

Foreword

PHYSICO-CHEMICAL ASPECTS OF OLIGO- AND POLY-SACCHARIDES

Progress in elucidation of the primary chemical structures of naturally occurring oligo- and poly-saccharides has been remarkable during the past decade, and this has opened the way for an increasing number of studies of the relationship of chemical structure to conformation, physical properties, and function in these macromolecular carbohydrates. This Issue of *Carbohydrate Research*, organized by R. H. Marchessault (Xerox Research Centre of Canada, Mississauga, Ontario L5K 2L1) and D. A. Brant (Department of Chemistry, University of California, Irvine, California 92717), brings together some thirty-one papers covering the current spectrum of physico-chemical studies in these systems. Topics span the range from nuclear magnetic resonance, X-ray diffraction, and electron microscopy investigations of the properties of crystalline, liquid-crystalline, and gelled polysaccharides, through rheological and light-scattering studies of polysaccharide conformation in solution, to application of an array of spectroscopic methods. The rapidly emerging area of carbohydrate conformational analysis using nuclear magnetic resonance techniques has, however, had to be largely omitted from the present issue in the interests of space.

The Editors commend to the readers of *Carbohydrate Research* the window into current activity in the physico-chemical studies of carbohydrate oligomers and polymers that this Special Issue provides.