

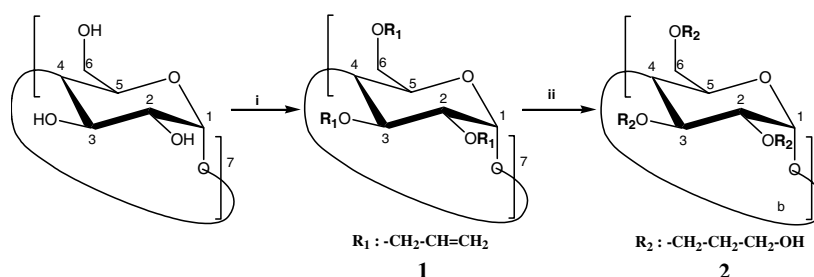
Contents

RAPID COMMUNICATION

Per-*O*-(3-hydroxy)propyl- β -cyclodextrin: a cyclodextrin derivative bearing only primary hydroxyl groups

pp 1989–1991

Nezha Badi* and Philippe Guégan*

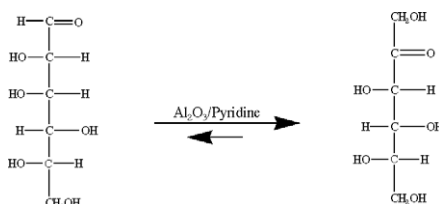


FULL PAPERS

Aldose–ketose interconversion in pyridine in the presence of aluminium oxide

pp 1992–1997

Dag Ekeberg, Svein Morgenlie* and Yngve Stenstrøm

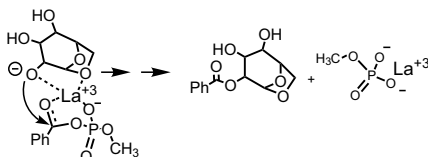


The reaction rate of aldose–ketose transformations in pyridine is strongly increased in the presence of aluminium oxide. The reverse reaction is less rapid.

Chelation-controlled regioselectivity in the lanthanum-promoted monobenzylation of monosaccharides in water

pp 1998–2002

Ian James Gray and Ronald Kluger*

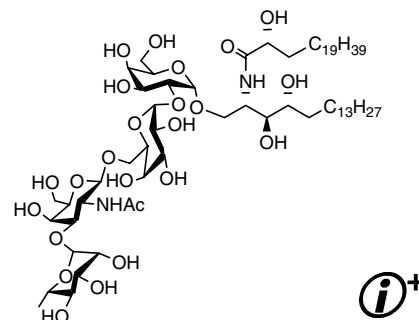


Concise synthesis of clarhamnoside, a novel glycosphingolipid isolated from the marine sponge *Agela clathrodes*

pp 2003–2013

Ning Ding, Chunxia Li, Yunpeng Liu, Zaihong Zhang and Yingxia Li*

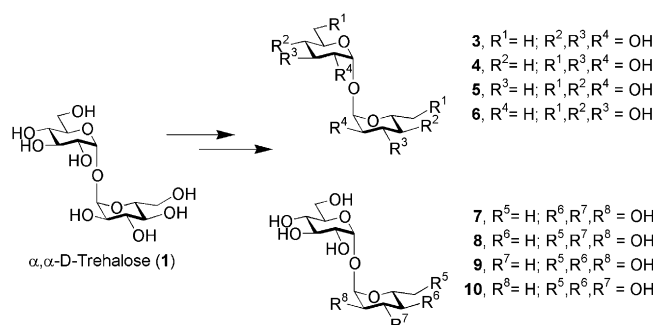
Clarhamnoside, a novel spongal α -GalGSL identified from new specimens of *Agela clathrodes*, has been first synthesized through a straightforward strategy.



Synthesis of mono- and dideoxygenated α,α -trehalose analogs

pp 2014–2030

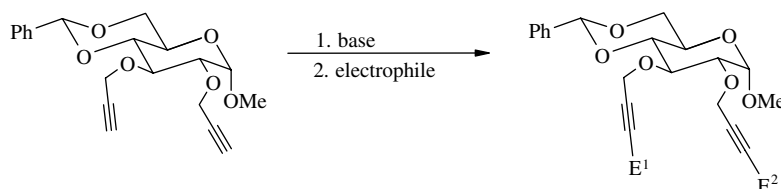
Fiona L. Lin, Herman van Halbeek and Carolyn R. Bertozzi*



Modification of methyl *O*-propargyl-D-glucosides: model studies for the synthesis of alkynyl based functional polysaccharides

pp 2031–2048

Pascal F. Tankam, Petra Mischnick,* Henning Hopf* and Peter G. Jones

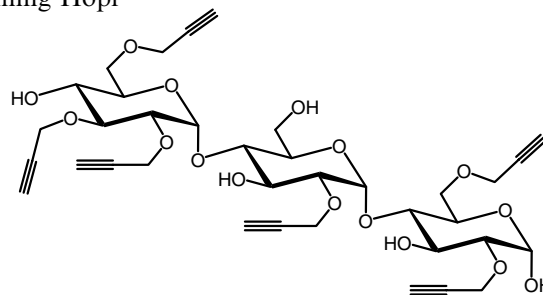


Alkynyl polysaccharides: synthesis of propargyl potato starch followed by subsequent derivatizations

pp 2049–2060

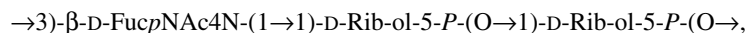
Pascal F. Tankam, Romy Müller, Petra Mischnick* and Henning Hopf*

