

The Specialist Periodical Reports are intended to keep the chemist abreast of recent progress in his own specialised area and also in related fields, as well as giving him an overall view of the development of his subject. Do they fulfil this role? In the opinion of the reviewer, the answer is definitely yes, but it seems that there may be a possible danger inherent in the use of all types of abstracting services. The fact that the literature is being efficiently combed by others for all related work and that this information will be provided in a packaged form at a later date may actually discourage some research workers from consulting primary journals. A result of this would be to remove valuable opportunities for the cross-fertilisation of ideas, which is often achieved by reading papers in non-related areas of study. However, there is no doubt that this latest volume should be available to all those working in carbohydrate chemistry. Unfortunately, I suspect that the cost may tend to prohibit its purchase for personal use.

What of the future of the series? Limitation of the size of the reports would seem to be of paramount importance, in order to prevent the selling price from increasing to unacceptable levels. The possibility of separate publication for Parts I and II has been raised, and resisted so far. If the present size is not exceeded (and Volume 9 is smaller than Volumes 6 and 7), fragmentation should be avoided. The introduction of selective coverage to reduce costs should, in my opinion, be absolutely the last resort; comprehensive coverage of the literature is, perhaps, one of the most important features that has led to the success of the series.

Everyone benefiting from these volumes owes, I believe, a vote of thanks to the reporters who undertake this arduous task. To date, twelve reporters have been involved; the one who has contributed to all nine volumes surely deserves an appropriate medal for his tirelessness!

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Aldehydes—Photometric Analysis: Volume 4, Aldehyde Precursors: Formation and Analysis of Aldehydes (Part II), by EUGENE SAWICKI AND CAROLE R. SAWICKI, Academic Press, London, 1976, xiii + 285 pages, £13.00, \$19.40.

This is the second of a sub-set of three volumes (Volumes 3–5 of the series *Aldehydes—Photometric Analysis*) which discuss (i) the photometric analysis of precursors through their derived aldehydes, (ii) the formation of aldehydes from precursors present in the environment or in living tissue, and (iii) the physiological importance of the precursor and/or the derived aldehyde.

The preface provides a disappointing and possibly misleading entry to the book; biochemists could easily, but incorrectly, conclude that the book is entirely for them, whilst chemists could equally easily assume, in error, that chemistry is very much given second place. Volume 4 in fact contains a wealth of information, and the three volumes may be described as covering "anything which gives an aldehyde somehow".

The contents are well organised, and the section headings are based both on classification according to the original compound and according to applications. The reader should therefore have no difficulty in locating those sections relevant to his/her search. The subject index is extensive.

The treatment of the subject is both unusual and novel. In a stimulating fashion, the authors have successfully brought together fields and approaches so often remaining in watertight compartments of biochemistry, botany, chemistry, clinical chemistry, genetics, histochemistry, medical biochemistry, medicine, and physiology. This will undoubtedly lead to the generation of new ideas on the part of the reader.

Two sections deal specifically with carbohydrates. The first considers monosaccharides and their derivatives, polysaccharides, glycoproteins, and nucleic acids from the viewpoint of their giving rise to aldehydes, but goes considerably further than describing reagents and measurement of products. The application of the measurements to the study of phenomena in biomedical fields is well described and referenced. The second considers monosaccharides and their derivatives, polysaccharides, glycolipids, and streptomycin as precursors of 2,5-dioxo-3-hexenal and their measurement, in terms of this compound, *via* the anthrone-sulphuric acid reaction. Again, in addition to standardisation and mechanistic aspects of the reaction, the results of biomedical application are described and referenced.

Although *Aldehydes—Photometric Analysis* is not a book that is likely to be used, or even read, in its entirety by any one person, it is an excellent reference book. Carbohydrate chemists are encouraged to read the relevant chapters—the minimum result could be that such readers will have a better appreciation of some of the aspects of applied carbohydrate chemistry.

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