

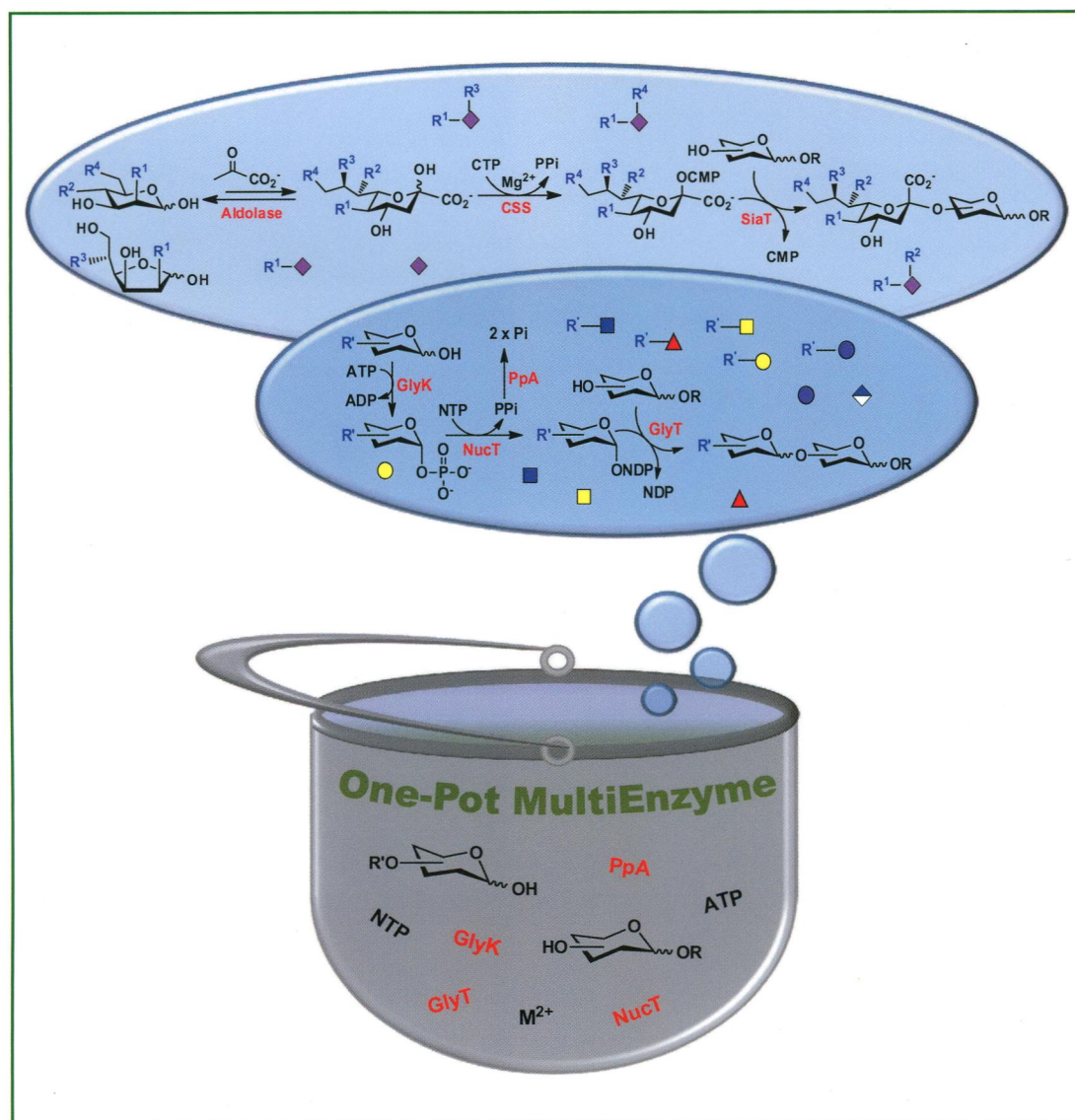
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Carbohydrate RESEARCH

