Preface

The progress of carbohydrate chemistry over this decade has been quite impressive. It is possible now to synthesize complex carbohydrate structures. This is largely due to a number of breakthroughs made both by methodology-oriented and target-oriented synthetic chemists. Especially, the development of numerous modern glycoside bond forming reactions has greatly expanded the repertoire of reaction conditions applicable to oligosaccharide synthesis. Enzymatic reactions are also well recognized to be extremely promising tools in this field. In combination with astonishing progress in gene technologies which enables the large-scale production of enzymes, enzyme-based strategies are going to be extremely important alternatives to chemical synthesis. Physiological function of glycoconjugates has been disclosed in connection with a variety of biomedical phenomena and their significance is now considered to be self-evident. A great deal of effort has been devoted to the development of carbohydrate based drugs.

This Symposium-in-Print entitled Frontiers in Carbohydrate Chemistry was planned to reflect such progress in this rapidly growing field. Distinguished researchers working in a variety of areas are invited as authors. We believe that those contributions compiled in this issue provide an updated overview of modern carbohydrate chemistry. Finally, we would like to thank the authors for their important and stimulating contributions.

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