Propargyl starches (PgS) with degrees of substitution (DS) from 0.1 to 2.2 have been prepared. The reactivity was $2 > 6 \gg 3$. Terminal alkynes were further modified by methylation, carboxylation, diethylaminomethylation and 1,3-dipolar cycloaddition of benzylazide.



Structure of a new ribitol teichoic acid-like O-polysaccharide of a serologically separate *Proteus vulgaris* strain, TG 276-1, classified into a new *Proteus* serogroup O53 pp 2061–2066

Nikolay P. Arbatsky, Anna N. Kondakova,* Sof'ya N. Senchenkova, Malgorzata Siwińska, Alexander S. Shashkov, Krystyna Zych, Yuriy A. Knirel and Zygmunt Sidorczyk

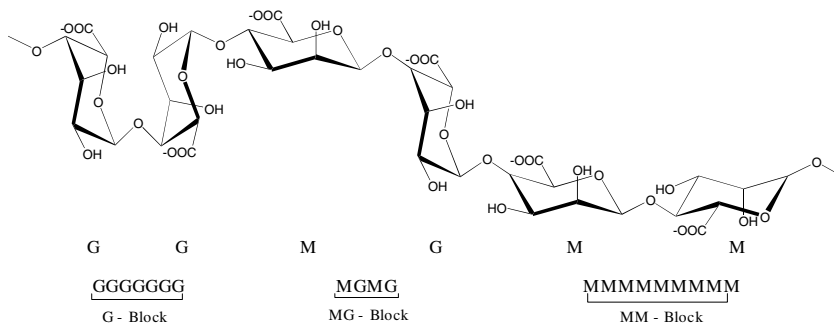


where the non-glycosylated ribitol residue is randomly mono-O-acetylated.

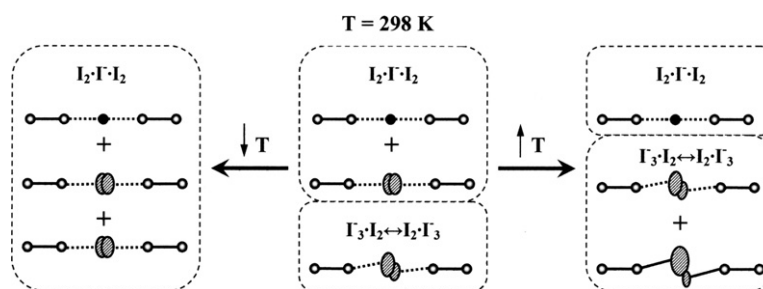
Extraction and physicochemical characterization of *Sargassum vulgare* alginate from Brazil

pp 2067–2074

Marcia R. Torres, Alessandra P. A. Sousa, Eduardo A. T. Silva Filho, Dirce F. Melo, Judith P. A. Feitosa, Regina C. M. de Paula* and Maria G. S. Lima

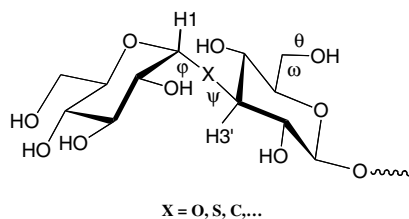

Two interconverting pentaiodide forms in the cyclomaltohexaose (α -cyclodextrin) polyiodide inclusion complex with sodium ion: dielectric and Raman spectroscopy studies pp 2075–2085

Vasileios G. Charalampopoulos and John C. Papaioannou*


New Karplus equations for $^2J_{\text{HH}}$, $^3J_{\text{HH}}$, $^2J_{\text{CH}}$, $^3J_{\text{CH}}$, $^3J_{\text{COCH}}$, $^3J_{\text{CSCH}}$, and $^3J_{\text{CCCH}}$ in some aldohexopyranoside derivatives as determined using NMR spectroscopy and density functional theory calculations

pp 2086–2096

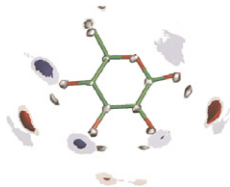
Mohsen Tafazzoli* and Mina Ghiasi



Conformation, dynamics, solvation and relative stabilities of selected β -hexopyranoses in water: a molecular dynamics study with the GROMOS 45A4 force field

