

Dey, S.; Basuroy, K.; Jayaraman, N., 2014, "Dense network of O–H⋯O and C–H⋯O interactions in the solid state structure of n-pentyl-2-chloro-2-deoxy- α -D-manno-sept 3-uloside", *Carbohydr. Res.*, 393, 37 – 42.

In a sustained programme in the area of septanosides, focusing on developing in-house designed synthetic methodology and, with oxyglycal as the precursor, a number of septanosides and their derivatives were synthesized. An important septuloside is the intermediate which allowed implementing different types of reactions, thereby enabling to achieve synthesis of different types of septanoside derivatives. In the course of studies, we have been fortunate to secure the single crystals of the septuloside, which prompted us to analyze the molecular and non-covalent interactions present in the solid-state structure of the uloside. Further, elucidation of septanosides through crystal structure determination continues to be far and few, in spite a heightened interest in the chemistry of septanosides in recent years. Lack of large number of crystal structures of septanosides contrasts that from furanosides and pyranosides. Further, reports on the non-covalent interactions governing the molecular packing in septanosides is scarcely available currently. Thus crystal structures of septanosides are awaited and important, helping to understand physical and chemical properties of such un-natural sugars.