

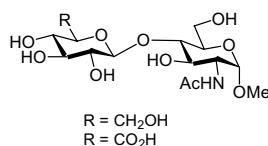
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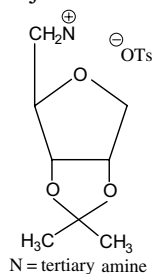
Alan O' Brien, Ciaran Lynch, Kathy M. O' Boyle and Paul V. Murphy*



Synthesis and structure of selected quaternary *N*-(1,4-anhydro-5-deoxy-2,3-*O*-isopropylidene-*D,L*-ribitol-5-yl)ammonium salts

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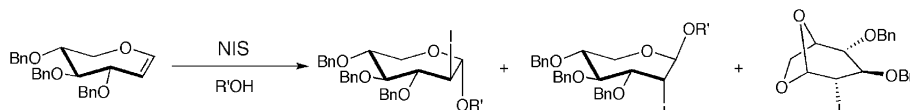
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W. Sean Fyvie, Martha Morton and Mark W. Pecuh*

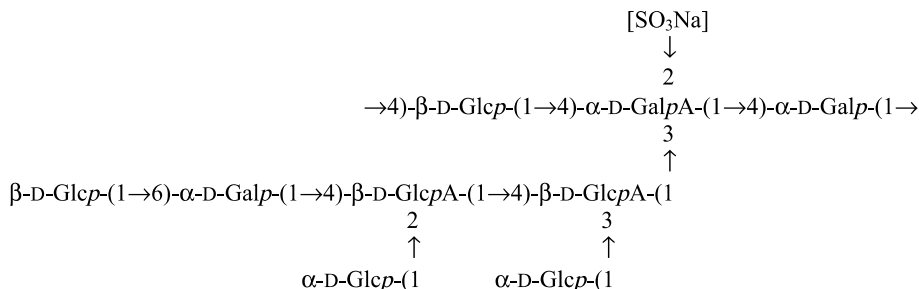


Structural studies of the main exopolysaccharide produced by the deep-sea bacterium

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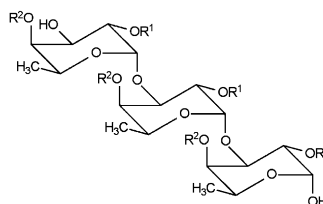
Alteromonas infernus

Olivier Roger, Nelly Kervarec, Jacqueline Ratiskol, Sylvia Collicec-Jouault and Lionel Chevolot*

**MM3 Potential energy surfaces of α -3-linked L-fucobiose and fucotriose and their sulfated counterparts**

pp 2381–2390

Carlos A. Stortz

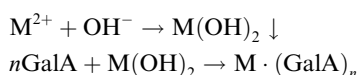


The adiabatic potential energy surfaces of four disaccharides and four trisaccharides of L-fucose with α -(1 $\rightarrow$ 3)-linkages were obtained using MM3.

The complexation of metal cations by D-galacturonic acid: a spectroscopic study

pp 2391–2405

Andriy Synytsya,* Marie Urbanová, Vladimír Setnička, Marcela Tkadlecová, Jaroslav Havlíček, Ivan Raich, Pavel Matějka, Alla Synytsya, Jana Čopíková and Karel Volka

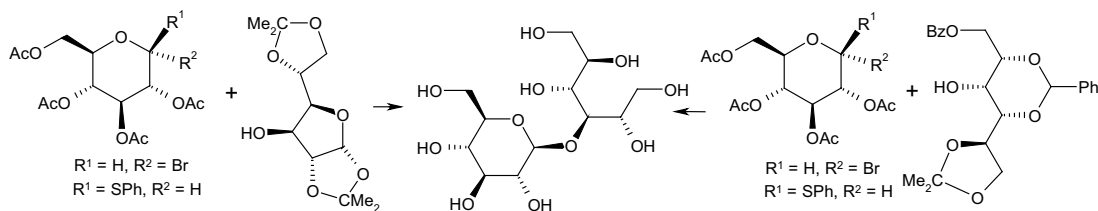


M = Cu²⁺, Co²⁺, Ni²⁺, VO²⁺; n = 2 for Cu²⁺, Co²⁺, Ni²⁺ and n = 1 for VO²⁺.

NOTES**Two approaches to the synthesis of 3- β -D-glucopyranosyl-D-glucitol**

pp 2407–2414

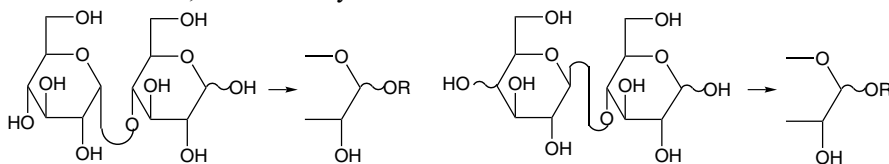
János Kuzsmann,* Gábor Medgyes and Sándor Boros



Simple preparations of alkyl and cycloalkyl α -glycosides of maltose, cellobiose, and lactose

pp 2415–2424

Shinkiti Koto,* Motoko Hirooka, Takako Tashiro, Motokazu Sakashita, Masaharu Hatachi, Takayuki Kono, Miho Shimizu, Nahoko Yoshida, Sayaka Kurasawa, Natsuko Sakuma, Sunao Sawazaki, Akihiro Takeuchi, Naomi Shoya and Emi Nakamura

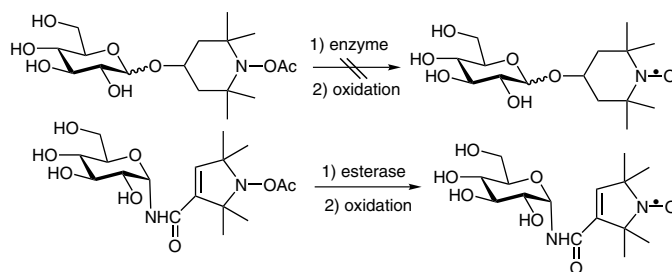


Alkyl, cycloalkyl, allyl, 4-pentenyl, and benzyl α -glycosides of maltose, cellobiose, and lactose were prepared via direct reaction of the free bioses with a binary AcBr–AcOH system, followed by glycosidation with alcohol using FeCl₃ in MeNO₂ or CH₂Cl₂, Zemplén deacetylation, and the chromatographic resolution of the mixture. The respective β -biosides were obtained via the glycosidation in MeCN.

