

Book review

Bioactive Carbohydrates in Chemistry, Biochemistry and Biology: by JOHN F. KENNEDY AND CHARLES A. WHITE, Ellis Horwood, Chichester, 1983, 318 pages + Subject Index, £ 32.50.

It is not evident from its title that this book is a primer on carbohydrate chemistry, but that is made clear in the preface. The authors wrote it primarily for students who have just a general knowledge of organic chemistry and for chemists seeking an introduction to this class of compounds.

This relatively small book, which is half-filled with structural formulas and tabulated information, is concerned with the mono-, oligo-, and poly-saccharides; such carbohydrate-containing macromolecules as glycoproteins, glycolipids, and nucleic acids; the carbohydrate-containing antibiotics; uses for polysaccharides and their derivatives; and also carbohydrate synthesis, biosynthesis, and analysis. IUPAC- and IUB-recommended nomenclature is used throughout the text. Much fundamental carbohydrate chemistry is described, with excellent clarity, but the coverage given to each topic is far from complete. The text is nearly error-free; however, a total of five errors occur in structural formulas (on pages 31, 94, and 117); and, under one formula on page 94, the wrong name is used. The literature references cited are almost exclusively secondary sources; thus, the book omits the names of virtually all of the illustrious carbohydrate chemists whose discoveries it describes.

The book should be useful to those interested in learning about carbohydrates and desirous of leads to the literature on selected topics. One would hope that, when used for a course on carbohydrate chemistry, the material in the book would be supplemented, at least, with examples of the brilliant insights and discoveries that led to the uncovering of the knowledge that is so simply presented in the book, to impart to students a measure of the fascinating problems that have been solved and of those that lie ahead to be solved.

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