Condensation reactions of N- β (para-tolyl)2,3,4,6-tetra-O-acetyl-glucopyranosylamine with trimethylchlorosilane

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In order to obtain biologically active compounds, it was developed by us

A new method for the synthesis of silicon-containing N-glycosides. healing

Silicon atoms can be important in drug modification

cause changes, especially in their chemical and biological characteristics

in properties.

We studied the chlorosylation reactions of N-glucopyranosylamine.

Acetylation of N-β-(p-tolyl)-D-glucopyranosylamine (1) with acetic anhydride

In addition, N- β -(p-tolyl)-2,3,4,6-tetra-O-acetyl-D glucopyranosylamine (2) was obtained at the pyridine site. By chlorosilylation of compound (2),

With the interaction of trimethylchlorosilane in the presence of zinc at room temperature

temperature, N-β-(p-tolyl)-N-trimethylsilyl-2,3,4,

6-tetra-O-acetyl-D-glucopyranose

Lamin (3). Reactions are carried out according to the following scheme:

The structures of the obtained compounds were determined by physico-chemical methods of analysis

(IR and 13C-NMR, 1H-NMR spectroscopy).