

## Contents

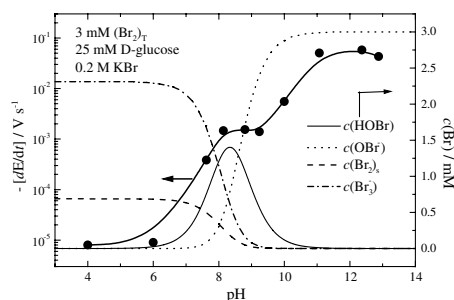
### FULL PAPERS

#### A kinetic study of D-glucose oxidation by bromine in aqueous solutions

pp 1779–1787

Branimir N. Grgur,\* Dragana L. Žugić, Milica M. Gvozdenović and Tomislav Lj. Trišović

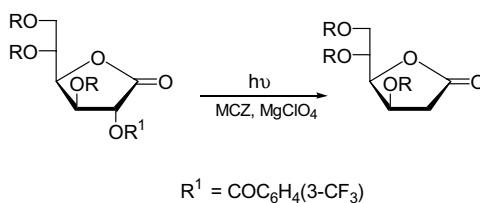
pH dependence of the slopes for D-glucose oxidation with bromine, obtained from linear parts of the potential changes during time, compared with theoretical distribution curves of bromine species.



#### Photoinduced electron-transfer $\alpha$ -deoxygenation of aldono-lactones. Efficient synthesis of 2-deoxy-D-arabino-hexono-1,4-lactone

pp 1788–1795

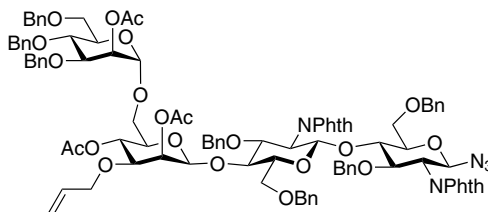
Andrea Bordoni, Rosa M. de Lederkremer and Carla Marino\*



#### Synthesis of the sugar moiety of TIME-EA4, a glycopeptide isolated from silkworm diapause eggs

pp 1796–1802

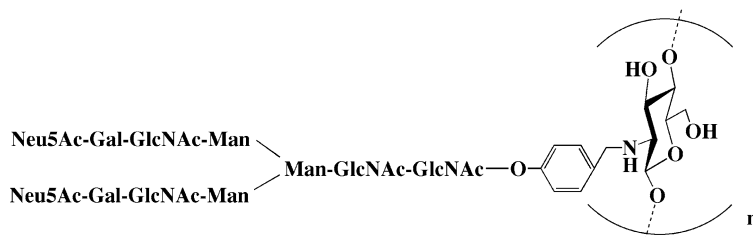
Shouji Hiro, Yoshinosuke Usuki and Hideo Iio\*



**Chemoenzymatic synthesis and application of a sialoglycopolymer with a chitosan backbone as a potent inhibitor of human influenza virus hemagglutination**

pp 1803–1808

Yutaka Makimura, Shinya Watanabe, Takashi Suzuki, Yasuo Suzuki, Hideharu Ishida, Makoto Kiso, Takane Katayama, Hidehiko Kumagai and Kenji Yamamoto\*


**A novel oligoalginate lyase from abalone, *Haliotis discus hannai*, that releases disaccharide from alginate polymer in an exolytic manner**

pp 1809–1819

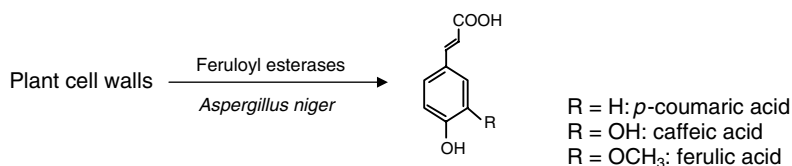
Harumasa Suzuki, Ken-ichi Suzuki, Akira Inoue and Takao Ojima\*

A novel oligoalginate lyase was isolated from abalone. This enzyme possesses exolytic activity on alginate polymer and belongs to polysaccharide family 14 (PL14).

