

Subject index

2-Acetamido-1,2-dideoxynojirimycin

A novel approach to the 1-deoxynojirimycin system: synthesis from sucrose of 2-acetamido-1,2-dideoxynojirimycin, as well as some 2-*N*-modified derivatives 49

Acyloxymethyl esters

The one-pot esterification of phosphoric acids with silver carbonate and alkyl halides in refluxing toluene 263

Adenophostin

A Ca^{2+} -mobilising carbohydrate-based polyphosphate: synthesis of 2-hydroxyethyl α -D-glucopyranoside 2',3,4-trisphosphate 169

Agar polysaccharides

Biosynthesis of agar polysaccharides in *Gracilaria chilensis* Bird, McLachlan *et* Oliveira 101

Amino acid

Preparation and structural characterization of *N*-glycated amino acid and linear or cyclic dipeptides containing the 6-amino-6-deoxy-1,2:3,4-di-*O*-isopropylidene- α -D-galactopyranose moiety 1

Amino acid complexes

Crystal structure of an adduct of sarcosine with sucrose 117

Amino acid linker

Polysaccharides as carriers for magnetic resonance imaging contrast agents: synthesis and stability of a new amino acid linker derivative 77

Biodegradable phosphate esters

The one-pot esterification of phosphoric acids with silver carbonate and alkyl halides in refluxing toluene 263

Biosynthesis

Biosynthesis of agar polysaccharides in *Gracilaria chilensis* Bird, McLachlan *et* Oliveira 101

Calorimetry

Thermodynamics of the interaction of α -cyclodextrin with monocarboxylic acids in aqueous solutions: a calorimetric study at 25 °C 127

Capillary electrophoresis (CE)

Analysis of charged cyclomalto-oligosaccharides (cyclodextrin) derivatives by ion-spray, matrix-assisted laser-desorption/ionization time-of-flight and fast-atom bombardment mass spectrometry, and by capillary electrophoresis 139

Chlorosulfonyl group

Glycosylation reactions of 2,3,4-tri-*O*-chlorosulfonyl- β -L-fucopyranosyl chloride and 2,3,4-tri-*O*-chlorosulfonyl- β -D-xylopyranosyl chloride 247

¹³C Labelling

Biosynthesis of agar polysaccharides in *Gracilaria chilensis* Bird, McLachlan *et* Oliveira 101

¹³C NMR

Furanose vs. acyclic forms of carbohydrate ligands. A multinuclear NMR spectroscopy study of the molybdate and tungstate complexes of D-glycero-L-manno-heptose 37

Contrast agents

Polysaccharides as carriers for magnetic resonance imaging contrast agents: synthesis and stability of a new amino acid linker derivative 77

Cyclodextrin

Investigation of the α -cyclodextrin-*myo*-inositol phosphate inclusion complex by NMR spectroscopy and molecular modeling 21

α -Cyclodextrin

Thermodynamics of the interaction of α -cyclodextrin with monocarboxylic acids in aqueous solutions: a calorimetric study at 25 °C 127

Cyclodextrin derivatives

Analysis of charged cyclomalto-oligosaccharides (cyclodextrin) derivatives by ion-spray, matrix-assisted laser-desorption/ionization time-of-flight and fast-atom bombardment mass spectrometry, and by capillary electrophoresis 139

Cyclomaltodextrinase

A convenient preparation of maltooctaose and maltononaose by the coupling reaction of cyclomaltodextrinase 271

Cyclomaltohexaose (α CD), heterogeneous doubly branched

Isolation by HPLC of the positional isomers of heterogeneous doubly branched cyclomaltohexaose having one α -D-galactosyl and one α -D-glucosyl side chain and determination of their structures by enzymatic degradation 213

1-Deoxynojirimycin

A novel approach to the 1-deoxynojirimycin system: synthesis from sucrose of 2-acetamido-1,2-dideoxynojirimycin, as well as some 2-*N*-modified derivatives 49

