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Synthesis of galactofuranose-containing disaccharides using thioimidoyl-type donors

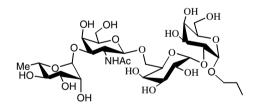
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Ronan Euzen, Vincent Ferrières\* and Daniel Plusquellec

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Ning Ding, Peng Wang, Zaihong Zhang, Yunpeng Liu and Yingxia Li\*



**(1)**+

 $A \ novel\ composite\ nanofiltration\ (NF)\ membrane\ prepared\ from\ graft\ copolymer\ of\ trimethylallyl\ ammonium\ chloride\ onto\ chitosan\ (GCTACC)/poly(acrylonitrile)\ (PAN)\ by\ epichlorohydrin\ cross-linking\ prepared\ prepare$ 

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Ruihua Huang, Guohua Chen,\* Mingkun Sun and Congjie Gao

A novel composite nanofiltration (NF) membrane was prepared using PAN ultrafiltration (UF) membrane as substrate, GCTACC as active layer and epichlorohydrin as cross-linking reagent. The effects of membrane preparation techniques and operating conditions on the performance of the composite membrane were studied. The resultant GCTACC/PAN composite membrane was positively charged, and its structure was characterized by Scanning electron microscopy, revealing the asymmetric and composite feature of this membrane.

Novel synthesis of α-galactosyl-ceramides and confirmation of their powerful NKT cell agonist activity pp 2785–2798 Adrianne Lee, Kathryn J. Farrand, Nina Dickgreber, Colin M. Hayman, Stefan Jürs, Ian F. Hermans and Gavin F. Painter\*

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Annie Ngono Ngane, Marie Lavault,\* Denis Séraphin, Anne Landreau and Pascal Richomme

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Charles D. Blundell, Michelle A. C. Reed and Andrew Almond\*

**(i)**+

# Structural characterization of the lipid A region of $Aeromonas\ salmonicida\ subsp.\ salmonicida\ lipopolysaccharide$

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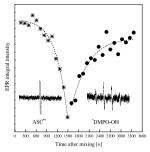
Zhan Wang, Jianjun Li and Eleonora Altman\*

The lipid A region of *Aeromonas salmonicida* subsp. *salmonicida* LPS was analyzed by a combination of fatty acid, electrospray ionization-mass spectrometry (ESIMS) and nuclear magnetic resonance (NMR) analyses and was found to contain three major lipid A molecules differing in acylation patterns corresponding to tetra-, penta- and hexaacylated lipid A species.

## Hyaluronan degradation by copper(II) chloride and ascorbate: rotational viscometric, EPR spin-trapping, and MALDI-TOF mass spectrometric investigations

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Ladislav Šoltés,\* Monika Stankovská, Vlasta Brezová, Juergen Schiller, Juergen Arnhold, Grigorij Kogan and Peter Gemeiner

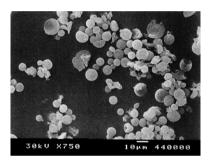


## Gadolinium diethylenetriaminopentaacetic acid-loaded chitosan microspheres for gadolinium neutron-capture therapy

pp 2835-2841

Tapan Kumar Saha,\* Hideki Ichikawa and Yoshinobu Fukumori

Gadolinium diethylenetriaminopentaacetic acid (Gd-DTPA)-loaded chitosan microspheres were prepared by the emulsion method using glutaraldehyde as a cross-linker and Span 80 as a surfactant for gadolinium neutron-capture therapy of cancer.



# Preparation of ethylenediamine-anchored cellulose and determination of thermochemical data for the interaction between cations and basic centers at the solid/liquid interface

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Edson C. da Silva Filho, Júlio C. P. de Melo and Claudio Airoldi\*

### Synthesis, characterization and thermal sensitivity of chitosan-based graft copolymers

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Hong-Mei Kang,\* Yuan-Li Cai and Peng-Sheng Liu

The graft copolymer of poly(N,N-dimethylamino) ethyl methacrylate onto N-carboxyethylchitosan (CECTS-g-PDMA) was synthesized and characterized, and the thermal sensitivity of its aqueous solution was studied.

# Cyclomaltooligosaccharide-assisted spectroscopic discrimination of phthalimido-derived amino acids through the formation of molecular aggregates

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Branko S. Jursic\* and Paresh K. Patel

$$R = PhCH_2$$
 $R = Me$ 
 $R = Me$ 
 $R = Me$ 

### **NOTES**

Synthesis of novel 2-phenylsulfonylhydrazono-3-(2',3',4',6'-tetra-O-acetyl- $\beta$ -D-glucopyranosyl)-thiazolidine-4-ones from thiosemicarbazide precursors

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Yu Xin Li, Su Hua Wang, Zheng Ming Li,\* Na Su and Wei Guang Zhao

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Yoram A. Puius, Todd H. Stievater and Thamarapu Srikrishnan\*



\*Corresponding author

\*\*D+ 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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