

Subject index

Acetone

Crystal structures of hexakis-(2,6-di-*O*-methyl)-cyclomaltohexaose (dimethyl- α -cyclodextrin) crystallized from acetone, and crystallized from hot water 69

O-Acetylation

Full ^1H NMR assignment and detailed *O*-acetylation patterns of capsular polysaccharides from *Neisseria meningitidis* used in vaccine production 83

Actinomycetes

Structural studies of the major glycolipid from *Saccharopolyspora* genus 55

Agar biosynthesis

In vivo conversion of 6-*O*-sulfo-L-galactopyranosyl residues into 3,6-anhydro-L-galactopyranosyl residues in *Gracilaria chilensis* Bird, McLachlan *et al.* Oliveira 285

Allyl ethers

The preparation of racemic and enantiomerically pure *myo*-inositol derivatives as intermediates for the synthesis of phosphatidylinositol 3-, 3,4-bis-, and 3,4,5-tris-phosphates and for the synthesis of analogues of 1D-*myo*-inositol 1,3,4,5-tetrakisphosphate 97

Anomerization

Mechanism of anomerization of cyclohexyl 2-deoxy-3,4,6-tri-*O*-methyl-2-(*N*-methylacetamido)- α - and β -D-hexopyranosides under reductive-cleavage conditions 215

Baker's yeast

Synthesis and semisynthesis of α -D-mannopyranosyl-(1 \rightarrow 2)- α -D-mannopyranose octaacetate 279

Bast fibre

Structural features of the pectic polysaccharides isolated from retted hemp bast fibres 249

Boron trifluoride diethyl etherate

An improved method for the preparation of some ethyl 1-thioglycosides 275

Capsular polysaccharide

The structure of stewartan, a capsular polysaccharide produced by *Erwinia stewartii* strain DC283 183

Carrageenan, 4',6'-disulfated, κ -, and ω -

Sulfated galactans from Australian specimens of the red alga *Phacelocarpus peperocarpus* (Gigartinales, Rhodophyta) 237

Chemoselective glycosylation

Synthesis of tetrasaccharides as possible metastatic inhibitors 229

Chiral *myo*-inositol derivatives

The preparation of racemic and enantiomerically pure *myo*-inositol derivatives as intermediates for the synthesis of phosphatidylinositol 3-, 3,4-bis-, and 3,4,5-tris-phosphates and for the synthesis of analogues of 1D-*myo*-inositol 1,3,4,5-tetrakisphosphate 97

Conformational analysis

Conformational studies of *myo*-inositol phosphates 39

Corn

The structure of stewartan, a capsular polysaccharide produced by *Erwinia stewartii* strain DC283 183

Crystal structure

Crystal structures of hexakis-(2,6-di-*O*-methyl)-cyclomaltohexaose (dimethyl- α -cyclodextrin) crystallized from acetone, and crystallized from hot water 69

Cyclic decasaccharide

Cyclolaminarinose. A new biologically active β -(1 \rightarrow 3) cyclic glucan 23

Cyclolaminarinose

Cyclolaminarinose. A new biologically active β -(1 \rightarrow 3) cyclic glucan 23

Deprotection

N-Trichloroethoxycarbonyl-glucosamine derivatives as glycosyl donors 135

Dimethyl- α -cyclodextrin

Crystal structures of hexakis-(2,6-di-*O*-methyl)-cyclomaltohexaose (dimethyl- α -cyclodextrin) crystallized from acetone, and crystallized from hot water 69

Erwinia stewartii

The structure of stewartan, a capsular polysaccharide produced by *Erwinia stewartii* strain DC283 183

ethyl 1-thioglycosides

An improved method for the preparation of some ethyl 1-thioglycosides 275

Farmer's lung disease

Structural studies of the major glycolipid from *Saccharopolyspora* genus 55

Fluorescence-labeled oligosaccharide

Synthesis of α -D-Glcp-(1 \rightarrow 2)- α -D-Glcp-(1 \rightarrow 3)- α -D-Glcp-O-(CH₂)₈COOCH₃ for use in the assay of α -glucosidase I activity 203

Galactans, sulfated

Sulfated galactans from Australian specimens of the red alga *Phacelocarpus peperocarpus* (Gigartinales, Rhodophyta) 237

Galactopyranosylamines

Enzymatic properties of α -D-galactosidase from *Trichoderma reesei* 261

 α -D-Galactosidase

Enzymatic properties of α -D-galactosidase from *Trichoderma reesei* 261

Gigartinales

Sulfated galactans from Australian specimens of the red alga *Phacelocarpus peperocarpus* (Gigartinales, Rhodophyta) 237

Glucan

Cyclolaminarinose. A new biologically active β -(1 \rightarrow 3) cyclic glucan 23

 α -Glucosidase I

Synthesis of α -D-Glcp-(1 \rightarrow 2)- α -D-Glcp-(1 \rightarrow 3)- α -D-Glcp-O-(CH₂)₈COOCH₃ for use in the assay of α -glucosidase I activity 203

