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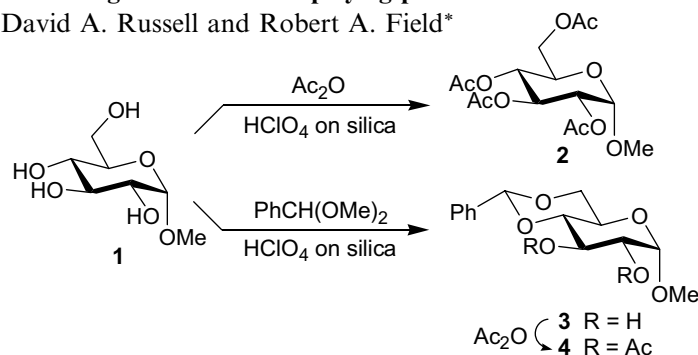
Announcement

p 1073

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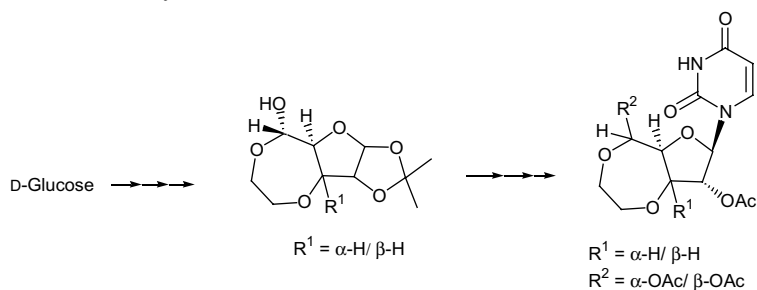
One-pot acetalation–acetylation of sugar derivatives employing perchloric acid immobilised on silica pp 1075–1080

Balaram Mukhopadhyay,* David A. Russell and Robert A. Field*



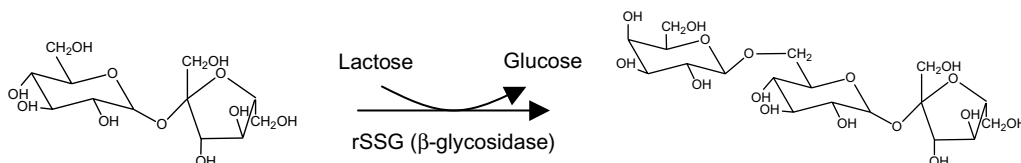
Bicyclic nucleoside analogues from D-glucose: synthesis of chiral as well as racemic 1,4-dioxepane ring-fused derivatives pp 1081–1087

Subhankar Tripathi, Joy Krishna Maity, Basudeb Achari and Sukhendu B. Mandal*



Production of a new sucrose derivative by transglycosylation of recombinant *Sulfolobus shibatae* β-glycosidase pp 1089–1096

Na-Young Park, Nam-In Baek, Jaeho Cha, Soo-Bok Lee, Joong-Hyuck Auh and Cheon-Seok Park*



Revised structures for the capsular polysaccharides from *Staphylococcus aureus* Types 5 and 8, components of novel glycoconjugate vaccines

pp 1097–1106

Christopher Jones

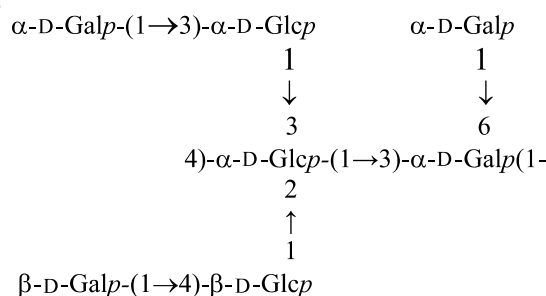
Type 5 → 4)-β-D-ManNAcA-(1 → 4)-α-L-FucNAc(3OAc)-(1 → 3)-β-D-FucNAc-(1 →

Type 8 → 3)-β-D-ManNAcA(4OAc)-(1 → 3)-α-L-FucNAc-(1 → 3)-α-D-FucNAc-(1 →

Structural characterisation of a highly branched exopolysaccharide produced by *Lactobacillus delbrueckii* subsp. *bulgaricus* NCFB2074

pp 1107–1111

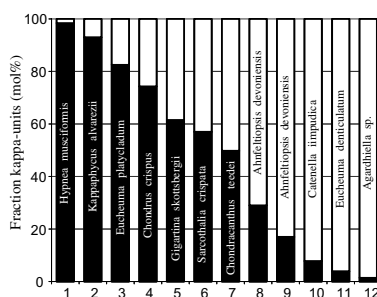
Lindsay P. Harding, Valerie M. Marshall, Yasmin Hernandez, Yucheng Gu, Mohammed Maqsood, Neil McLay and Andrew P. Laws*



