

SUBJECT INDEX

- 6'-*N*-Acetylglucosaminylactose, studies of the one- and two-dimensional ^1H and ^{13}C NMR spectra, 173
- N*-Acetyl glucosaminyltransferase III activity, synthesis of a di-*O*-methylated pentasaccharide for use in the assay of, 283
- Acyclic carbohydrates, 1,3-parallel O//O interactions in, the crystal and molecular structures of some heptitols and heptitol heptaacetates, 9
- Agaroid hydroxyl groups, chemical methylation, 127
- Algae, 115
- Algae, detection by ^{13}C NMR spectroscopy of cellulose in the cell wall of some red, 167
- Alkali-soluble glucans from the mycelium of *Aspergillus giganteus* mut. *alba*, structural characterization, 155
- Amadori compounds (1-amino-1-deoxy-D-fructose derivatives) derived from a series of aliphatic ω -amino acids, the preparation and characterization of some, 257
- (1-Amino-1-deoxy-D-fructose derivatives) derived from a series of aliphatic ω -amino acids, the preparation and characterization of some Amadori compounds, 257
- 5-Aminopentyl glycoside of β -D-Galp-(1 \rightarrow 4)- β -D-GlcpNAc-(1 \rightarrow 3)-L-Fucp and fragments thereof related to glycopeptides of human Christmas factor and the marine sponge *Microciona prolifera*, synthesis, 195
- α -Amylases, human, synthesis of *p*-nitrophenyl 6 5 - and/or 4 5 -*O*-glycosyl- α -maltopentaosides for the differential assay of, 137
- Aspergillus giganteus* mut. *alba*, structural characterization of alkali-soluble glucans from the mycelium of, 155
- Benzyl 7-*O*-allyl-2,3-*O*-isopropylidene-4-*O*-*p*-methoxybenzyl-L-glycero- α -D-manno-heptopyranoside, synthesis as a versatile LD-ManHepp derivative, 49
- Capsular polysaccharide of *E. coli* K84, structural elucidation, 323
- Capsular polysaccharide of *E. coli* K103, structural investigation using bacteriophage degradation and NMR spectroscopy, 311
- Cell wall, 115
- Cell wall of some red algae, detection of cellulose by ^{13}C NMR spectroscopy, 167
- Cellulose, 115
- Cellulose char structure: a combined analytical Py-GC-MS, FTIR, and NMR study, 27
- Cellulose in the cell wall of some red algae, detection by ^{13}C NMR spectroscopy, 167
- Chemical methylation of agaroid hydroxyl groups, 127
- Chiral *myo*-inositol phosphates and phosphorothioates, synthesis from 1D-3,6-*O*-benzyl-1,2-*O*-isopropylidene-*myo*-inositol, 59
- Chitin and chitosan, molecular mass distribution, 161
- Chitosan and chitin, molecular mass distribution, 161
- Chlamydia*-specific Kdo trisaccharides epitope, synthesis of carboxyl-reduced analogues, 223
- Chlorophyceae, 115
- Crystal and molecular structure of 1-deoxy-1-nitro-D-altritol, 1,3-parallel C//O interactions in acyclic carbohydrates, 1
- ^{13}C Solid-state NMR study of ion-exchange resins derived from natural polysaccharides, a, 185
- Cyclomalto-oligosaccharides pivaloylation and diphenylacetylation, 271
- 2-Deoxy- α -D-*arabino*-hexopyranosyl phosphate and 2-deoxy-maltooligosaccharides, synthesis with phosphorylase, 335
- Deoxyglobotrioses, synthesis of double-chain bis-sulfone neoglycolipids of the 2'', 3'', 4'', and 6'', 79
- 2-Deoxy-maltooligosaccharide (2-deoxy-amylose), enzymatic synthesis with phosphorylase

