

Srinivas, O.; Muktha, B.; Radhika, S.; Guru Row, T. N.; Jayaraman, N., 2004, "Solution and solid state structure of N-acetamido-3, 4, 6-tri-O-acetyl-2-azido-2-deoxy- $\alpha$ -D-galactopyranosylamine", *Carbohydr. Res.*, 339, 1447 – 1451.

In the crystal structure of the first title compound, we are intrigued by the fact that a single site modification of mannose perbenzoate at the anomeric site with an aminoethyl substituent as in the title compound profoundly alters the solid state packing in these two compounds. We have reported the crystal structure analysis of mannose perbenzoate itself recently (*Carbohydr. Res.* 2003, 318, 2005 – 2011). The commonalities and differences of the title compound with respect to mannose perbenzoate reveal a profound role for non-covalent intermolecular interactions in the molecular packing of these sugar derivatives.

The crystal structure of the second title compound relates to a reaction product of one of the most widely used reactions in the synthetic carbohydrates, namely, the azidonitration of glycals. Apart from the single crystal X-ray structural determination, we have also performed solution phase characterization of the title compound. Here again, it is important to note the interplay of the 'strong' and 'weak' intermolecular interactions to stabilize the molecular packing in the solid state and some of these interactions may also rationalize the course of the azidonitration reaction itself.