Dipeptide

Preparation and structural characterization of *N*-glycated amino acid and linear or cyclic dipeptides containing the 6-amino-6-deoxy-1,2,3,4-di-*O*-isopropylidene- α -D-galactopyranose moiety 1

Enzymatic degradation

Isolation by HPLC of the positional isomers of heterogeneous doubly branched cyclomaltohexaose having one α -D-galactosyl and one α -D-glucosyl side chain and determination of their structures by enzymatic degradation 213

Enzymatic synthesis

A convenient preparation of maltooctaose and maltononaose by the coupling reaction of cyclomaltodextrinase 271

ESIMS

Analysis of charged cyclomalto-oligosaccharides (cyclodextrin) derivatives by ion-spray, matrix-assisted laser-desorption/ionization time-of-flight and fast-atom bombardment mass spectrometry, and by capillary electrophoresis 139

FABMS

Analysis of charged cyclomalto-oligosaccharides (cyclodextrin) derivatives by ion-spray, matrix-assisted laser-desorption/ionization time-of-flight and fast-atom bombardment mass spectrometry, and by capillary electrophoresis 139

Fructose dianhydrides

Di-D-fructose dianhydrides and related oligomers from thermal treatments of inulin and sucrose 183

L-Fucose

Glycosylation reactions of 2,3,4-tri-*O*-chlorosulfonyl- β -L-fucopyranosyl chloride and 2,3,4-tri-*O*-chlorosulfonyl- β -D-xylopyranosyl chloride 247

Galactopyranose

Preparation and structural characterization of *N*-glycated amino acid and linear or cyclic dipeptides containing the 6-amino-6-deoxy-1,2,3,4-di-*O*-isopropylidene- α -D-galactopyranose moiety 1

Gelatinized starch granules

Reaction of enzymes with starch granules: reaction of isoamylase with native and gelatinized granules 255

GLC-MS spectroscopy

Determination of the O-specific polysaccharide structure in the lipopolysaccharide of *Ochrobactrum anthropi* LMG 3331 123

Glycan

The glycans of horseradish peroxidase 203

Glycosidase inhibitors

A novel approach to the 1-deoxynojirimycin system: synthesis from sucrose of 2-acetamido-1,2-dideoxynojirimycin, as well as some 2-*N*-modified derivatives 49

Glycosylation

Glycosylation reactions of 2,3,4-tri-*O*-chlorosulfonyl- β -L-fucopyranosyl chloride and 2,3,4-tri-*O*-chlorosulfonyl- β -D-xylopyranosyl chloride 247

Glycosyl chloride

Glycosylation reactions of 2,3,4-tri-*O*-chlorosulfonyl- β -L-fucopyranosyl chloride and 2,3,4-tri-*O*-chlorosulfonyl- β -D-xylopyranosyl chloride 247

Gracilaria chilensis

Biosynthesis of agar polysaccharides in *Gracilaria chilensis* Bird, McLachlan *et* Oliveira 101

D-glycero-L-manno-Heptose

Furanose vs. acyclic forms of carbohydrate ligands. A multinuclear NMR spectroscopy study of the molybdate and tungstate complexes of D-glycero-L-manno-heptose 37

Horseradish peroxidase

The glycans of horseradish peroxidase 203

HPLC

Isolation by HPLC of the positional isomers of heterogeneous doubly branched cyclomalto-

