

ABSTRACTS
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Library of Triazolyldisaccharides in *allo*- and *galacto*-Series

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Oligosaccharides and glycoconjugates have integral part in many biological processes. Carbohydrates are the main energy source in living organisms; they play important roles in cellular recognition processes and have relevant effect on the immune response and viral infections.

Since the discovery of copper catalyzed azide – alkyne cycloaddition (CuAAC) independently by groups of M. Meldal^{1a} and K. B. Sharpless^{1b} different triazole-carbohydrate conjugates with different biological activities have been prepared.^{2,3,4} We would like to report here synthesis of a series of 1,2,3-triazole-linked disaccharides, obtained by well-established CuAAC approach (Fig.1).

Efficient Cu(I)-catalyzed cycloaddition between diacetone-D-allose and diacetone-D-galactose derived azides **1** and **2** and different diynes with following removal of protecting

groups gave novel stable triazole-linked disaccharides, which are soluble in water.

Commercially available 1,n-diynes or 2,2-dipropargyl dimedone, 5,5-dipropargyl Meldrum's acid, 3,3-dipropargyl barbituric acid and ether of ethylene glycol were used as precursors for extended linkers.

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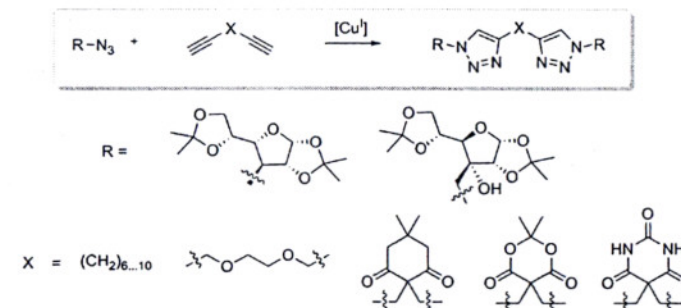


Fig.1 Copper catalyzed azide – alkyne cycloaddition