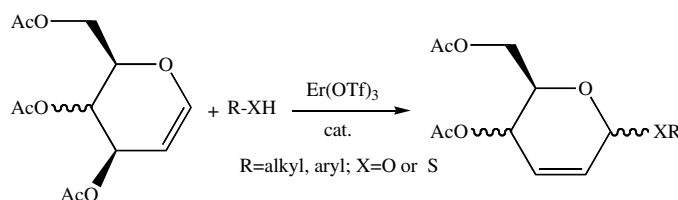
pp 2097–2124

Vincent Kräutler, Martin Müller and Philippe H. Hünenberger*


NOTES
A facile $\text{Er}(\text{OTf})_3$ -catalyzed synthesis of 2,3-unsaturated O- and S-glycosides

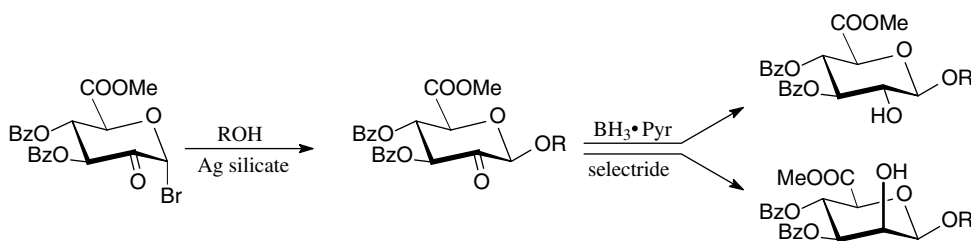
pp 2125–2131

Antonio Procopio,* Renato Dalpozzo, Antonio De Nino, Loredana Maiuolo, Monica Nardi, Manuela Oliverio and Beatrice Russo


Glucuronic acid-based ulosyl donors for introducing α -D-GlcA and β -D-ManA units

pp 2132–2137

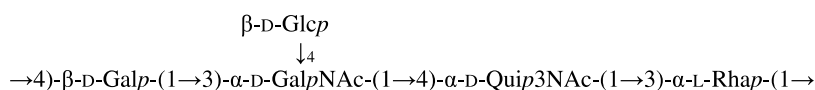
Matthias Lergenmüller and Frieder W. Lichtenthaler*


The structure of the O-polysaccharide isolated from the lipopolysaccharide of *Salmonella* Dakar (serogroup O:28)

pp 2138–2143

Jolanta Kumirska,* Janusz Szafrank, Małgorzata Czerwiczka, Monika Paszkiewicz, Halina Dziadziuszko, Danuta Kunikowska and Piotr Stepnowski

The following structure of the O-antigenic part of the lipopolysaccharide (LPS) of *Salmonella* Dakar was determined:

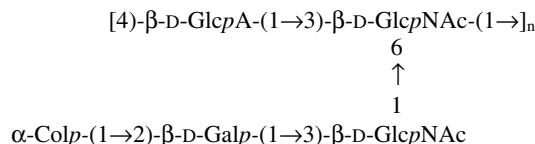


where Quip3NAc is 3-acetamido-3,6-dideoxyglucose. This is the first published structure of the O-polysaccharides from 101 serotypes of *Salmonella* bacteria belonging to serogroup O:28 (formerly M) in the Kauffmann–White scheme.

Structure of a colitose-containing O-polysaccharide from the lipopolysaccharide of *Providencia alcalifaciens* O6

pp 2144–2148

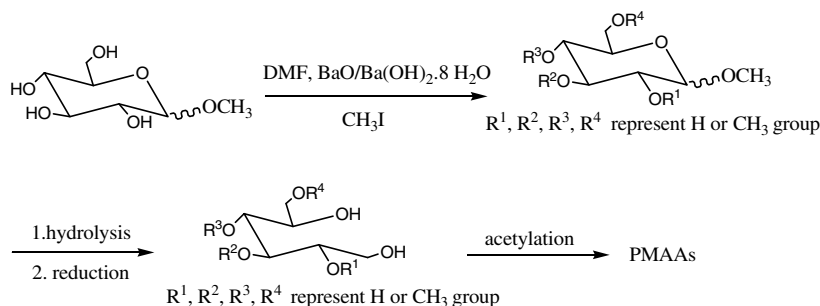
Olga G. Ovchinnikova,* Nina A. Kocharova, Marianna Wykrota, Alexander S. Shashkov, Yuriy A. Knirel and Antoni Rozalski



An alternative method for the rapid synthesis of partially O-methylated alditol acetate standards for GC–MS analysis of carbohydrates

pp 2149–2151

Zhong-Fu Wang, Yuan He and Lin-Juan Huang*



*Corresponding author

Supplementary data available via ScienceDirect

COVER

The image shows the ball-and-stick representation of a potent *n*-butyl thiazoline inhibitor of *Q*-GlcNAcase, bound in the active centre of the enzyme. The work is the result of collaboration between the groups of Professors David Vocadlo (Simon Fraser University, British Columbia, Canada) and Gideon Davies (University of York, UK). The image, generated with PYMOL (DeLano Scientific LLC, <http://pymol.sourceforge.net/>), shows the observed electron density as a blue “wire-cage” inside the active centre pocket represented by the smooth surface.

Professor Davies was presented with the Roy L Whistler Award of the International Carbohydrate Organization at the XXIIIrd International Carbohydrate Symposium in Whistler in 2006.

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