

Pal, R.; Das, A.; Jayaraman, N., 2018, "Radical halogenation-mediated latent-active glycosylations of allyl glycosides", *Chem. Commun.*, 54, 588 – 590 (with Cover Page illustration).

Among synthetic methods available for glycoside bond formation, methods that generate the oxocarbenium ion intermediate on the glycosyl donor component are the most prominent. Whereas a number of methods are developed, the complexities of sugar structures and the attendant protecting group control on the reactions warrant further explorations of this critical reaction. With this acute necessity in contemporary developments of synthetic methods, we identify a facile route to activate an allyl glycoside to a reactive glycosyl donor through allylic halide activation. An allylic halide activation followed by treatment with a Brønsted acid promoter aid a glycosylation reaction in an exemplary manner. With this new method, an assortment of di- and trisaccharides are synthesized. Importantly, the methodology adheres to the 'latent-active' concept of glycosylation. Thus, the allyl moiety can be installed in both the glycosyl donor and acceptor, and the allyl moiety can be activated selectively on the glycosyl donor component alone. Subsequent to the formation of the glycosidic bond, the allyl moiety at the reducing end of the newly formed glycoside can be subjected to another glycosylation reaction by repeating the sequence of reactions. As opposed to transition metal-catalyzed reactions of allyl glycoside conversion to reactive vinyl glycosides, the present method simplifies to a non-metallic reagent system, namely, N-halosuccinimides, in order to derive the potent glycosyl donor system from allyl glycosides. The reactions are performed in one pot, the sequential glycosylations emerge as a result of the presence of allylic moiety at the growing glycoside reducing end. Due to the central importance of chemical glycosylation and the development of a facile, practical and one-pot glycosylation synthetic method as reported in this manuscript, we identify that the work shall attract immediate attention and immense interest of synthetic chemists in general.