

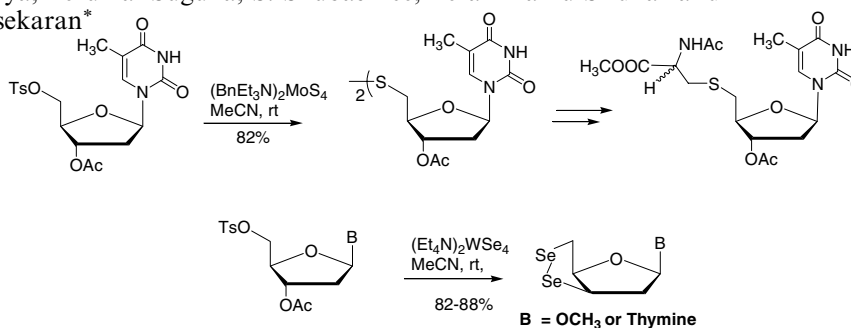
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Novel chalcogenides of thymidine and uridine: synthesis, properties and applications

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Kirubakaran Sivapriya, Perumal Suguna, S. Shubashree, Perali Ramu Sridhar and Srinivasan Chandrasekaran*

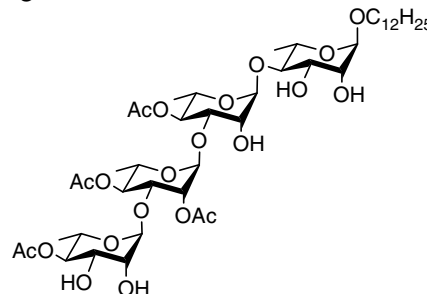


Total synthesis of cleistetroside-2, partially acetylated dodecanyl tetra-*r*hamnoside derivative isolated from *Cleistopholis patens* and *Cleistopholis glauca*

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Zaihong Zhang, Peng Wang, Ning Ding, Gaopeng Song and Yingxia Li*

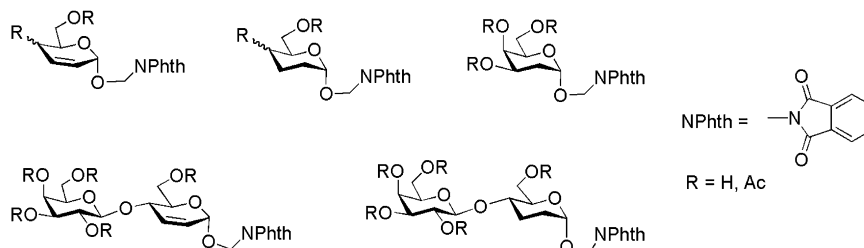
The total synthesis of a partially acetylated dodecanyl tetra-*r*hamnoside derivative, cleistetroside-2, which was isolated from *Cleistopholis patens* and *Cleistopholis glauca* and showed significant in vitro antibacterial activity against the Gram-positive bacteria, was achieved for the first time.



Synthesis and anti-inflammatory activity of *N*-phthalimidomethyl 2,3-dideoxy- and 2,3-unsaturated glycosides

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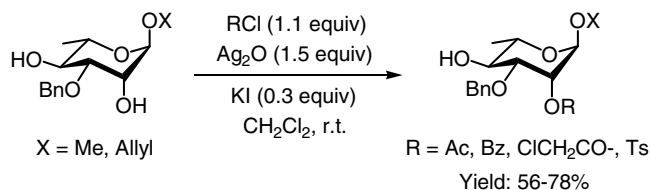
Xiang-Bao Meng, Dong Han, Su-Na Zhang, Wei Guo, Jing-Rong Cui and Zhong-Jun Li*



Silver(I) oxide-mediated regioselective 2-monoacylation in 3-*O*-benzyl- α -L-rhamnopyranosides and application in synthesis of a protected tetrasaccharide fragment of potent cytotoxic saponins gleditsiosides C and D

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Qian Yang, Ming Lei, Qin-Jian Yin and Jin-Song Yang*

