

Paul, S.; Raghothama, S.; Jayaraman, N., 2009, "Synthesis of 2-deoxy cyclic and linear oligosaccharides by oligomerization of monomers", *Carbohydr. Res.*, 344, 177 – 186.

This work deals with the chemical synthesis of the cyclic and linear oligosaccharides, using disaccharides as the monomer for the oligomerization reaction. While the linear oligosaccharides correspond to the 2-deoxy analogues of maltodextrins, that of the cyclic oligosaccharides correspond to the 2-deoxy analogues of cyclodextrins. The glycosylation reaction conditions were observed to be important for the linear and the cyclo-oligomerizations. Following the synthesis, we have conducted a preliminary encapsulation study on a 2-deoxy cyclic oligosaccharide, so as to infer the guest encapsulation abilities. The relatively higher acid lability of the glycosidic bonds of the 2-deoxy sugars, when compared to that in the normal linear and cyclic oligomers points to an altered potential for these new types of oligosaccharides in many targeted studies and applications.