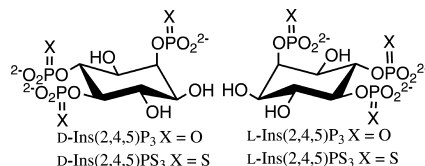


Carbohydr. Res. 2002, 337, 1795

Synthesis of D- and L-myo-inositol 2,4,5-trisphosphate and trisphosphorothioate: structural analogues of D-myo-inositol 1,4,5-trisphosphate

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Carbohydr. Res. 2002, 337, 1803

The use of tri-O-acetyl-D-glucal and -D-galactal in the synthesis of 3-acetamido-2,3-dideoxyhexopyranoses and -hexopyranosides

Beata Liberek, Aleksandra Dąbrowska, Ryszard Frankowski, Marlena Matuszewska, Zygfryd Smiatacz

Faculty of Chemistry, University of Gdańsk, Sobieskiego 18, PL-80-952 Gdańsk, Poland

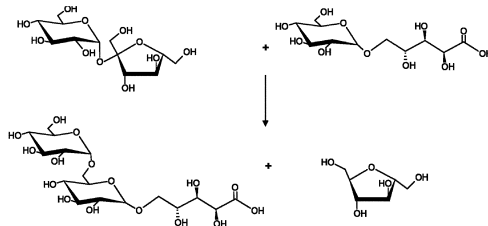
The addition of hydrazoic acid to α,β -unsaturated aldehydes derived from tri-O-acetyl-D-glucal and -D-galactal has been employed to the synthesis of different 3-azido and 3-amino-2,3-dideoxyhexopyranoses and hexopyranosides. Conformational analysis of the products has been performed based on ¹H NMR spectra and polarimetric data.

Carbohydr. Res. 2002, 337, 1811

Oligosaccharide synthesis by dextranucrase: new unconventional acceptors

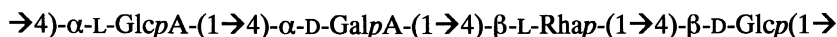
Kristin Demuth, Hans-Joachim Jördening, Klaus Buchholz

Chair for Carbohydrate Technology, Technical University, Langer Kamp 5, D-38106 Braunschweig, Germany



Carbohydr. Res. 2002, 337, 1821

Structural elucidation of the EPS of slime producing *Brevundimonas vesicularis* sp. isolated from a paper machine

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Ab initio computational study of β -cellobiose conformers using B3LYP/6-311++G**

Carbohydr. Res. **2002**, 337, 1833

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Plant Polymer Research, National Center for Agricultural Utilization Research, USDA, Agricultural Research Service, 1815 N. University St., Peoria, IL 61604, USA

From in vacuo B3LYP/6-311++G** calculations, conformations of β -cellobiose 'flipped' in ϕ_H to $\sim 180^\circ$ are found to be of significantly lower energy than the observed or 'normal' conformations.

A DFT/ab initio study of hydrogen bonding and conformational preference in model cellobiose analogs using B3LYP/6-311++G**

Carbohydr. Res. **2002**, 337, 1851

Gina L. Strati, Julious L. Willett, Frank A. Momany

Plant Polymer Research, National Center for Agricultural Utilization Research, USDA, Agricultural Research Service, 1815 N. University St., Peoria, IL 61604, USA

From in vacuo B3LYP/6-311++G** calculations, most analogs of β -cellobiose are energy preferred in the 'normal' conformation, the exception being in the case of removal of both hydroxymethyl groups, where cooperative hydrogen bonding stabilizes the 'flipped' form preferentially.

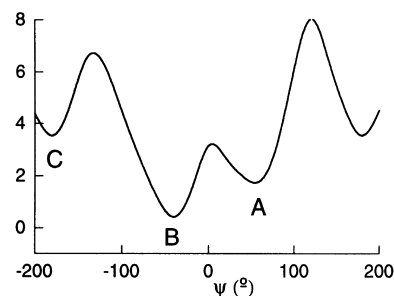
Disaccharide conformational maps: 3D contours or 2D plots?

Carbohydr. Res. **2002**, 337, 1861

Carlos A. Stortz, Alberto S. Cerezo

Departamento de Química Orgánica-CIHIDECAR, Facultad de Ciencias Exactas y Naturales, Universidad de Buenos Aires, Ciudad Universitaria, 1428 Buenos Aires, Argentina

The potential energy surfaces of several disaccharides were obtained and plotted in terms of energy versus ψ glycosidic angle.



Effect of sodium orthovanadate on glycosylation of the phosphopeptidomannans involved in the cell-cell aggregation of the yeast *Kluyveromyces bulgaricus*

Carbohydr. Res. **2002**, 337, 1873

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^b*Environmental Sciences, György Bessenyei College, Nyiregyhaza 4401, Hungary*

In studies of the yeast *Kluyveromyces bulgaricus* it has been shown that vanadium may have pleiotropic effects on the phosphopeptidomannan structure inducing the decrease of flocculation.

