

Book review

Methods in Carbohydrate Chemistry: Volume VIII, edited by ROY L. WHISTLER AND JAMES N. BEMILLER, Academic Press, New York, 1980. xix + 349 pages, \$38.50.

Literature on carbohydrates appears in a wide range of scientific and technical publications. However, a number of excellent literature sources are dedicated specifically to the needs of carbohydrate chemists and biochemists. One of these indispensable works is *Methods in Carbohydrate Chemistry*, Volume VIII of which has now appeared.

This Volume is subtitled "General Methods" and, like Volume VI, it deals with a large variety of subjects (fifty in all), most of which supplement areas treated in earlier volumes. There are two sections of about equal length. The first one, entitled "General Methods of Separation and Analysis", contains six substantial articles on chromatography, ranging over ion exchange, gel permeation, h.p.l.c., and g.l.c.–m.s. The second section consists of two groups of articles on chemical and enzymic methods for the analysis of constituents, end groups, substituents, and sequences in polysaccharides; the enzymic determination of sugars; and ^{13}C -n.m.r. spectroscopy of mono- and poly-saccharides. Section II is entitled "Preparation of Mono-, Oligo-, and Poly-saccharides and Their Derivatives", and is comprised of nine categories of topics, including monosaccharide derivatives, glycosides, modified polysaccharides, unsaturated sugars, and cyclic acetals. The list of contributors is broadly international, and nicely reflects the widespread location of distinguished centers of research on carbohydrates. In its general format, which is closely similar to that of earlier volumes, the book is attractive, well-illustrated, and uncluttered.

As in the other volumes of the series, most of the individual methods are presented by those who devised them, or contributed importantly to their development, and the quality of presentation is uniformly good. A number of authors, however, have provided little by way of comment to supplement procedures that were contained in their original articles. Whereas minor details are often omitted from journals for the sake of brevity, they can be very appropriate to the "methods-type" of description. Several articles stand out because they are liberally furnished with useful footnotes, and more articles could have been improved in this way.

A number of helpful, supplementary comments are to be found among a list of "Errata and Additions" that apply to Vols. I–VI. There are relatively few errata in this list; in fact, it is a reflection of the careful editing that has gone into the series. I did notice several minor errors in the present Volume. Misspelt names in references include "Pazar" for "Pazur" (ref. 13, p. 217), "Kahrash" for "Kharasch" (ref. 14, p. 225), "J. C." for "J. G." (ref. 20, p. 231), and "Bollinger" for "Bolliger" (ref. 8, p. 199). The footnote to Table I on p. 220 belongs to Table II on p. 222, and " α "

should be “ β ” on line 16, p. 273, and lines 6 and 7, p. 274. Compounds (cited on pages 219 and 223–225) that are described by the term “1,2,3-trideoxy-” should instead be regarded as derivatives of “1,5-anhydro-2,3-dideoxyhex-1-enitol”, according to IUPAC rules.

Volume VIII of *Methods* successfully updates this invaluable series of reference texts. Anyone with an interest in carbohydrates will do well to consult it, and specialists in the field will want a personal copy, despite the price.

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