

Introduction

Polysaccharide and oligosaccharide flexibility

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In recent years interest has broadened from descriptions of the equilibrium distribution of oligo- and polysaccharide conformation in solution to include the dynamics of conformational change. As a first order of business in considering the dynamics, we need to get oriented to the time scales of the various types of molecular motions that can occur, to the experimental and theoretical tools available for exploring these motions, and to the time scales to which they apply. We also need to ask what we mean

by carbohydrate flexibility and to distinguish between the accessible range of configuration space and the rates at which transitions are made between the accessible domains of configuration space. Failure to settle on common language has sometimes inhibited fruitful discussion in the past. In this oral session and in the associated posters, we will hear about both the experimental and theoretical methods in current use to investigate carbohydrate conformation and conformational dynamics in solution.