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Carbohydrate Research 340 (2005) 789
Carbohydrate RESEARCH

Foreword

This thematic issue on the 'Conformations of Oligo- and Poly-saccharides' follows other thematic issues on similar subjects, one of which (*Carbohydr. Res. 160*) was released in 1987 under the editorship of Professor David A. Brant (Irvine, USA) and Professor Robert H. Marchessault (Montreal, Canada).

The articles in that issue covered physicochemical aspects of oligo- and poly-saccharides, from solution properties to conformational structures, as determined by statistical approaches. Professor Brant, to whom this new collection of papers is dedicated, has been particularly interested in all of these themes throughout his career. His pioneering studies of the conformational statistics of carbohydrate polymers set a standard of quantification and rigor that has made his work a landmark in the field. If the basic function of all education, even in its most traditional sense, is to increase a group's chances of survival, it is clear that this function has been amply fulfilled, considering the vibrant scientific community that has grown in several fields from that groundwork.

Indeed, the combination of methods, approaches, and subject molecules, together with new findings at several levels, makes this collection a quite atypical (if not rare) event for *Carbohydrate Research*. The two Perspective articles are devoted mainly to experimental characterization of physicochemical properties of polysaccharides. The themes in subsequent articles range from polymeric conformations in the solid state to fundamental issues of the conformational challenges of 'simple' carbohydrates, to disaccharide flexibility and interaction with water molecules, to the experimental and computational approaches used to elucidate conformations of polysaccharides (including nano-ordering), and finally to carbohydrate interaction with proteins and the biological role of carbohydrates in the broad biomedical field.

It was not the intention of the Editors to present a full coverage of the various physicochemical methods for study, or the large number of molecular species that are to be found in the current literature. The primary purpose of this collection has been to provide a picture, albeit incomplete, of research carried out in the fields in which David Brant has been active. These papers might easily have been presented at a possible symposium under his chairmanship. With this idea in mind the Editors wish to thank all of the participants in this forum on the 'Conformations of Oligo- and Poly-saccharides' for their valuable and wide-ranging contributions.

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0008-6215/$ - see front matter
doi:10.1016/j.carres.2005.02.024