**Feruloyl esterases as a tool for the release of phenolic compounds from agro-industrial by-products**

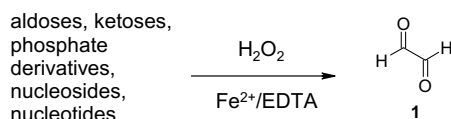
pp 1820–1827

Isabelle Benoit, David Navarro, Nathalie Marnet, Nnjara Rakotomanomana, Laurence Lesage-Meessen, Jean-Claude Sigoillot, Marcel Asther and Michèle Asther\*


**Glyoxal formation by Fenton-induced degradation of carbohydrates and related compounds**

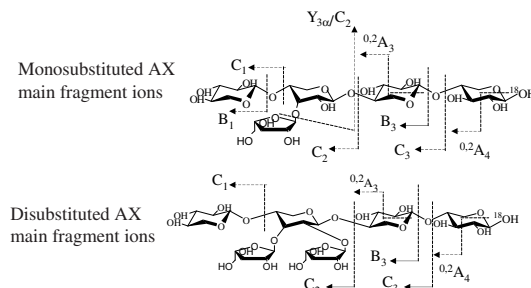
pp 1828–1833

Paola Manini, Paola La Pietra, Lucia Panzella, Alessandra Napolitano and Marco d'Ischia\*



## Structural characterization of underivatized arabino-xylo-oligosaccharides by negative-ion electrospray mass spectrometry pp 1834–1847

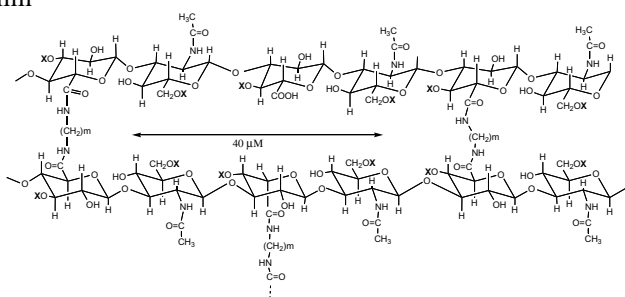
Bernard Quémener,\* José Juan Ordaz-Ortiz and Luc Saulnier



## Low- and high-resolution nuclear magnetic resonance (NMR) characterisation of hyaluronan-based native and sulfated hydrogels pp 1848–1858

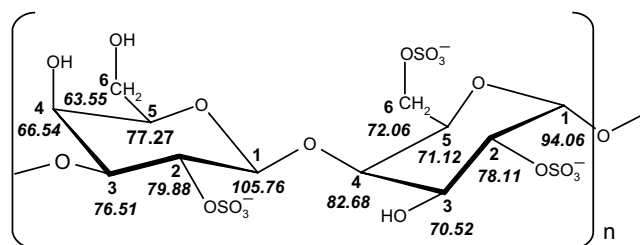
Rolando Barbucci,\* Gemma Leone, Antonio Chiumiento, Maria Enrica Di Cocco, Giovanni D'Orazio, Raffaella Gianferri and Maurizio Delfini

Hyaluronan-based hydrogels were synthesised. The low- and high-resolution nuclear magnetic resonance highlighted that the reaction developed make it possible to obtain a homogeneous structure with reproducible meshes whose dimension is dependent only on the procedure for synthesis. The  $T_1/T_2$  ratio shows that the anisotropy of the system is not as high as it would be if the crosslinkings were not homogenous.



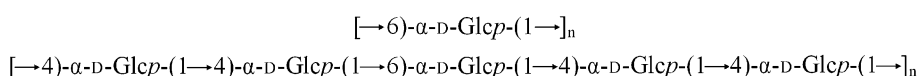
## Complete assignment of $^1\text{H}$ and $^{13}\text{C}$ NMR spectra of *Gigartina skottsbergii* $\lambda$ -carrageenan using carrabiose oligosaccharides prepared by enzymatic hydrolysis pp 1859–1869

Marion Guibet, Nelly Kervarec, Sabine Génicot, Yann Chevolot and William Helbert\*



## Structural analysis of water-soluble glucans from the root of *Angelica sinensis* (Oliv.) Diels pp 1870–1877

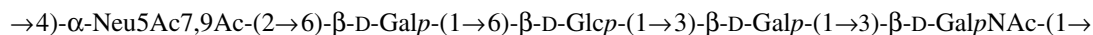
Wei Cao, Xiao-Qiang Li, Li Liu, Minchang Wang, Hui-Ting Fan, Chen Li, Zhengguang Lv, Xiaojing Wang and Qibing Mei\*