Glycan

Synthesis of α - and β -linked tyvelose epitopes of the *Trichinella spiralis* glycan: 2-Acetamido-2-deoxy-3-*O*-(3,6-dideoxy-D-arabino-hexopyranosyl)- β -D-galactopyranosides 149

Glycolipid

Structural studies of the major glycolipid from *Saccharopolyspora* genus 55

N-Glycoprotein

Synthesis and semisynthesis of α -D-mannopyranosyl-(1 \rightarrow 2)- α -D-mannopyranose octaacetate 279

Glycosidase assay

Synthesis of α -D-Glcp-(1 \rightarrow 2)- α -D-Glcp-(1 \rightarrow 3)- α -D-Glcp-O-(CH₂)₈COOCH₃ for use in the assay of α -glucosidase I activity 203

Glycosidation

Synthesis of α - and β -linked tyvelose epitopes of the *Trichinella spiralis* glycan: 2-Acetamido-2-deoxy-3-*O*-(3,6-dideoxy-D-arabino-hexopyranosyl)- β -D-galactopyranosides 149

Glycosylation

Synthesis of a hexasaccharide acceptor corresponding to the reducing terminus of mycobacterial 3-*O*-methylmannose polysaccharide (MMP) 171

Glycosyl trichloroacetimidates

N-Trichloroethoxycarbonyl-glucosamine derivatives as glycosyl donors 135

Gracilaria chilensis

In vivo conversion of 6-*O*-sulfo-L-galactopyranosyl residues into 3,6-anhydro-L-galactopyranosyl residues in *Gracilaria chilensis* Bird, McLachlan *et* Oliveira 285

¹H and ¹³C NMR spectroscopy

Structural features of the pectic polysaccharides isolated from retted hemp bast fibres 249

Hemp (*Cannabis sativa*)

Structural features of the pectic polysaccharides isolated from retted hemp bast fibres 249

Human serum transferrin

Complete ¹H and ¹³C resonance assignments of a 21-amino acid glycopeptide prepared from human serum transferrin 1

Hydrogen bonding

Crystal structures of hexakis-(2,6-di-*O*-methyl)-cyclomaltohexaose (dimethyl- α -cyclodextrin) crystallized from acetone, and crystallized from hot water 69

myo-Inositol phosphates

Conformational studies of *myo*-inositol phosphates 39

1D-*myo*-Inositol 1,3,4,5-tetrakisphosphate analogues

The preparation of racemic and enantiomerically pure *myo*-inositol derivatives as intermediates for the synthesis of phosphatidylinositol 3-, 3,4-bis-, and 3,4,5-tris phosphates and for the synthesis of analogues of 1D-*myo*-inositol 1,3,4,5-tetrakisphosphate 97