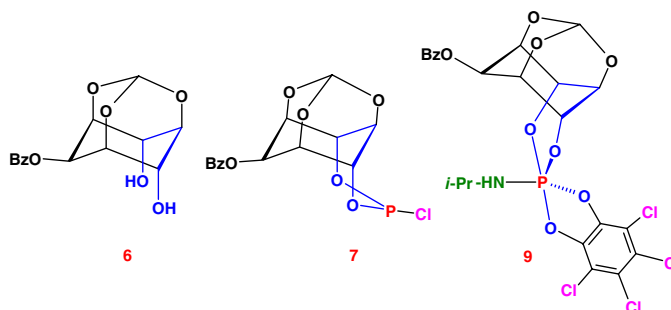


The first structural study on a cyclic tricoordinate phosphorochloridite and a pentacoordinate phosphorane based on 1,2,3,5-protected *myo*-inositol—a new conformation of 1,3,2-dioxaphosphorinane ring

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K. V. P. Pavan Kumar and K. C. Kumara Swamy*

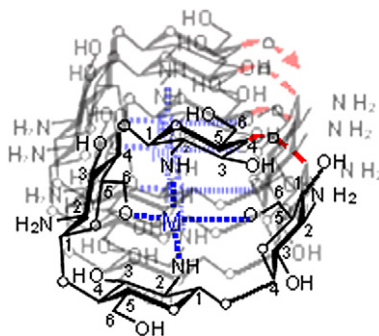
Synthesis and X-ray structures of the first examples of a cyclic phosphorochloridite (**7**) and a pentacoordinate phosphorane (**9**) based on 1,2,3,5-protected *myo*-inositol that exhibit a new boat conformation for the 1,3,2-dioxaphosphorinane ring, are reported. A chromatography-free synthesis of the protected diol, benzoic acid 8,9-dihydroxy-2,4,10-trioxatricyclo[3.3.1*3,7*]dec-6-yl ester (**6**), is presented.



Metal complexation of chitosan and its glutaraldehyde cross-linked derivative

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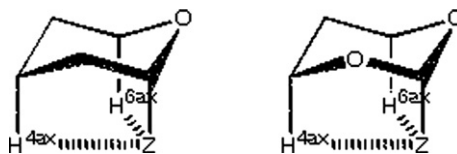
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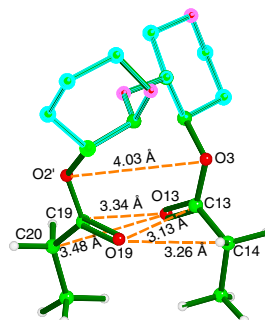
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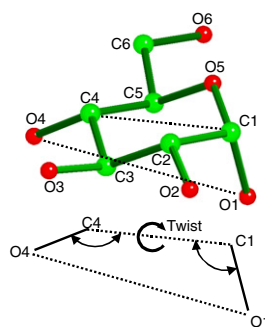
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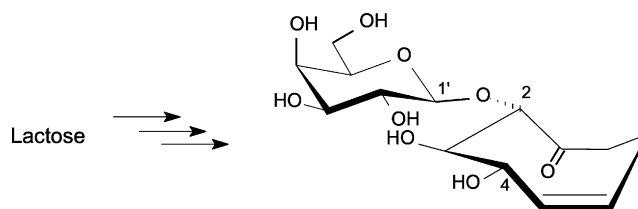
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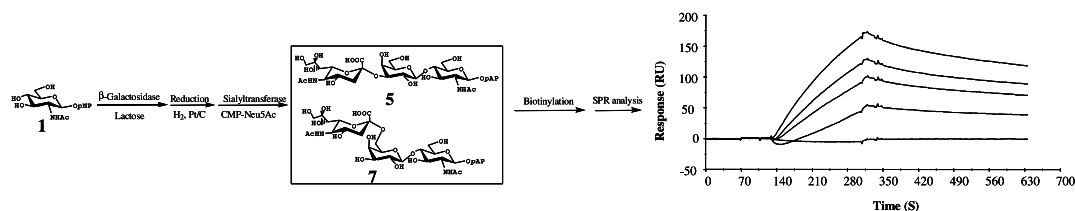
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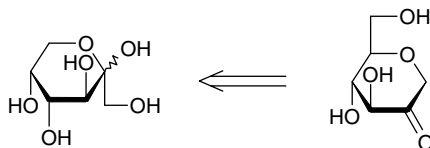
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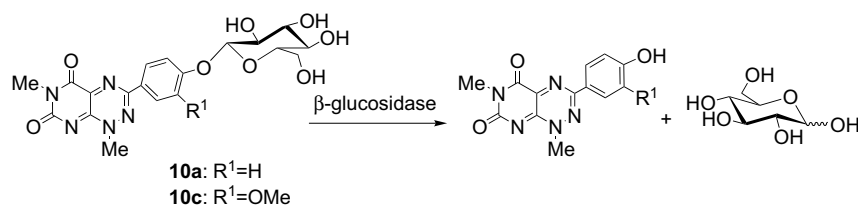
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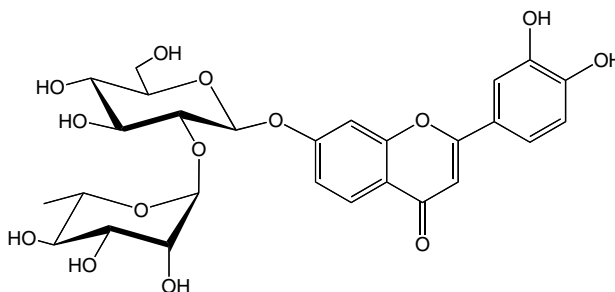
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**A new 5-deoxyflavone glycoside from the aerial parts of *Calea clauseniana***

