

Srinivas, O.; Radhika, S.; Bandaru, N. M.; Siva Kumar, N.; Jayaraman, N., 2005, "Synthesis and biological evaluation of mannose-6-phosphate coated multivalent dendritic cluster glycosides", *Org. Biomol. Chem.*, 3, 4252 – 4257.

In this article, synthesis of mannopyranosyl-6-phosphate coated poly(amido amine) dendrimers of various generations is reported. Dendritic design principles are being exploited increasingly in efforts to synthesize newer types of cluster glycosides based on dendrimers. The present study enlarges the scope of dendritic framework in order to derive dendritic cluster glycosides, incorporated with functionalized sugar moieties, namely, the phosphorylated sugar moieties herein. The efficacy of the functionalization reactions is exemplified with the synthesis of up to four generations, containing up to 32 mannopyranosyl-6-phosphate sugar units, at the peripheries of the poly(amido amine) dendrimers. The present report should be of immediate interest to those working in the broad areas of carbohydrate chemistry and dendrimer chemistry, apart from those working in the carbohydrate biochemistry and the interfacial area of biological and materials chemistry.