S. agents. 1965. xi + 200 pp. 18 × 25 cm. \$9.75.

This book contains the proceedings of a symposium on cyclophosphamide, held at the Royal College of Surgeons of England on October 4, 1963. Physicians and surgeons, mainly from Great Britain, described their clinical experiences in using cyclophosphamide to treat malignant disease. In addition there is a brief section on the use of cyclophosphamide as an immunosuppressive drug. The book also contains a bibliography of approximately 800 references arranged alphabetically with regard to the author's or first author's name. The index refers to the papers in the bibliography as well as to the text.

The contributions are short and sometimes consist only of the report of a single case covered in a few lines. Little attempt has been made to describe the results in a consistent manner. Generally the workers have not made an attempt to compare the benefits from cyclophosphamide with other available agents, or even with other alkylating agents. No comment on the mechanism of action of cyclophosphamide or how it might differ from other agents is presented.

The monograph appears to have a lack of balance and perspective and has little value except perhaps to the clinician. Even in the latter case the bibliography might indeed be the most useful part of the book.

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New Drugs. Evaluated by the American Medical Association Council on Drugs. American Medical Association, Chicago, Ill. 1965. xii + 510 pp. 16 × 24 cm. \$5.00.

"New Drugs" is the successor of "New and Nonofficial Drugs" but differs from this previous annual standard publication in scope, organization, and format. It is not a list of approved or accepted drugs, and inclusion in this volume does not constitute a recommendation for the use of a drug. The drugs listed have become available in the United States within the past 10 years, and their evaluation is based on laboratory and clinical evidence by the Council and its consultants. The chapters and sections of the book have been arranged essentially on the basis of therapeutic rather than pharmacologic classifications. The drugs are indexed by their nonproprietary and trade names; attractive features are a list of manufacturers and rules for nomenclature of drugs.

Heavy emphasis is placed on adverse reactions, contraindications, and precautions. The book will be useful to every medical practitioner.

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