Aldehyde Adducts in Alcoholism

Edited by M.A. Collins

Alan R. Liss; New York, 1985

xiv + 230 pages. £35.00

This book arose from a valuable round table discussion held in June 1984 as part of an international meeting on biomedical research into alcohol held in Santa Fe, New Mexico.

Acetaldehyde has been implicated for several years in the pathogenesis of various aspects of alcohol toxicity and addiction and this book is a useful summary of the state of the art. Although there have been considerable methodological problems it is generally agreed that alcoholics have higher blood, and by implication, tissue acetaldehyde levels than normal subjects after an ethanol load. This probably reflects the well known observation that hepatic ethanol oxidation is increased in alcoholics probably due to induction of the microsomal ethanol-oxidising system. However, acetaldehyde oxidation is reduced due to lower activities of various hepatic aldehyde dehydrogenases. Evidence for adduct formation between acetaldehyde and various proteins including haemoglobin is critically reviewed. These latter compounds may form the basis of a useful method for detecting and monitoring alcohol abuse. Adduct formation with encephalins and with biogenic amines with the formation of various isoquinolines, carboline and tryptoline compounds is critically reviewed. These latter compounds are of particular interest as in certain experimental conditions they may induce a 'craving' for ethanol and thus may form the biochemical basis of the addiction in the long-standing abuser. Other adducts of interest include those with glutathione, tetrahydrofolate and with acetaldehyde dehydrogenase itself.

This is a valuable, authoritative book, highly recommended to workers participating in, or entering, this important area of alcoholism research.

T.J. Peters

Advances in Inflammation Research, Volume 10

Edited by F. Russo-Marie, J.M. Mencia-Huerta and M. Chignard

Raven Press; New York, 1985

xxiii + 435 pages. \$60.50

Another conference proceedings, this time of the Third International Congress of Inflammation (Paris 1984, I think, but nowhere mentioned in the book itself). This congress series is not to be confused with the World Congresses on Inflammation (e.g. the second, to be held in Monaco in March 1986). I mention all this to emphasise that there is

a lively trade in Congresses in the field of inflammation, and to query whether they are really justified, despite the scientific, clinical and pharmaceutical importance of the subject.

According to the introductory Preface, the book 'presents the most recent knowledge in the broad field of inflammation', and to this end contains 14

'major' articles (pages 1-136) and 95 'short communications' (3 pages each, few references, and printed in camera-ready format). Thus the editors have not had a heavy task, except to subdivide the contributions into appropriate subject classifications. Nevertheless, they have come up with some oddities: for example, the (interesting) paper on the identification of the lipoxins is placed in the section on 'Mechanism of Action of NSAIDs', whereas a brief contribution on inhibition of neutrophil responses by NSAIDs is placed under 'Membrane Activation'.

The editors suggest that a multidisciplinary approach is expected for the study of inflammation, and I agree. This is reflected by the diverse subject

matter in the book. However, as might be expected, the coverage is very uneven such that some topics (especially those of French-speaking interest such as arachidonate metabolites, plateletactivating factor) get very good treatment, whereas others (e.g. kinins, serotonin, eosinophils, slowacting anti-rheumatic drugs) are ignored almost completely, or totally. Nevertheless, the compass of inflammation research is vast, and the present volume has been published relatively quickly and does offer the reader a reasonable update in selected contemporary areas. It is thus a book for the inflammologist, not for the uninitiated.

Robin Hoult

Regulation of Carbon Partitioning in Photosynthetic Tissue

Proceedings of the 8th Annual Symposium in Plant Physiology

Edited by R.L. Heath and J. Preiss

Waverly Press; Baltimore, 1985

xxi + 374 pages. \$20.00 (£14.30 approx.)

This paperback book reports the papers presented at the Eighth Annual Symposium in Plant Physiology of the American Society of Plant Physiology, held in Riverside, California, in January 1985. The book has thus been published reasonably quickly. To achieve this, camera-ready presentation has been used, although the submitted papers have apparently been retyped to give a uniform presentation. Unfortunately, several glaring typographical errors have been left uncorrected.

The presentations are largely devoted to a discussion of starch and sucrose metabolism, subcellular localization and tissue partitioning. Special attention is paid to the roles of pyrophosphate and fructose 2,6-bisphosphate in

regulation of carbohydrate metabolism, and the major papers presented are useful reviews of this expanding area.

This volume should, for a short time, provide a useful set of reviews for graduate students about to enter the field of photosynthetic carbon metabolism. Although the book's value will only be transient, its cheapness should facilitate its use. One major problem is that no attempt has been made to present the discussions that took place after each paper. Discussion is the lifeblood of any conference and no proceedings volume is complete without it.

B. Halliwell