**Structural determination of the O-antigenic polysaccharide from the Shiga toxin-producing *Escherichia coli* O171**

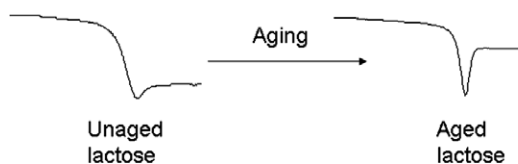
pp 1878–1883

Tara Ali, Andrej Weintraub and Göran Widmalm\*


**Glass transition and enthalpy relaxation of amorphous lactose glass**

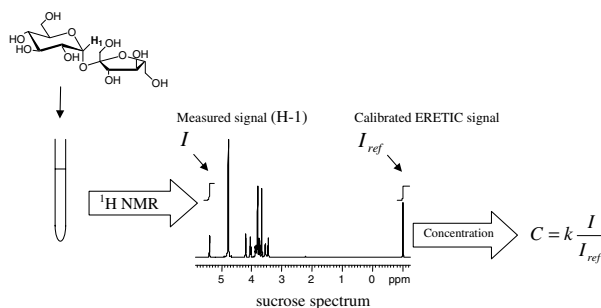
pp 1884–1889

Md. Kamrul Haque,\* Kiyoshi Kawai and Toru Suzuki


**Concentration measurements of sucrose and sugar surfactants solutions by using the  $^1\text{H}$  NMR ERETIC method**

pp 1890–1895

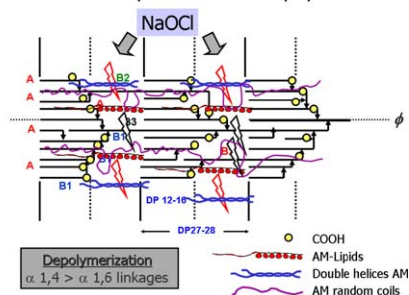
Valérie Molinier, Bernard Fenet, Juliette Fitremann,\* Alain Bouchu and Yves Queneau


**Structural characteristics and physicochemical properties of oxidized corn starches varying in amylose content**

pp 1896–1915

Daris Kuakpetoon and Ya-Jane Wang\*

Locations of Carboxyl formation and Depolymerization

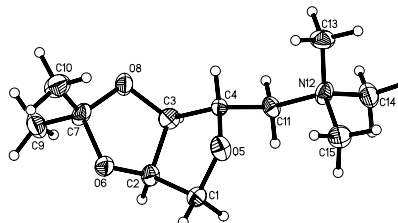


## NOTES

**Preparation, single-crystal X-ray diffraction and high-resolution NMR spectroscopic analyses of *N*-[(1,4-anhydro-5-deoxy-2,3-*O*-isopropylidene-*D*,*L*-ribitol)-5-yl]trimethylammonium iodide**

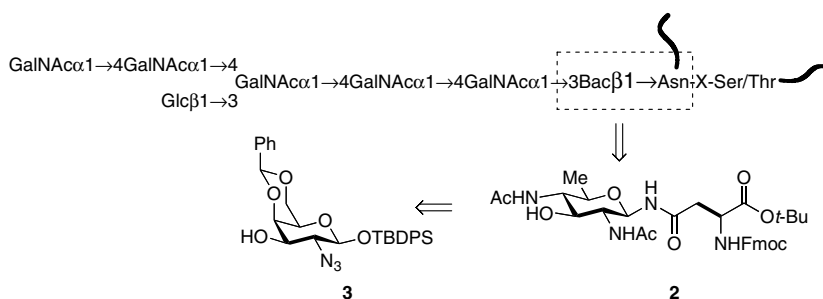
pp 1916–1921

Barbara Dmochowska,\* Eugenia Skorupa,  
Lucyna Pellowska-Januszek, Monika Czarkowska,  
Artur Sikorski and Andrzej Wiśniewski

**Synthesis of asparagine-linked bacillosamine**

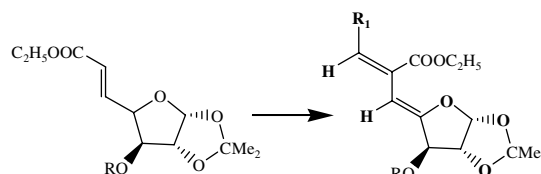
pp 1922–1929

Mohammed Nurul Amin, Akihiro Ishiwata and Yukishige Ito\*

**DBU assisted expeditious synthesis of glycosyl dienes via glycosylated  $\beta$ -hydroxy esters**

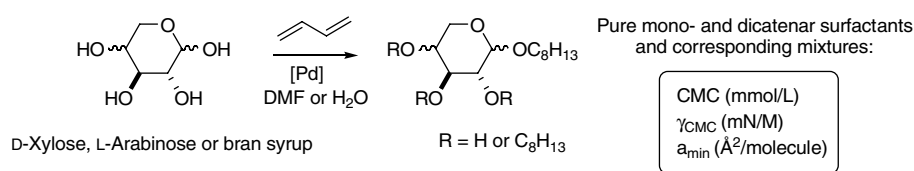
pp 1930–1937

Shyam S. Verma, Namrata Dwivedi, Biswajit K. Singh and Rama P. Tripathi\*

**Neutral pentosides surfactants issued from the butadiene telomerization with pentoses: preparation and amphiphilic properties**