The structure of κ/ι-hybrid carrageenans II. Coil–helix transition as a function of chain composition

pp 1113–1129

Fred van de Velde,* Anna S. Antipova, Harry S. Rollema, Tatiana V. Burova, Nataliya V. Grinberg, Leonel Pereira, Paula M. Gilsenan, R. Hans Tromp, Brian Rudolph and Valerij Ya. Grinberg



Chemical characterization of the immunomodulating polysaccharide of *Aloe vera* L.

pp 1131–1142

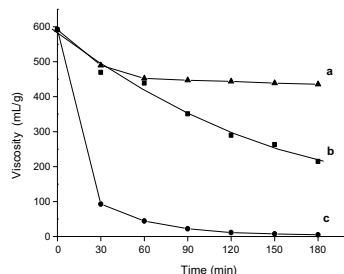
Jimmy Tai-Nin Chow, David A. Williamson, Kenneth M. Yates and Warren J. Goux*

Data provide direct evidence of a previously proposed glucomannan backbone, but draw into question previously proposed side-chain structures for the polysaccharide from the mucilaginous gel of *Aloe vera*.

Study on the synergetic degradation of chitosan with ultraviolet light and hydrogen peroxide

pp 1143–1147

Shi-Ming Wang,* Qun-Zeng Huang and Qiong-Sheng Wang

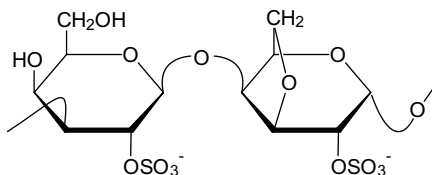


The intrinsic viscosities versus reaction time in the different treatment methods. (a) Irradiation alone; (b) only with hydrogen peroxide; (c) with irradiation and hydrogen peroxide oxidation.

Structural analysis of carrageenans from the red alga, *Callophyllis hombroniana* Mont. Kütz (Kallymeniaceae, Rhodophyta)

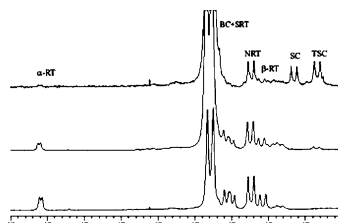
pp 1149–1158

Ruth Falshaw,* Richard H. Furneaux and David E. Stevenson

**Structural characterization of β -D-(1 $\rightarrow$ 3)-glucans from different growth phases of the marine diatoms *Chaetoceros mülleri* and *Thalassiosira weissflogii***

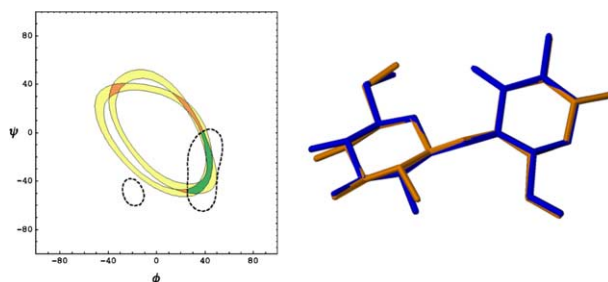
pp 1159–1164

Trond R. Størseth,* Karina Hansen, Kjell Inge Reitan and Jorunn Skjermo

**Determination of the three-dimensional structure of oligosaccharides in the solid state from experimental ^{13}C NMR data and ab initio chemical shift surfaces**

pp 1165–1174

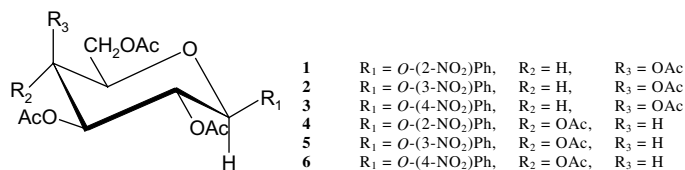
Ivan Sergeyev and Guillermo Moyna*



Crystal structure and solid state ^{13}C NMR analysis of nitrophenyl 2,3,4,6-tetra-*O*-acetyl- β -D-gluco- and D-galactopyranosides

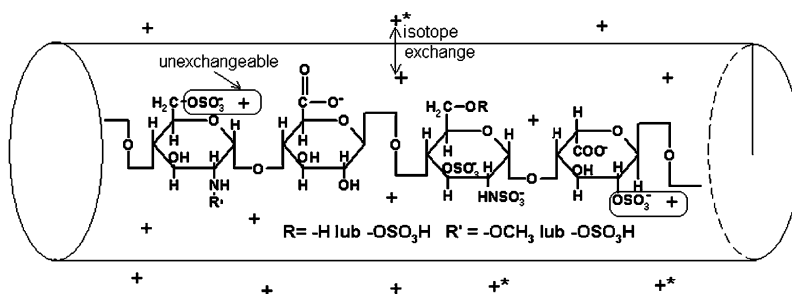
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Andrzej Temeriusz,* Tomasz Gubica, Paulina Rogowska, Katarzyna Paradowska and Michał K. Cyrański


