

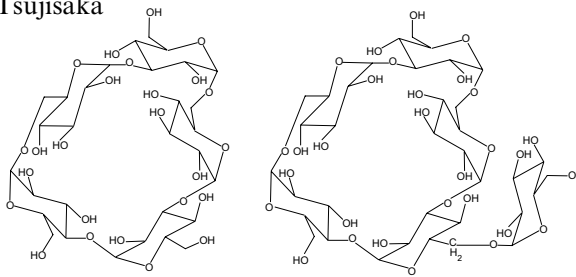
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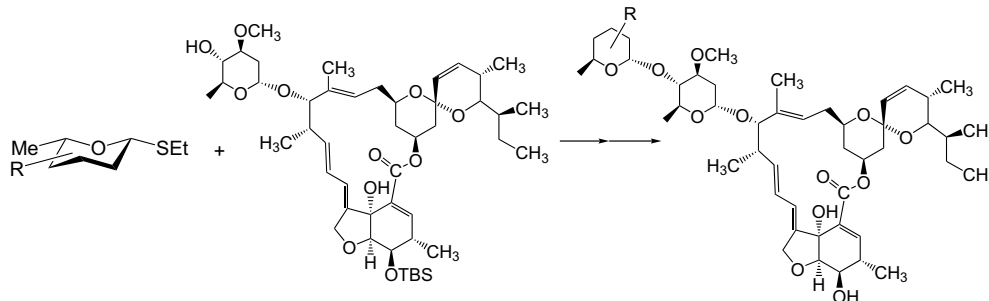
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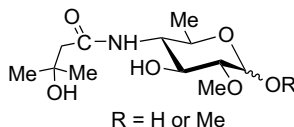
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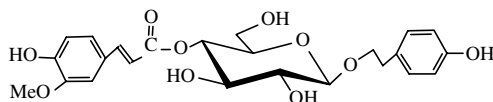
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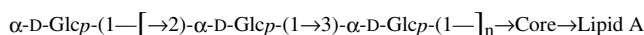
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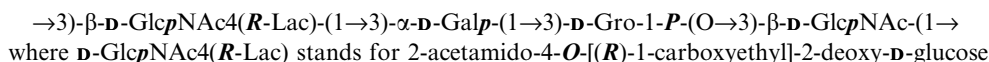
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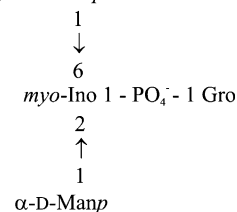
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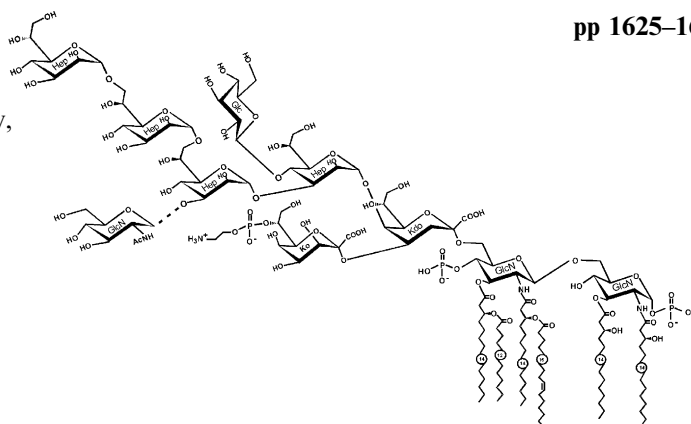
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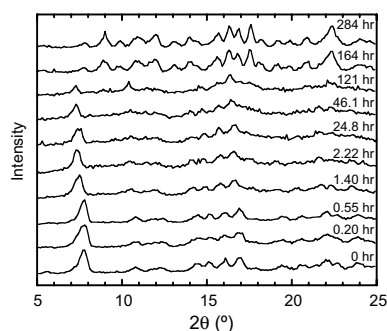
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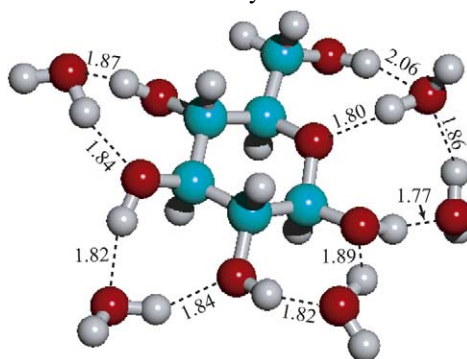
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### B3LYP/6-311++G\*\* geometry-optimization study of pentahydrates of $\alpha$ - and $\beta$ -D-glucopyranose