- hexaose having one α -D-galactosyl and one α -D-glucosyl side chain and determination of their structures by enzymatic degradation 213
- Inclusion**
Thermodynamics of the interaction of α -cyclodextrin with monocarboxylic acids in aqueous solutions: a calorimetric study at 25 °C 127
- Inclusion complex**
Investigation of the α -cyclodextrin-*myo*-inositol phosphate inclusion complex by NMR spectroscopy and molecular modeling 21
- Inositol phosphates**
A Ca^{2+} -mobilising carbohydrate-based polyphosphate: synthesis of 2-hydroxyethyl α -D-glucopyranoside 2',3,4-trisphosphate 169
The one-pot esterification of phosphoric acids with silver carbonate and alkyl halides in refluxing toluene 263
- Inulin thermolysis**
Di-D-fructose dianhydrides and related oligomers from thermal treatments of inulin and sucrose 183
- Isoamylase**
Reaction of enzymes with starch granules: reaction of isoamylase with native and gelatinized granules 255
- Lipopolysaccharide**
Determination of the O-specific polysaccharide structure in the lipopolysaccharide of *Ochrobactrum anthropi* LMG 3331 123
Structural studies of the *Vibrio salmonicida* lipopolysaccharide 225
- Magnetic resonance imaging**
Polysaccharides as carriers for magnetic resonance imaging contrast agents: synthesis and stability of a new amino acid linker derivative 77
- MALDITOF**
The glycans of horseradish peroxidase 203
- MALDITOFMS**
Analysis of charged cyclomalto-oligosaccharides (cyclodextrin) derivatives by ion-spray, matrix-assisted laser-desorption/ionization time-of-flight and fast-atom bombardment mass spectrometry, and by capillary electrophoresis 139
- Maltononaose**
A convenient preparation of maltooctaose and maltononaose by the coupling reaction of cyclomaltodextrinase 271
- Maltooctaose**
A convenient preparation of maltooctaose and maltononaose by the coupling reaction of cyclomaltodextrinase 271
- Maltose-Mn(II) complex**
Transition-metal-saccharide chemistry: synthesis and characterisation of D-galactose, D-fructose, D-glucose, D-xylose, D-ribose, and maltose complexes of Mn(II) 157
- Methylation analysis**
The glycans of horseradish peroxidase 203
- Mn(II) complexes**
Transition-metal-saccharide chemistry: synthesis and characterisation of D-galactose, D-fructose, D-glucose, D-xylose, D-ribose, and maltose complexes of Mn(II) 157
- Modification of starch granules**
Reaction of enzymes with starch granules: reaction of isoamylase with native and gelatinized granules 255
- Molecular dynamics**
Investigation of the α -cyclodextrin-*myo*-inositol phosphate inclusion complex by NMR spectroscopy and molecular modeling 21
- Molybdate complexes**
Furanose vs. acyclic forms of carbohydrate ligands. A multinuclear NMR spectroscopy study of the molybdate and tungstate complexes of D-glycero-L-manno-heptose 37
- Monocarboxylic acids**
Thermodynamics of the interaction of α -cyclodextrin with monocarboxylic acids in aqueous solutions: a calorimetric study at 25 °C 127
- Monosaccharide-Mn(II) complexes**
Transition-metal-saccharide chemistry: synthesis and characterisation of D-galactose, D-fructose, D-glucose, D-xylose, D-ribose, and maltose complexes of Mn(II) 157
- Myo-inositol 2-phosphate**
Investigation of the α -cyclodextrin-*myo*-inositol phosphate inclusion complex by NMR spectroscopy and molecular modeling 21
- Native starch granules**
Reaction of enzymes with starch granules: reaction of isoamylase with native and gelatinized granules 255
- N-glycation**
Preparation and structural characterization of N-glycated amino acid and linear or cyclic dipeptides containing the 6-amino-6-deoxy-1,2:3,4-di-O-isopropylidene- α -D-galactopyranose moiety 1
- N-linked oligosaccharides**
The glycans of horseradish peroxidase 203

NMR

Structural studies of the *Vibrio salmonicida* lipopolysaccharide 225

NMR spectroscopy

Preparation and structural characterization of *N*-glycated amino acid and linear or cyclic dipeptides containing the 6-amino-6-deoxy-1,2:3,4-di-*O*-isopropylidene- α -D-galactopyranose moiety 1

Investigation of the α -cyclodextrin-*myo*-inositol phosphate inclusion complex by NMR spectroscopy and molecular modeling 21

Determination of the O-specific polysaccharide structure in the lipopolysaccharide of *Ochrobactrum anthropi* LMG 3331 123