Kinetic scheme

Enzymatic properties of α -D-galactosidase from *Trichoderma reesei* 261

- Mannobiose, synthetic and semisynthetic**
 Synthesis and semisynthesis of α -D-mannopyranosyl-(1 \rightarrow 2)- α -D-mannopyranose octaacetate 279
- Meningococcal polysaccharides**
 Full ^1H NMR assignment and detailed *O*-acetylation patterns of capsular polysaccharides from *Neisseria meningitidis* used in vaccine production 83
- Metastatic inhibitor**
 Synthesis of tetrasaccharides as possible metastatic inhibitors 229
- p*-Methoxybenzyl ethers**
 The preparation of racemic and enantiomerically pure *myo*-inositol derivatives as intermediates for the synthesis of phosphatidylinositol 3-, 3,4-bis-, and 3,4,5-tris-phosphates and for the synthesis of analogues of 1D-*myo*-inositol 1,3,4,5-tetrakisphosphate 97
- 3-*O*-Methylmannose polysaccharide (MMP)**
 Synthesis of a hexasaccharide acceptor corresponding to the reducing terminus of mycobacterial 3-*O*-methylmannose polysaccharide (MMP) 171
- Microheterogeneity**
 Complete ^1H and ^{13}C resonance assignments of a 21-amino acid glycopeptide prepared from human serum transferrin 1
- Mycobacterium**
 Synthesis of a hexasaccharide acceptor corresponding to the reducing terminus of mycobacterial 3-*O*-methylmannose polysaccharide (MMP) 171
- N-linked diantennary oligosaccharide**
 Complete ^1H and ^{13}C resonance assignments of a 21-amino acid glycopeptide prepared from human serum transferrin 1
- NMR spectroscopy**
 Full ^1H NMR assignment and detailed *O*-acetylation patterns of capsular polysaccharides from *Neisseria meningitidis* used in vaccine production 83
- Nuclear magnetic resonance**
 Complete ^1H and ^{13}C resonance assignments of a 21-amino acid glycopeptide prepared from human serum transferrin 1
- Nuclear Overhauser effect**
 Complete ^1H and ^{13}C resonance assignments of a 21-amino acid glycopeptide prepared from human serum transferrin 1
- Oligomannose type**
 Synthesis and semisynthesis of α -D-mannopyranosyl-(1 \rightarrow 2)- α -D-mannopyranose octaacetate 279
- Oligosaccharide**
 Synthesis of α - and β -linked tyvelose epitopes of the *Trichinella spiralis* glycan: 2-Acetamido-2-deoxy-3-*O*-(3,6-dideoxy-D-*arabino*-hexopyranosyl)- β -D-galactopyranosides 149
- Oligosaccharide synthesis**
N-Trichloroethoxycarbonyl-glucosamine derivatives as glycosyl donors 135
- Parasite**
 Synthesis of α - and β -linked tyvelose epitopes of the *Trichinella spiralis* glycan: 2-Acetamido-2-deoxy-3-*O*-(3,6-dideoxy-D-*arabino*-hexopyranosyl)- β -D-galactopyranosides 149
- Partial acetolysis**
 Synthesis and semisynthesis of α -D-mannopyranosyl-(1 \rightarrow 2)- α -D-mannopyranose octaacetate 279
- Pectins**
 Structural features of the pectic polysaccharides isolated from retted hemp bast fibres 249
- Phosphatidylinositol 3-, 3,4-bis-, and 3,4,5-tris-phosphates**
 The preparation of racemic and enantiomerically pure *myo*-inositol derivatives as intermediates for the synthesis of phosphatidylinositol 3-, 3,4-bis-, and 3,4,5-tris-phosphates and for the synthesis of analogues of 1D-*myo*-inositol 1,3,4,5-tetrakisphosphate 97
- Polysaccharides, algal**
 Sulfated galactans from Australian specimens of the red alga *Phacelocarpus peperocarpus* (Gigartinales, Rhodophyta) 237
- Precursor conversion**
 In vivo conversion of 6-*O*-sulfo-L-galactopyranosyl residues into 3,6-anhydro-L-galactopyranosyl residues in *Gracilaria chilensis* Bird, McLachlan *et al.* Oliveira 285
- Reductive cleavage**
 Mechanism of anomerization of cyclohexyl 2-deoxy-3,4,6-tri-*O*-methyl-2-(*N*-methylacetamido)- α - and β -D-hexopyranosides under reductive-cleavage conditions 215
- Resonance assignment**
 Complete ^1H and ^{13}C resonance assignments of a 21-amino acid glycopeptide prepared from human serum transferrin 1
- Rhamnogalacturonan I**
 Structural features of the pectic polysaccharides isolated from retted hemp bast fibres 249
- Rhizobium meliloti***
 Cyclolaminarinose. A new biologically active β -(1 \rightarrow 3) cyclic glucan 23
- Rhodophyta**
 Sulfated galactans from Australian specimens

- of the red alga *Phacelocarpus peperocarpus* (Gigartinales, Rhodophyta) 237
- Saccharopolyspora*
- Structural studies of the major glycolipid from *Saccharopolyspora* genus 55
- Stewarts wilt
- The structure of stewartan, a capsular polysaccharide produced by *Erwinia stewartii* strain DC283 183
- Structure
- Structural studies of the major glycolipid from *Saccharopolyspora* genus 55
- Structure determination
- Sulfated galactans from Australian specimens of the red alga *Phacelocarpus peperocarpus* (Gigartinales, Rhodophyta) 237
- Synthesis
- Synthesis of a hexasaccharide acceptor corresponding to the reducing terminus of mycobacterial 3-*O*-methylmannose polysaccharide (MMP) 171
 - An improved method for the preparation of some ethyl 1-thioglycosides 275
- Tetramethylhodamine
- Synthesis of α -D-Glcp-(1 \rightarrow 2)- α -D-Glcp-(1 \rightarrow 3)- α -D-Glcp-O-(CH₂)₈COOCH₃ for use in the assay of α -glucosidase I activity 203
- Tetrasaccharide
- Synthesis of tetrasaccharides as possible metastatic inhibitors 229
- Thioglycosides
- N*-Trichloroethoxycarbonyl-glucosamine derivatives as glycosyl donors 135
- Tin-mediated alkylations
- The preparation of racemic and enantiomerically pure *myo*-inositol derivatives as intermediates for the synthesis of phosphatidylinositol 3-, 3,4-bis-, and 3,4,5-tris-phosphates and for the synthesis of analogues of 1D-*myo*-inositol 1,3,4,5-tetrakisphosphate 97
- Transglycosylation
- Enzymatic properties of α -D-galactosidase from *Trichoderma reesei* 261
- Trichinella spiralis*
- Synthesis of α - and β -linked tyvelose epitopes of the *Trichinella spiralis* glycan: 2-Acetamido-2-deoxy-3-*O*-(3,6-dideoxy-D-*arabino*-hexopyranosyl)- β -D-galactopyranosides 149
- N*-Trichloroethoxycarbonyl
- N*-Trichloroethoxycarbonyl-glucosamine derivatives as glycosyl donors 135
- Trichoderma reesei*
- Enzymatic properties of α -D-galactosidase from *Trichoderma reesei* 261
- Tyvelose
- Synthesis of α - and β -linked tyvelose epitopes of the *Trichinella spiralis* glycan: 2-Acetamido-2-deoxy-3-*O*-(3,6-dideoxy-D-*arabino*-hexopyranosyl)- β -D-galactopyranosides 149