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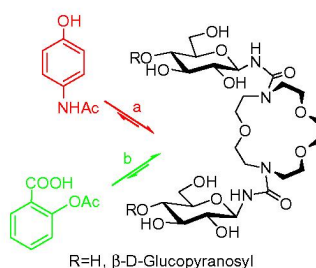
FULL PAPERS

Synthesis

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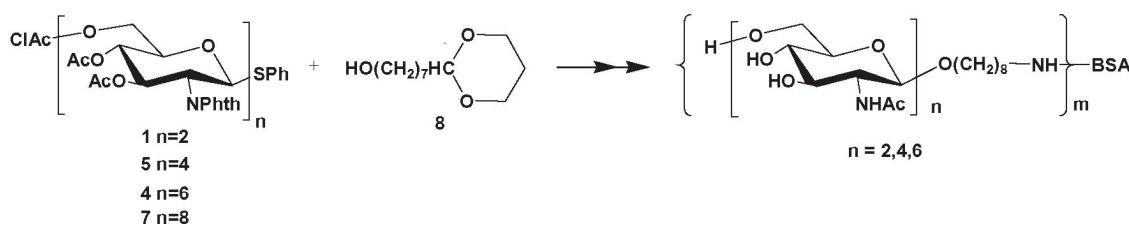
Michalina Pinal, Bogusław Kryczka, Alain Marsura, Stanisław Porwański*



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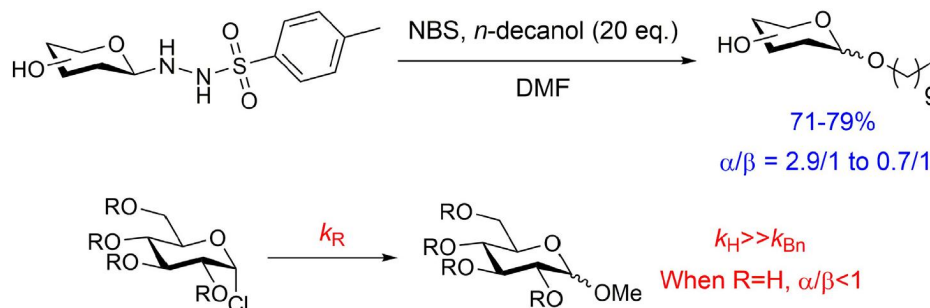
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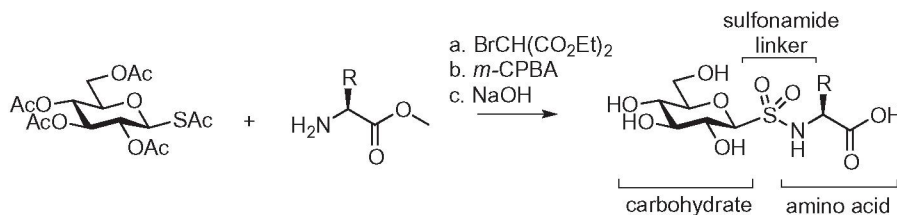
Rohan J. Williams, Caroline E. Paul, Mark Nitz*



Synthesis of sulfonamide-conjugated glycosyl-amino acid building blocks

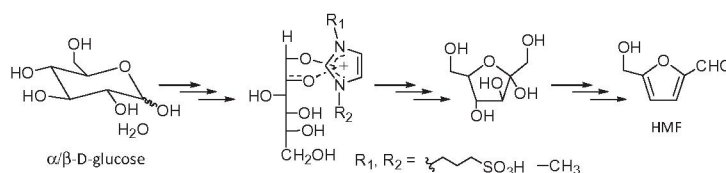
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**Mechanism of 1-(1-propylsulfonic)-3-methylimidazolium chloride catalyzed transformation of D-glucose to 5-hydroxymethylfurfural in DMSO: an NMR study**