Nonulosonic acid

Structural studies of the *Vibrio salmonicida* lipopolysaccharide 225

Ochrobactrum anthropi

Determination of the O-specific polysaccharide structure in the lipopolysaccharide of *Ochrobactrum anthropi* LMG 3331 123

Piperazinedione

Preparation and structural characterization of *N*-glycated amino acid and linear or cyclic dipeptides containing the 6-amino-6-deoxy-1,2:3,4-di-*O*-isopropylidene- α -D-galactopyranose moiety 1

Polysaccharides

Polysaccharides as carriers for magnetic resonance imaging contrast agents: synthesis and stability of a new amino acid linker derivative 77

Positional isomer, separation

Isolation by HPLC of the positional isomers of heterogeneous doubly branched cyclomaltohexaose having one α -D-galactosyl and one α -D-glucosyl side chain and determination of their structures by enzymatic degradation 213

Salmon

Structural studies of the *Vibrio salmonicida* lipopolysaccharide 225

Sarcosine

Crystal structure of an adduct of sarcosine with sucrose 117

Second messenger

A Ca^{2+} -mobilising carbohydrate-based polyphosphate: synthesis of 2-hydroxyethyl α -D-glucopyranoside 2',3,4-trisphosphate 169

Selective protection

A Ca^{2+} -mobilising carbohydrate-based polyphosphate: synthesis of 2-hydroxyethyl α -D-glucopyranoside 2',3,4-trisphosphate 169

Silver carbonate

The one-pot esterification of phosphoric acids with silver carbonate and alkyl halides in refluxing toluene 263

Single crystal

Crystal structure of an adduct of sarcosine with sucrose 117

O-Specific polysaccharide

Determination of the O-specific polysaccharide structure in the lipopolysaccharide of *Ochrobactrum anthropi* LMG 3331 123

Stability

Polysaccharides as carriers for magnetic resonance imaging contrast agents: synthesis and stability of a new amino acid linker derivative 77

Stannylene

A Ca^{2+} -mobilising carbohydrate-based polyphosphate: synthesis of 2-hydroxyethyl α -D-glucopyranoside 2',3,4-trisphosphate 169

Structural analysis

Isolation by HPLC of the positional isomers of heterogeneous doubly branched cyclomaltohexaose having one α -D-galactosyl and one α -D-glucosyl side chain and determination of their structures by enzymatic degradation 213

Structure

Structural studies of the *Vibrio salmonicida* lipopolysaccharide 225

Sucrose

A novel approach to the 1-deoxynojirimycin system: synthesis from sucrose of 2-acetamido-1,2-dideoxynojirimycin, as well as some 2-*N*-modified derivatives 49

Crystal structure of an adduct of sarcosine with sucrose 117

Sucrose thermolysis

Di-D-fructose dianhydrides and related oligomers from thermal treatments of inulin and sucrose 183

Thermolysis of sugars

Di-D-fructose dianhydrides and related oligomers from thermal treatments of inulin and sucrose 183

Tungstate complexes

Furanose vs. acyclic forms of carbohydrate ligands. A multinuclear NMR spectroscopy study of the molybdate and tungstate complexes of D-glycero-L-manno-heptose 37

¹⁸³W NMR, Furanose forms

Furanose vs. acyclic forms of carbohydrate ligands. A multinuclear NMR spectroscopy study of the molybdate and tungstate complexes of D-glycero-L-manno-heptose 37

X-ray

Crystal structure of an adduct of sarcosine with sucrose 117

X-ray structure

Preparation and structural characterization of *N*-glycated amino acid and linear or cyclic dipeptides containing the 6-amino-6-deoxy-1,2:3,4-di-*O*-isopropylidene- α -D-galactopyranose moiety 1

D-Xylose

Glycosylation reactions of 2,3,4-tri-*O*-chlorosulfonyl- β -L-fucopyranosyl chloride and 2,3,4-tri-*O*-chlorosulfonyl- β -D-xylopyranosyl chloride 247