

SUBJECT INDEX

- Acetal, septanoside, from methyl- α -D-glucopyranoside, 150
- Acetylation of (4-O-methyl-D-glucurono)-D-xylo-
lan under homogeneous conditions using trifluoroacetic acid-acetic anhydride, 346
- O-Acetyl groups in the heteropolysaccharide of the cactus *Pereskia aculeata*, location of, 277
- Alditol derivatives of neutral and acidic oligosaccharides, 1-alkoxyamino-1-deoxy, 135
- Aldono-1,4-lactones, a route to 3,6-anhydro-2-deoxy-, by reaction of sugars with Meldrum's acid, 223
- 1-Alkoxyamino-1-deoxy alditols, useful u.v.-absorbing derivatives of neutral and acidic oligosaccharides, 135
- Analogues of β -KdoP, 2-deoxy-2-(substituted-methyl), 209
- Alpha amylase, synthesis of O- α -D-glucopyranosyl (1 \rightarrow 4)-O- α -D-xylopyranosyl-(1 \rightarrow 4)-O- α -D-xylopyranosyl-(1 \rightarrow 4)-D-glucopyranose as a natural substrate analogue of, 261
- 3,6-Anhydro-2-deoxyaldono-1,4-lactones, a route to, by reaction of sugars with Meldrum's acid, 223
- 3-(D-Arabinofuranosyl)pyrazoles, synthesis of, by cyclodehydration of 3-(D-manno-pentitol-1-yl)pyrazoles, 233
- ^{3,0}B-Boat conformation, an unusual, of the D-galactose residue of O-isopropylidenated derivatives of lactose, induced by sulfation at the 2'-position, 161
- 6-(N-Benzyl-N-tert-butoxycarbonylamino)-2,3,6,7-tetradeoxy- α -DL-erythro- and - β -DL-threo-hept-2-enopyranos-4-ulose, X-ray and conformational investigations of a 4:1 mixture of, 153
- Bifidobacterium bifidum*, D-galactosides formed by transglycosylation during lactose hydrolysis by, 115
- Borohydride-soluble lignin-carbohydrate complex, esters of p-coumaric acid from the cell walls of a tropical grass, 299
- Capsular polysaccharide, from Type 5 *Staphylococcus aureus* structure of, 285
- Chiral recognition of racemic sugars by polar and nonpolar cyclodextrin-derivative gas chromatography phases, 175
- Chitosan gel, conversion of a chitosan oxalate gel to an N-acetylchitosan gel via a, 145
- CMP-Kdo synthetase, synthesis of some C-8-modified 3-deoxy- β -D-manno-2-octulosonic acid analogs as inhibitors of, 185
- ¹³C-N.m.r. spectra of cyclomalto-oligosaccharides (cyclodextrins), their derivatives, and complexes with azo dyes, 1
- Conformation, an unusual ^{3,0}B-boat, of the D-galactose residue of O-isopropylidenated derivatives of lactose, induced by sulfation at the 2'-position, 161
- Conformational and X-ray investigations of a 4:1 mixture of 6-(N-benzyl-N-tert-butoxycarbonylamino)-2,3,6,7-tetradeoxy- α -DL-erythro- and - β -DL-threo-hept-2-enopyranos-4-ulose, 153
- Copper(II) ions in the Maillard reaction, influence of, 311
- Cyclodehydration of 3-(D-manno-pentitol-1-yl)pyrazoles, synthesis of 3-(D-arabinofuranosyl)pyrazoles by, 233
- Cyclodextrin-derivative gas chromatography phases, chiral recognition of racemic sugars by polar and nonpolar, 175
- β -Cyclodextrin, diglucosyl, (Diglucosylcyclomaltoheptaose), isolation and characterization of three positional isomers of, 125
- Cyclodextrins (cyclomalto-oligosaccharides), their derivatives, and complexes with azo dyes, ¹³C-n.m.r. spectra of, 1
- Cyclomaltoheptaose, diglucosyl, isolation and characterization of three positional isomers of, 125
- Cyclomalto-oligosaccharides (cyclodextrins), their derivatives, and complexes with azo dyes, ¹³C-n.m.r. spectra of, 1
- "3-Deoxy-D-galactose" units, synthesis of methyl glycosides of oligosaccharides containing, 79
- Deoxy-2-(substituted-methyl)analogues of β -KdoP, 2-, 209
- 3,6-Dideoxyhexoses, stereospecifically labeled, synthesis of, 95
- Diglucosylcyclomaltoheptaose, isolation and characterization of three positional isomers of, 125
- Disaccharides having a β -D-mannopyranosyl group, synthesis from N-phthalimidolactosamine derivatives of, 69
- Formation of methyl (2,7-anhydro-3-deoxy- α -D-