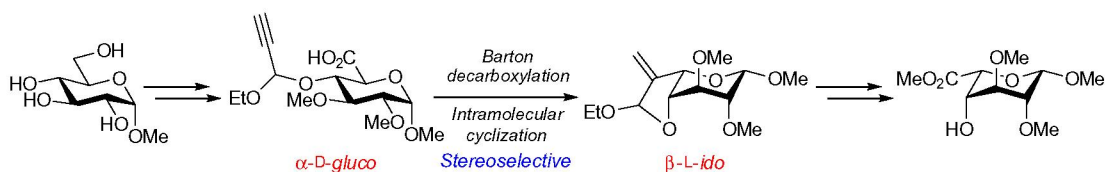
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Ananda S. Amarasekara*, Ashfaque Razzaq

**From D-glucuronic acid to L-iduronic acid derivatives via a radical tandem decarboxylation-cyclization**

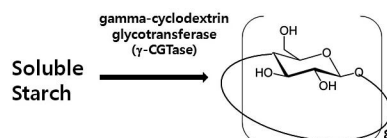
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**Biochemistry and Enzymes****Bacillus thuringiensis: a specific gamma-cyclodextrin producer strain**

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Bon Geun Goo, You Jin Hwang, Jae Kweon Park*

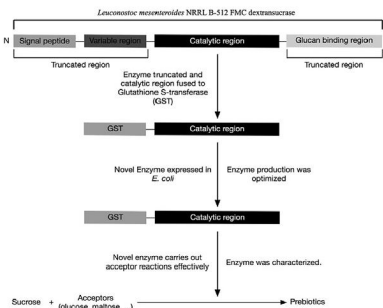


A specific gamma-cyclodextrin glycotransferase (γ -CGTase) is attractive for the production of γ -CD. γ -CGTase catalyzes the production of gamma-cyclodextrin from starch via a transglycosylation reaction. The efficiency of transglycosylation reaction was considered in terms of obtaining γ -CD in enzyme reaction of γ -CGTase.

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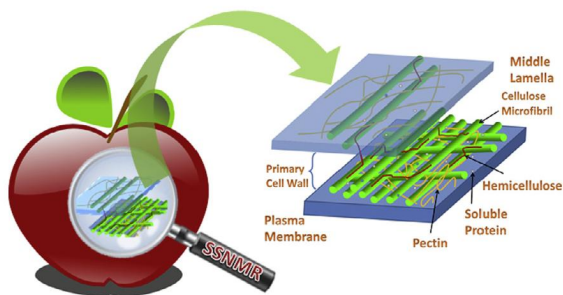


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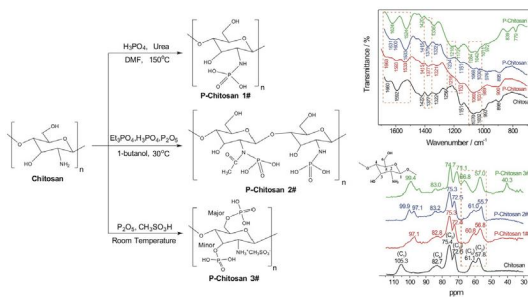
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Chemical structure analyses of phosphorylated chitosan

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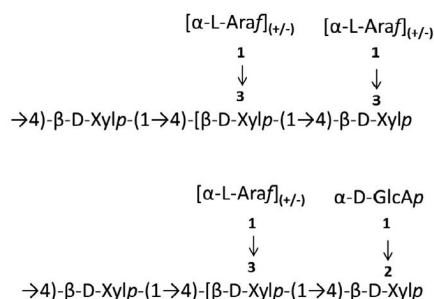