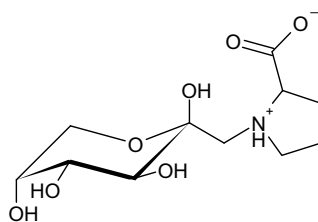
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Andréa Mendes do Nascimento* and Dionéia Camilo Rodrigues de Oliveira

**Crystal structure of *N*-(1-deoxy-β-D-fructopyranos-1-yl)-L-proline—an Amadori compound**

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Mirosław Tarnawski,* Katarzyna Ślepokura, Tadeusz Lis, Renata Kuliś-Orzechowska and Bogdan Szelepin



***O*-Allyl decoration on α -glucan isolated from the haloalkaliphilic *Halomonas pantelleriensis* bacterium pp 1271–1274**

Maria Michela Corsaro,* Agata Gambacorta, Rosa Lanzetta, Barbara Nicolaus, Giuseppina Pieretti, Ida Romano and Michelangelo Parrilli

An α -glucan containing the unprecedented peculiar *O*-allyl substituent was isolated from the haloalkaliphilic Gram-negative *Halomonas pantelleriensis* bacterium. Its dextran-like structure was deduced from chemical degradative and spectroscopic methods.

Structural relation of the antigenic polysaccharides of *Escherichia coli* O40, *Shigella dysenteriae* type 9, and *E. coli* K47 pp 1275–1279

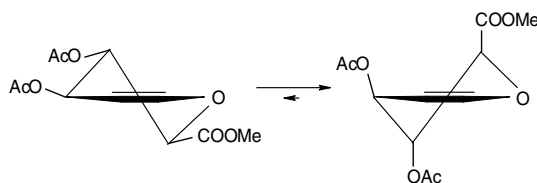
Guang Zhao, Andrei V. Perepelov,* Sof'ya N. Senchenkova, Alexander S. Shashkov, Lu Feng, Xiaomin Li, Yuriy A. Knirel and Lei Wang

$\rightarrow 2$)- β -D-Galp-(1 \rightarrow 4)- β -D-Manp-(1 \rightarrow 4)- α -D-Galp-(1 \rightarrow 3)- β -D-GlcpNAc-(1 \rightarrow
Escherichia coli O40

$\rightarrow 2$)- β -D-Galp3,4(RPyr)-(1 \rightarrow 4)- β -D-Manp-(1 \rightarrow 4)- α -D-Galp-(1 \rightarrow 3)- β -D-GlcpNAc-(1 \rightarrow
Shigella dysenteriae type 9 and *E. coli* K47


X-ray diffraction and high-resolution NMR spectroscopy of methyl 3,4-di-*O*-acetyl-1,5-anhydro-2-deoxy-D-*arabino*-hex-1-enopyranuronate pp 1280–1284

Beata Liberek,* Dorota Tuwalska, Antoni Konitz and Artur Sikorski



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*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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