- of 2-deoxy- α -D-arabino-hexopyranosyl phosphate and a, 335
- 3-Deoxy-D-manno-2-octulosonic acid derivatives related to the *Chlamydia*-specific Kdo trisaccharide epitope, synthesis, 223
- 1-Deoxy-1-nitro-D-altritol, crystal and molecular structure, 1,3-parallel C//O interactions, 1
- 1D-3,6-Di-O-benzyl-1,2-O-isopropylidene-myo-inositol, synthesis of chiral myo-inositol phosphates and phosphorothioates from, 59
- 2,3-Difluorofuranose with the D-lyxo configuration. An intramolecular rearrangement of methyl 5-O-benzoyl-2,3-dideoxy-2,3-difluoro-D-lyxofuranoside observed during the attempted synthesis of 1-(2,3-dideoxy-2,3-difluoro- β -D-lyxofuranosyl)thymine, synthesis of a, 103
- Disaccharides: syntheses and anti-HIV testing of thiokojibiose octaacetate, thionigerose, and thiomaltose, α -(1 \rightarrow 2)-, α -(1 \rightarrow 3)-, and α -(1 \rightarrow 6)-thioglycosidic, 245
- Double-chain bis-sulfone neoglycolipids of the 2"-, 3"-, 4"-, and 6"-deoxyglobotrioses, synthesis, 79
- E. coli* O20:K84:H26 capsular polysaccharide, structural elucidation, 323
- E. coli* O101:K103:H- capsular polysaccharide, structural investigation using bacteriophage degradation and NMR spectroscopy, 311
- Epichlorohydrin and polysaccharides, model substances with non-cyclic substituents for the reaction between, 213
- FTIR, PY-GC-MS, and NMR study of cellulose char structure, 27
- β -D-Galp-(1 \rightarrow 4)- β -D-GlcpNAc-(1 \rightarrow 3)-L-Fucp, synthesis of the 5-aminopentyl glycoside of, 195
- Glucans from the mycelium of *Aspergillus giganteus* mut. *alba*, structural characterization of alkali-soluble, 155
- Glycopeptides of human Christmas factor and the marine sponge *Microciona prolifera*, synthesis of the 5-aminopentyl glycoside of β -D-Galp-(1 \rightarrow 4)- β -D-GlcpNAc-(1 \rightarrow 3)-L-Fucp and fragments thereof related to, 195
- Goat (*Capra hircus*) colostrum, studies of the neutral trisaccharides, 173
- Heptitols and heptitol heptaacetates, the crystal and molecular structures of some, 9
- Heptopyranoside, synthesis of benzyl 7-O-allyl-2,3-O-isopropylidene-4-O-p-methoxybenzyl-L-glycero- α -D-manno-, a versatile LD-man-Hepp derivative, 49
- myo-Inositol phosphates and phosphorothioates, synthesis from 1D-3,6-di-O-isopropylidene-myo-inositol of chiral, 59
- Ion-exchange resins derived from natural polysaccharides, a ^{13}C solid-state NMR study of, 185
- Kdo trisaccharide epitope, synthesis of carboxyl-reduced analogues of the *Chlamydia*-specific, 223
- α -Maltopentaosides, *p*-nitrophenyl 6⁵- and/or 4⁵-O-glycosyl-, for the differential assay of human α -amylases, synthesis, 137
- Methylation of agaroid hydroxyl groups, chemical, 127
- Methyl α -D-glucopyranoside derivatives with non-cyclic substituents, synthesis as model compounds for the reaction between epichlorohydrin and polysaccharides, 213
- Molecular mass distribution of chitin and chitosan, 161
- Neoglycolipids of the 2"-, 3"-, 4"-, and 6"-deoxyglobotrioses, synthesis of double-chain bis-sulfone, 79
- NMR, PY-GC-MS, and FTIR study of cellulose char structure, 27
- NMR study of ion-exchange resins derived from natural polysaccharides, a ^{13}C solid-state, 185
- 1,3-Parallel C//O interactions in acyclic carbohydrates: the crystal and molecular structure of 1-deoxy-1-nitro-D-altritol, 1
- 1,3-Parallel O//O interactions in acyclic carbohydrates, the crystal and molecular structures of some heptitols and heptitol heptaacetates, 9
- Pentasaccharide for use in the assay of *N*-acetyl glucosaminyltransferase III activity, synthesis of a di-O-methylated, 283
- Phosphorylase, enzymatic synthesis of 2-deoxy- α -D-arabino-hexopyranosyl phosphate and 2-deoxy-maltooligosaccharides with, 335
- Pivaloylation and diphenylacetylation of cyclomalto-oligosaccharides, 271
- Polysaccharide, structural elucidation of the *E. coli* K84 capsular, 323
- Polysaccharide, structural investigation of the *E. coli* K103 capsular, using bacteriophage degradation and NMR spectroscopy, 311

Polysaccharides and epichlorohydrin, model substances with non-cyclic substituents for the reaction between, 213

Polysaccharides, a ^{13}C solid-state NMR study of ion-exchange resins derived from natural, 185

Potential inhibitors of sialidase from *Influenza* virus, 297

Py–GC–MS, FTIR, and NMR study of cellulose char structure, 27

Rearrangement of methyl 5-*O*-benzoyl-2,3-dideoxy-2,3-difluoro-D-lyxofuranoside observed during the attempted synthesis of 1-(2,3-dideoxy-2,3-difluoro- β -D-lyxofuranosyl)thymine, synthesis of a, 2,3-difluorofuranose with the D-lyxo configuration. An intramolecular, 103

Reducing sugars, stereochemical control in the formation of thiazolidines from O-protected, 147

Selective pivaloylation and diphenylacetylation of cyclomalto-oligosaccharides, 271

Stereochemical control in the formation of thiazolidines from O-protected reducing sugars, 147

Synthesis of transition-state analogues as potential inhibitors of sialidase from *Influenza* virus, 297

Thiazolidines, stereochemical control in formation from O-protected reducing sugars, 147

Thioglycosidic disaccharides: syntheses and anti-HIV testing of thiokojibiose octaacetate, thionigerose, and thiomaltose, α -(1 \rightarrow 2)-, α -(1 \rightarrow 3)-, and α -(1 \rightarrow 6)-, 245

Thiokojibiose octaacetate, thionigerose, and thiomaltose, α -(1 \rightarrow 2)-, α -(1 \rightarrow 3)-, and α -(1 \rightarrow 6)-, thioglycosidic disaccharides: syntheses and anti-HIV testing of, 245

Thiomaltose, α -(1 \rightarrow 2)-, α -(1 \rightarrow 3)-, and α -(1 \rightarrow 6)-thioglycosidic disaccharides: syntheses and anti-HIV testing of thiokojibiose octaacetate, thionigerose, and, 245

Thionigerose, and thiomaltose, α -(1 \rightarrow 2)-, α -(1 \rightarrow 3)-, and α -(1 \rightarrow 6)-thioglycosidic disaccharides: syntheses and anti-HIV testing of thiokojibiose octaacetate, 245

Transition state analogue as potential inhibitors of sialidase, 297

Trisaccharides of goat (*Capra hircus*) colostrum, studies of the neutral, 173

Ulva lactuca, 115

Versatile LD-manHepp derivative, synthesis of benzyl 7-*O*-allyl-2,3-*O*-isopropylidene-4-*O*-*p*-methoxybenzyl-L-glycero- α -D-manno-heptopyranoside, 49

Xyloglucan, 115