Polysaccharides

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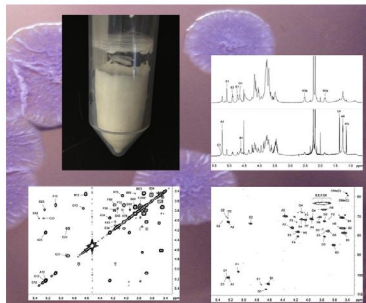
Sunil Ratnayake, Cherie T. Beahan, Damien L. Callahan, Antony Bacic*



Structural characterization of polysaccharides expressed by *Burkholderia oklahomensis* E0147

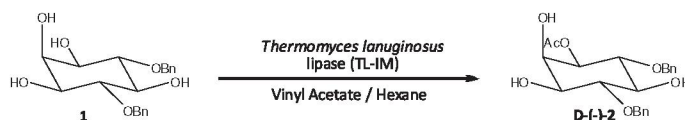
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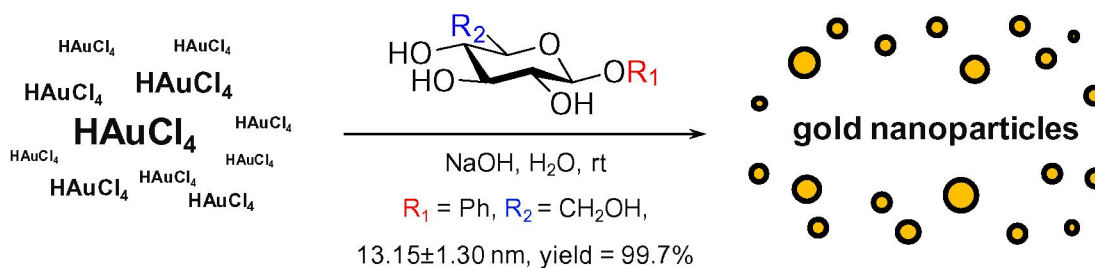
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**Synthesis of gold nanoparticles with glycosides: synthetic trends based on the structures of glycones and aglycones**

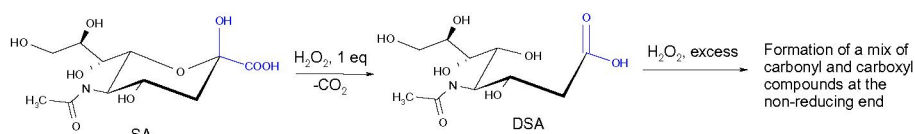
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**Oxidation of sialic acid using hydrogen peroxide as a new method to tune the reducing activity**

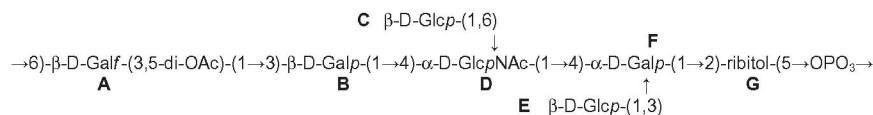
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Polysaccharides**Structural elucidation of the capsular polysaccharide from *Streptococcus pneumoniae* serotype 47A by NMR spectroscopy** pp 62–67

Bent O. Petersen*, Ole Hindsgaul, Berit Smestad Paulsen, Antonio R. Redondo, Ian C. Skovsted



The structure of the capsular polysaccharide from *Streptococcus pneumoniae* serotype 47A was elucidated by NMR spectroscopy. The structure shown above of the repeating heptasaccharide was deduced. The capsular polysaccharide 47A is one out of a total number of 91 structurally and serologically distinct capsular polysaccharides that have been recognized in *S. pneumoniae*, a significant human pathogenic bacterium.

*Corresponding author

 Supplementary data available via ScienceDirect
COVER

Multi-functionalisation of cyclodextrins (CD) has entered a new era thanks to the regioselective chemistry developed by M. Sollogoub's group. As illustrated on the cover, many applications can now be reached using CDs with various functions on specific positions. An example of functionalisation of CDs is given in the first issue of this journal. Image realised by Mickaël Ménand.

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