

Related Compounds by A. R. Patel offers a timely survey of all facets of this important hallucinogen; Oral Anticoagulants by E. Renk and W. G. Stoll (in German) comprehensively surveys the chemistry, biochemistry, pharmacology, and medical significance of these drugs and, incidentally, does it so very much better than other similar reviews (see previous review, *Topics in Medicinal Chemistry*, Volume 2). The third article in this category is by M. H. Bickel: Biochemistry and Pharmacology of Thymoleptics. This should have been called antidepressants instead of thymoleptics since this is the real subject of the discussion. With about 470 references, and written with great thoroughness, this review will take its place with other good recent surveys of this field.

The other two topics are based on organic-pharmaceutical attitudes: pick a chemical system or reaction, deal with it thoroughly, and see how it can be applied to drugs. This holds for Photochemistry of Drugs by S. T. Reid, and The Amidines in Drug Research by A. Krentzberger (in German). These are useful in that they provide a systematic cataloging of interesting reactions and compounds, but such approaches cannot stimulate medicinal discovery. But then, one gets ideas mostly as one reads, and who knows what new ideas may arise from a rather unrelated discussion of strange compounds and reactions with therapeutic overtones.

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ALFRED BURGER

Annual Reports in Medicinal Chemistry, 1967. Editor-in-Chief, C. K. Cain, and 46 contributors. Academic Press, New York and London. 1968. xxii + 374 pp. 18 × 25.5 cm. \$8.75 (paperback).

This third volume of the series, sponsored by the Division of Medicinal Chemistry of the American Chemical Society, continues the tradition to offer critical and near-comprehensive reviews of contributions in most of the fields of medicinal chemistry which appeared in the literature during the past year (1967) and to point to new approaches which become discernible. The up-to-dateness of the book is attested by the inclusion of the address of Dr. Sydney Archer upon receipt of the Second Award in Medicinal Chemistry on June 25, 1968. Thirty-four topics are presented, ranging from the major fields of medicinal chemical research in the most active areas of pharmacology and chemotherapy to Topics in Biology (drug metabolism, neurotransmitters, drugs in memory and learning, drugs and enzymes, drug allergies) and Topics in Chemistry (syntheses of prostaglandins, nucleosides, steroids, alkaloids, organic reactions of interest in medicinal chemistry, pharmacokinetics, and physical parameters in drug design), the last of which is now espoused eagerly by those medicinal chemists who see in regression analysis a real hope for escape from a century of screening.

Although this series assumes that the reader commands adequate knowledge of the history and performance of each topic until 2 years ago, it is probably the most useful review series available in our field. It also sticks to its stated purpose of reviewing medicinal chemistry and does not wander off into vaguely related areas as so many other review series are accustomed to doing. Anyone who wants to bring his specialized knowledge up-to-date, and venture out into new areas of our science, should have this series of excellently written and edited volumes by his work bench, desk, and bedside.

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Fortschritte der Chemie Organischer Naturstoffe (Progress in the Chemistry of Organic Natural Products). Volume 25. Edited by L. ZECHMEISTER. Springer-Verlag, Vienna and New York. 1967. vii + 348 pp. 23.5 × 17 cm. 24 figures. \$19.75.

This most recent volume of the series brings a number of comprehensive monographs of high quality. In the first contribution, an exhaustive and well-organized survey of biogenetic relations of naturally occurring acetylene compounds (53 pp, 157 ref) is given (in German) by F. Bohlmann, mainly on the basis of his own work. P. R. Ashurst discusses the problems involved in the chemistry of the hops resins (22 pp, 91 ref). The pseudoguaianolides are reviewed by J. Romo and A. Romo de Vivar in 37 pages. There is a discussion of the structures, stereochemistry, and relationships between the various members of this group of sesquiterpenes. A list of the compounds reviewed closes the article (80 ref).

After a clear and brief revision of the nonadrides (17 pp, 19 ref), in which J. K. Sutherland studies the chemistry and biosynthesis of this small group of fungal metabolites, L. Farkas and L. Pallos devote 19 pages to the naturally occurring aurone glycosides (112 ref). In addition to a brief reference to occurrence, isolation, and available methods for structure elucidation, they discuss the syntheses and transformations of aurone and its glycosides into other flavanoids.

In an interesting report on the recent advances in the chemistry of hashish (102 ref) by R. Mechoulam and Y. Gaoni, the isolation, structural elucidation, synthesis, chemical transformations, and biogenesis of the naturally occurring cannabinoids is described. The article ends with tables of the biological activity and some physical properties of these compounds.

The toxic peptides of *Amanita phalloides* (32 pp, 86 ref) are described by Th. Wieland in an excellent contribution. The results in the isolation of the toxic ingredients, their structure, synthetic experiments, and toxic action have been taken mainly from the author's own investigations. E. Waldschmidt-Leitz and H. Kling report (in German) on the prolamins (90 ref), and G. A. Morrison discusses the conformational analysis of some alkaloids (38 pp, 190 ref) with special attention to yohimbine, heteroyohimbines, and related alkaloids, in addition to a conformational study of the alkaloids of *Amarillidaceae*.

All in all, the quality and the production, with the numerous schemes and formulas, is as excellent as in the well-known earlier volumes.

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MANUEL BERNABÉ

The Problems and Prospects of LSD. Edited by J. THOMAS UNGERLEIDER with 4 Contributors. Charles C Thomas, Springfield, Ill. 1968. xiii + 109 pp. 15.5 × 23.5 cm. \$5.00.

This little book could not be priced so low if the publishers had not anticipated a considerable sales volume. To attain this, there is nothing in the book that any well-read American could not comprehend, except one page of chemical structures, and a semiprofessional section on pharmacology of LSD. The rest of the chapters describe the LSD state, experiments with the drug in psychotherapy, acute and chronic side effects, and sociological aspects of the current abuse of LSD.

The book should be read by adolescents in big cities and by their parents, with the hope that factual understanding of LSD, good and evil, may make them comprehend the drug habits that surround them, and deal with this situation.

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