pp 1938–1944

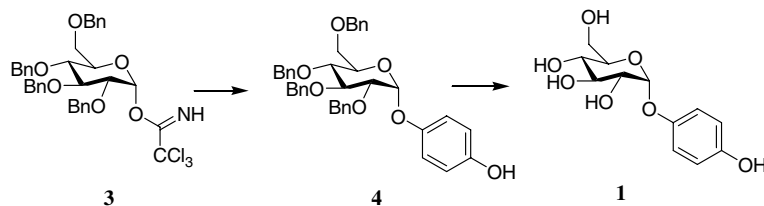
Caroline Hadad, Céline Damez, Sandrine Bouquillon,\* Boris Estrine, Françoise Hénin,  
Jacques Muzart, Isabelle Pezron and Ljepša Komunjer



**A new synthesis of  $\alpha$ -arbutin via Lewis acid catalyzed selective glycosylation of tetra-*O*-benzyl- $\alpha$ -D-glucopyranosyl trichloroacetimidate with hydroquinone**

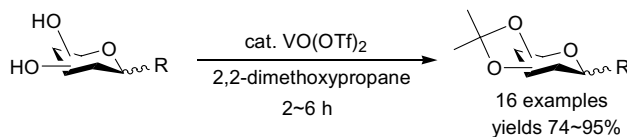
pp 1945–1947

Zhao-Xia Wang, Xiao-Xin Shi, Guo-Rong Chen,\* Zhi-Hua Ren, Lei Luo and Jing Yan


***O*-Isopropylidenation of carbohydrates catalyzed by vanadyl triflate**

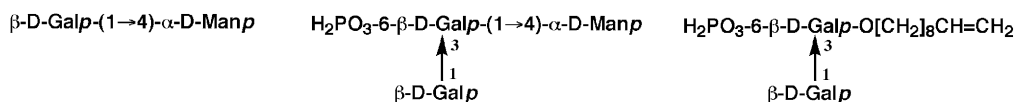
pp 1948–1953

Chun-Cheng Lin,\* Mi-Dan Jan, Shiue-Shien Weng, Chang-Ching Lin and Chien-Tien Chen\*


**Parasite glycoconjugates. Part 16: Synthesis of a disaccharide and phosphorylated di- and tri-saccharides from *Leishmania* lipophosphoglycan**

pp 1954–1964

Andrew J. Ross, Olga V. Sizova and Andrei V. Nikolaev\*

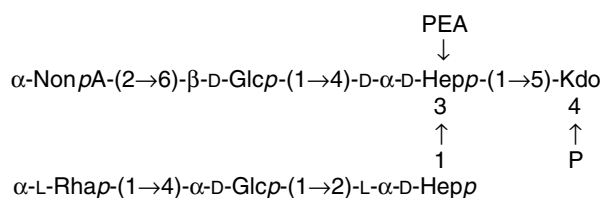


Compounds listed above were synthesised and used for characterisation of novel biosynthetic enzymes ( $\beta$ -D-galactosyl transferases) in *Leishmania*.

**Structural studies of the O-antigenic oligosaccharide from *Vibrio salmonicida* strain C2 isolated from Atlantic cod, *Gadus morhua* L.**

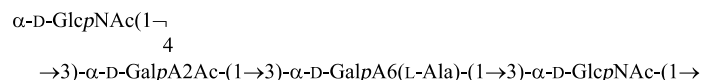
pp 1965–1968

Jarl Bøgwald\* and James Hoffman



**Structure of the O-polysaccharide of *Proteus mirabilis* CCUG 10705 (OF) containing an amide of D-galacturonic acid with L-alanine** pp 1969–1974

Andrei V. Perepelov,\* Agnieszka Zabłotni, Alexander S. Shashkov, Yuriy A. Knirel and Zygmunt Sidorczyk

**OTHER CONTENT****Corrigendum**

p 1975

\*Corresponding author


 Supplementary data available via ScienceDirect**COVER**

Image represents a key process of malaria parasites multiplying in, and rupturing from the human blood cell. The parasite surface is coated with glycosylphosphatidylinositols (GPIs), which have been identified as the malaria toxin by a collaborative effort between the research groups headed by Peter Seeberger (Swiss Federal Institute of Technology (ETH) Zürich, Switzerland) and Louis Schofield (Walter and Eliza Hall Institute of Medical Research, Australia). The space filling model represents the native GPI molecule from malaria parasite that has been chemically synthesized by the Seeberger group. Professor Peter Seeberger was presented with the Carbohydrate Research Award at the 13th European Carbohydrate Symposium (Bratislava, 2005).

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