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## NOTES

### Synthesis of bis-(methyl 3,4,6-tri-O-acetyl-D-glucopyranosid-2-yl)-oxamides

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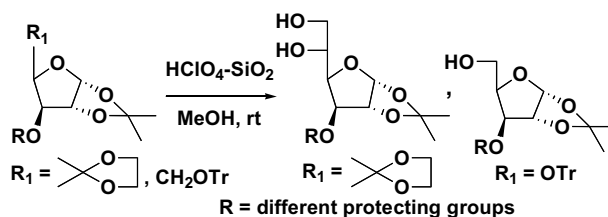
Andrzej Temeriusz,\* Magdalena Rowińska and Bogusława Piekarska-Bartoszewicz

The synthesis of a new bis-(D-glucopyranosid-2-yl)oxamides via the key intermediate, *N*-acetyl *N*-(methyl 3,4,6-tri-*O*-acetyl- $\alpha$ -D-glucopyranosid-2-yl) oxamic acid chloride (**2a**) described. Treatment of compound **2a** with methyl 3,4,6-tri-*O*-acetyl-2-amino-2-deoxy- $\beta$ -D-glucopyranoside afforded *N*-(methyl 3,4,6-tri-*O*-acetyl- $\alpha$ -D-glucopyranosid-2-yl)-*N'*-(methyl 3,4,6-tri-*O*-acetyl- $\beta$ -D-glucopyranosid-2-yl)-oxamide. Reaction of **2a** with 1,2-diaminoethane afforded 1,2-bis-[*N,N'*(methyl 3',4',6'-tri-*O*-acetyl- $\alpha$ -D-glucopyranosid-2'-yl)]ethyloxamide as a main product, while 2-*N*-[*N'*(methyl 3',4',6'-tri-*O*-acetyl- $\alpha$ -D-glucopyranosid-2'-yl)oxamid]-ethyl acetamide was formed as a side-product. Reaction of **2a** with 1,3-diamino-2-hydroxypropane gave only 1,3-bis-*N,N'*[*N'*-(methyl 3',4',6'-tri-*O*-acetyl-2'-deoxy- $\alpha$ -D-glucopyranosid-2'-yl)-oxamido]-2-propanol.

# Selective deprotection of terminal isopropylidene acetals and trityl ethers using $\text{HClO}_4$ supported on silica gel

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Aditi Agarwal and Yashwant D. Vankar\*



\*Corresponding author

i+ Supplementary data available via ScienceDirect

## COVER

Model of blood group A trisaccharide in the binding site of the *Dolichos biflorus* lectin as established by a combination of theoretical and experimental approaches. Molecular modeling of the oligosaccharide demonstrated that two different conformations could be adopted by the trisaccharide in the binding site. NMR experiments using transferred nuclear Overhauser effects (TRNOE) displayed intermolecular contacts (blue arrows) corresponding to only one of the two theoretical conformations. This work is a collaboration between Anne Imberty (CERMAV, Grenoble) and Thomas Peters (University of Lübeck) and was presented during the XXII<sup>nd</sup> International Carbohydrate Symposium (Glasgow, 2004) on the occasion of the Whistler award.

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