Book review

Carbohydrate Chemistry, Volume 7, J. S. BRIMACOMBE (Senior Reporter), A Specialist Periodical Report of The Chemical Society, London, 1975, xiv+612 pages, £16.50 (Chemical Society Members).

Volume 7 is a review of the literature from mid-January 1973 to mid-January 1974. It is divided into two parts: Part I covers the literature on mono-, di-, and tri-saccharides and their derivatives in 27 chapters and 198 pages (868 references), and Part II covers macromolecules in 8 chapters and 387 pages (2100 references).

This volume is well presented and includes numerous formulae and schemes which aid the reader. It provides an investigator with an excellent opportunity to review rapidly the recent developments in carbohydrate chemistry. Although there is no subject index, the list of contents is very detailed and the cross-referencing between chapters in Part I is noteworthy. However, there is a limit to the degree of cross-referencing that is possible, and the reader should make intelligent use of the list of contents. For example, the chapter on n.m.r. does not include two papers on n.m.r. studies of complexing of carbohydrates with sodium ions and Group II metal ions, but these are to be found in the chapter on Inorganic Derivatives.

As in Volume 6, Part II again comprises the larger portion, the chapter headings being (1) Introduction, (2) General Methods, (3) Plant and Algal Polysaccharides, (4) Microbial Polysaccharides, (5) Glycoproteins, Glycopeptides, and Animal Polysaccharides, (6) Enzymes, (7) Glycolipids and Gangliosides, (8) Chemical Synthesis and Modification of Oligosaccharides, Polysaccharides, Glycoproteins, Enzymes, and Glycolipids. Chapter 6 includes a useful index of enzymes and is the longest chapter (114 pages), but Chapter 5 cites the most references (655). Deciding what to include in Part II, especially in the chapter on enzymes where the boundary between Chemistry and other disciplines is ill-defined, must be difficult. Readers interested in a particular enzyme-catalysed reaction will find that all papers describing studies of the reaction, as opposed to the enzyme itself, are not necessarily included. However, this is not meant to be a criticism; clearly the line must be drawn somewhere.

This volume will be an invaluable acquisition to all laboratories engaged in work on carbohydrates. The total number of references cited (approximately 2968; a few references are cited in more than one chapter) is more than 10% less than that cited in Volume 6. This makes the dramatic increase in price (by more than 100%) yet more difficult to accept! Finally, I regret very much the increasing delay in the publication of these reports. Because of this increasing delay and cost, perhaps the reporters should reconsider the possibility of publishing Parts I and II in separate volumes.