Synthesis and enzyme-catalyzed hydrolysis of a radical-masked glycosylated spin-label reagent

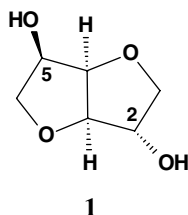
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Shingo Sato,* Miho Nemoto, Toshihiro Kumazawa, Shigeru Matsuba, Jun-ichi Onodera, Masaaki Aoyama, Heitaro Obara and Hitoshi Kamada

**Glycosylation of 1,4:3,6-dianhydro-D-glucitol (isosorbide)**

pp 2433–2440

David J. Claffey, Mary F. Casey and Patrick A. Finan*

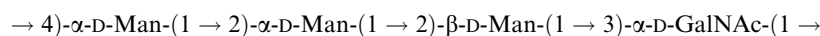


Condensation of 2,3,4,6-tetra-*O*-acetyl- α -D-glucopyranosyl-, 2,3,4-tri-*O*-acetyl- α -D-xylopyranosyl- and of 2,3,4,6-tetra-*O*-acetyl- α -D-galactopyranosyl bromides with 1,4:3,6-dianhydro-D-glucitol under Koenigs–Knorr conditions, and using the Helferich modification of the reaction showed regioselectivity in glycosylation at C-5 of isosorbide (**1**).

The structure of the O-specific polysaccharide from *Salmonella cerro* (serogroup K, O:6,14,18)

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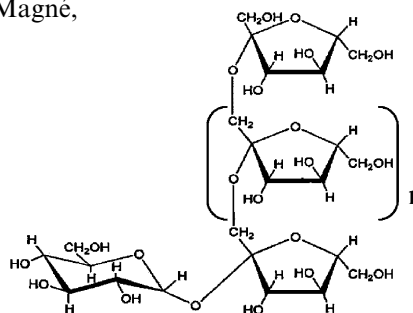
Evgeny Vinogradov,* Ludmila Nossova and Joanna Radziejewska-Lebrecht



NMR characterisation of inulin-type fructooligosaccharides as the major water-soluble carbohydrates from *Matricaria maritima* (L.)

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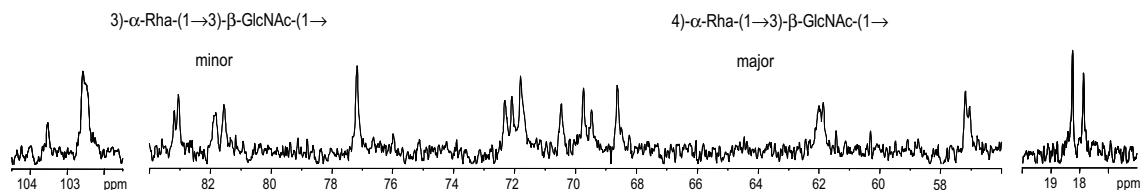
Stéphane Cérantola,* Nelly Kervarec, Roger Pichon, Christian Magné, Marie-Anne Bessieres and Eric Deslandes



Elucidation of two O-chain structures from the lipopolysaccharide fraction of *Agrobacterium tumefaciens* F/1

pp 2451–2455

Cristina De Castro,* Anna Carannante, Rosa Lanzetta, Rosa Nunziata, Vincenzo Piscopo and Michelangelo Parrilli



Structural analysis of arabinoxylans isolated from native and malted finger millet (*Eleusine coracana*, ragi)

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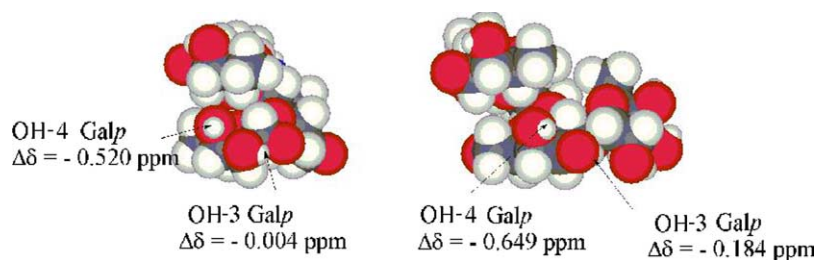
M. V. S. S. T. Subba Rao and G. Muralikrishna*



NMR study on the hydroxy protons of the Lewis X and Lewis Y oligosaccharides

pp 2465–2468

Somer Bekiroglu, Lennart Kenne and Corine Sandström*



*Corresponding author

COVER

Well-defined glycoforms of glycoproteins can easily be obtained by oxidative coupling of synthetic thioaldoses with proteins that have a cysteine moiety in lieu of an asparagine residue carrying natural N-linked oligosaccharides. In vitro glycosylation offers several advantages such as quantitative conjugation, incorporation of oligosaccharides that display high bioactivities and the possibility of using convenient bacterial or yeast protein expression systems. The figure is related to Geert-Jan Boons' *Carbohydrate Research Award* paper, *Carbohydr. Res.*, **2004**, 339, 181–193.



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