A new radiochemical method to investigate ion binding with polyelectrolytes

pp 1185–1191

Ilona Kijewska and Ewa Hawlicka*


An investigation of pectin methylesterification patterns by two independent methods: capillary electrophoresis and polysaccharide analysis using carbohydrate gel electrophoresis

pp 1193–1199

Florence Goubet, Anna Ström, Paul Dupree and Martin A. K. Williams*

In this work standard samples of unesterified and partially methylesterified galacturonides, and enzymatic digests of several pectin samples possessing distinct intramolecular patterns of methylesterification were studied using capillary electrophoresis (CE) and polysaccharide analysis using carbohydrate gel electrophoresis (PACE).

A fluorescence study of sodium hyaluronate/surfactant interactions in aqueous media

pp 1201–1206

Dian-shu Yin, Wan-yun Yang, Zhi-qiang Ge and Ying-jin Yuan*

The interactions between sodium hyaluronate and surfactants were studied using a pyrene fluorescence method.

Octanol–water partition coefficient of glucose, sucrose, and trehalose

pp 1207–1211

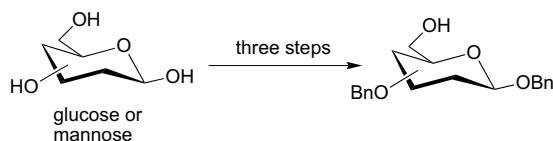
María F. Mazzobre,* María V. Román, Ariel Feo Mourelle and Horacio R. Corti

Sugar	<i>T</i> , °C	<i>P</i>	log <i>P</i>
Glucose	20	$(1.5 \pm 0.1) \times 10^{-3}$	-2.82 ± 0.04
Sucrose	20	$(5.0 \pm 0.4) \times 10^{-4}$	-3.30 ± 0.03
Trehalose	20	$(1.71 \pm 0.2) \times 10^{-4}$	-3.77 ± 0.05

NOTES**An expedient synthesis of benzyl 2,3,4-tri-*O*-benzyl-β-D-glucopyranoside and benzyl 2,3,4-tri-*O*-benzyl-β-D-mannopyranoside**

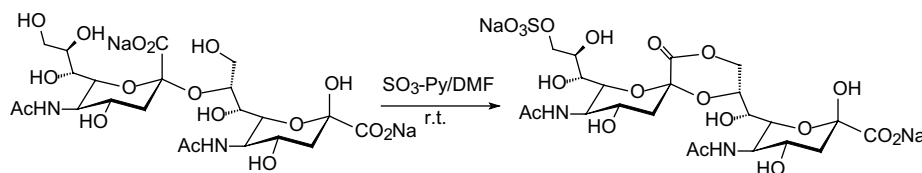
pp 1213–1217

Wallach Lu, Latifeh Navidpour and Scott D. Taylor*

**9-*O*-Sulfation on α-NeuAc-(2→8)-NeuAc and inter-residue lactonization**

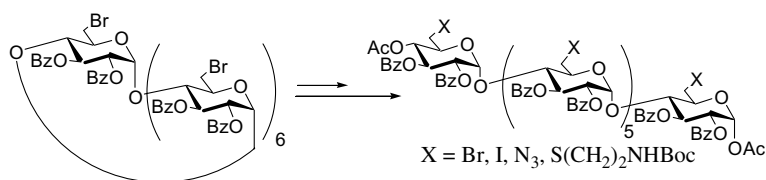
pp 1219–1223

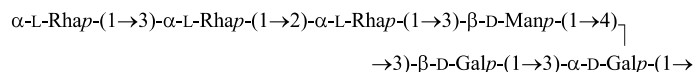
An-Tai Wu, Yi-Ping Yu, Chien-Tai Ren, Wei Zou* and Shih-Hsiung Wu*

**Synthesis of regioselectively and uniformly modified maltoheptaose derivatives from cyclomaltoheptaose precursors**

pp 1225–1231

David Lesur, Abdoulaye Gassama, Vincent Moreau, Serge Pilard and Florence Djedaïni-Pilard*



Structure of the O-polysaccharide from the *Azospirillum lipoferum* Sp59b lipopolysaccharide**pp 1259–1263**Yuliya P. Fedonenko, Olga N. Konnova, George V. Zatonsky, Svetlana A. Konnova,
Nina A. Kocharova, Evelina L. Zdorovenko* and Vladimir V. Ignatov

*Corresponding author

①⁺ 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 XXIInd International Carbohydrate Symposium (Glasgow, 2004) on the occasion of the Whistler award.

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