

Seven chapters contain nothing more recent than 1969. Some chapters are long (67 pp) and some short (7 pp). The major ones are on Dextrans (Murphy and Whistler, 320 refs, 32 pp), Gum Arabic (Glicksman and Sand, 297 refs, 67 pp), Amylose (BeMiller, 245 refs, 22 pp), Carboxymethylcellulose (Batdorf and Rossman, 206 refs, 35 pp), and Algin (McNeely and Pettitt, 201 refs, 34 pp).

The overall impression is therefore of a book dealing somewhat unevenly with achievements of the late sixties. Everyone realises the frightening editorial difficulties involved in compiling a multi-authored text on the scale involved here, and perhaps those with the most up-to-date chapters held back the contributions of the others who had submitted by an agreed date. It has happened before! Whilst all credit remains with Professors Whistler and BeMiller for their massive effort on our behalf, one wonders why such a long gestation period did occur, and whether, at a cost of £21, those able to commit their own funds or (more likely) those of their employers are being let down just a little bit? At any rate, one thing is clear, it is time for Whistler and his boys to start on the 3rd edition if they are still resting on their laurels!

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Guthrie and Honeyman's Introduction to Carbohydrate Chemistry Fourth Edition, by R D GUTHRIE, Clarendon Press, Oxford, 1974, vii + 120 pages, £4 00, £1 50 (paper-back)

Comparison of the first edition, which first appeared 27 years ago, with the present text reflects the tremendous progress that has been achieved, not only in carbohydrate chemistry but also in the style and presentation of this complex subject to the reader. This compact introduction to the subject has been given a complete overhaul by Professor R D Guthrie, who has rewritten and reorganised the whole text, deleting some historical data and introducing new material, to such an extent that, in reality, the present edition resembles the previous editions in title only. In keeping with the modern style, the classical approach is discarded, whilst retaining a link by quoting the Fischer proof of the structure of glucose in appendix form. Attention is focused on those areas of current and developing interest; thus, the chemistry of the glycosides has been enlarged and a chapter on carbohydrate antibiotics introduced. The chapter on spectroscopic techniques cites useful data on the chemical shifts of ^1H and ^{13}C n m r spectra.

The final chapter gives a number of excellent illustrations of structural analysis and synthesis of natural products by reference to the structures of the antibiotics gentamicin and everninomicin and to multistage syntheses of methyl abequoside and 5-amino-5-deoxy-D-allofuranuronic acid.

The difficult nomenclature of carbohydrates is skilfully introduced by a brief mention early in the book and then developed as required, including a system for pyranoid conformations. Notable features of this edition include the liberal use of good

formulae and a preference for Mills'-type formulae to Haworth formulae for the representation of pyranoid and furanoid forms I agree with the author that this transformation is quickly and easily achieved and probably has advantages when teaching the subject to students

The author is to be complimented on the excellence of this introductory text to carbohydrate chemistry, and I would add further praise for the publishers for producing the paper-back edition at such remarkably good value. I cannot imagine that anyone would purchase the hard-back for an additional £2 50. Finally, a trivial point not *all* sugars are sweet (page 1)—try tasting β -D-mannose!

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