- manno*-2-octulofuranos)onate upon methanolysis of 2,4,7,8-tetra-*O*-acetyl-3-deoxy-*a*-D-*manno*-2-octulopyranosono-1,5-lactone, 337
- (1→6)- β -D-Galacto-oligosaccharides having one residue deoxygenated at position 3, synthesis of methyl glycosides of, 79
- D-Galactosides formed by transglycosylation during lactose hydrolysis by *Bifidobacterium bifidum*, 115
- Gel, a chitosan oxalate: its conversion to an *N*-acetylchitosan gel *via* a chitosan gel, 145
- β -D-GlcpNAc6SO₃-(1→3)- β -D-Galp6SO₃-(1→4)- β -D-GlcpNAc6SO₃-(1→3)-D-Galp, a regio- and stereo-controlled synthesis of, 51
- α -D-Glucopyranoside, methyl, septanoside acetals from, 150
- Glycan, a key intermediate for the synthesis of a "bisected" complex type of a glycoprotein, 15
- Glycan fragment, a linear acidic, of keratin sulfate I: a regio- and stereo-controlled synthesis of β -D-GlcpNAc6SO₃-(1→3)- β -D-Galp6SO₃-(1→4)- β -D-GlcpNAc6SO₃-(1→3)-D-Galp, 51
- Glycan, synthesis of a core glycoheptaose of a bisected complex-type of glycoproteins, 31
- Glycoprotein, synthesis of a core glycoheptaose of a bisected complex-type glycan of, 31
- Glycoprotein, synthesis of a key intermediate for the synthesis of a "bisected" complex-type glycan of, 15
- Glycotetraoside, synthesis of an appropriately protected, 15
- Influence of Cu²⁺ in the Maillard reaction, the, 311
- Isorhodomycons: their synthesis using glycals and their structure-activity relationship, semisynthetic *ε*-, 249
- Kdop, 2-deoxy-2-(substituted-methyl) analogs of β -, 209
- Keratan sulfate I, a linear acidic glycan fragment of; a regio- and stereo-controlled synthesis of β -D-GlcpNAc6SO₃-(1→3)- β -D-Galp6SO₃-(1→4)- β -D-GlcpNAc6SO₃-(1→3)-D-Galp, 51
- Lignin-carbohydrate complex esters of *p*-coumaric acid from the cell walls of a tropical grass, borohydride-soluble, 299
- Lactose, sulfation of *O*-isopropylidenated derivatives at the 2'-position induces an unusual ^{3,0}*B*-boat conformation of the D-galactose residue, 161
- Labeled sugars, stereospecifically labeled, 3,6-di-deoxyhexoses, synthesis of, 95
- Lactose hydrolysis by *Bifidobacterium bifidum*, D-galactosides formed by transglycosylation during, 115
- Maillard reaction, the influence of Cu²⁺ in the, 311
- α -D-*manno*-2-Octulopyranosono-1,5-lactone, formation of methyl (2,7-anhydro-3-deoxy-*a*-D-*manno*-2-octulofuranos)onate upon methanolysis of 2,4,7,8-tetra-*O*-acetyl-3-deoxy-, 337
- β -D-Mannopyranosyl group, synthesis from *N*-phthalimidolactosamine derivatives of disaccharides having, 69
- (4-*O*-Methyl-D-glucurono)-D-xylan, acetylation of, under homogeneous conditions using trifluoroacetic acid-acetic anhydride, 346
- Methyl β -glycosides of (1→6)- β -D-galacto-oligosaccharides having one residue deoxygenated at position 3, synthesis of, 79
- Nitrates, synthesis of some sugar, 334
- N.m.r. characterization of trehalulose from the excrement of the sweet potato whitefly, *Bemisia tabaci*, 342
- N.m.r. spectra, ¹³C-, of cyclomalto-oligosaccharides (cyclodextrins), their derivatives, and complexes with azo dyes, 1
- N.m.r. spectra of *Vigna* primary cell walls and their polysaccharide components, solid-state ¹³C-, 327
- Octulopyranosono-1,5-lactone, formation of methyl (2,7-anhydro-3-deoxy-*a*-D-*manno*-2-octulofuranos)onate upon methanolysis of 2,4,7,8-tetra-*O*-acetyl-3-deoxy-*a*-D-*manno*-2-, 337
- Octulosonic acid analogs as inhibitors of CMP-Kdo synthetase, synthesis of some C-8-modified 3-deoxy- β -D-*manno*-2-, 185
- Oligosaccharides, 1-alkoxyamino-1-deoxyalditol derivatives of, u.v.-absorbing, 135
- Pereskia aculeata* heteropolysaccharide, location of *O*-acetyl groups in, 277
- N*-Phthalimidolactosamine derivatives, synthesis of disaccharides having a β -D-mannopyranosyl group from, 69
- Polysaccharide, a chitosan oxalate gel: its conversion to an *N*-acetylchitosan gel *via* a chitosan gel, 145
- Polysaccharide components, solid-state ¹³C-n.m.r. spectra of *Vigna* primary cell walls and their, 327
- Polysaccharide of the cactus *Pereskia aculeata*, location of *O*-acetyl groups in, 277
- Racemic sugars by polar and nonpolar cyclodextrin-derivative gas chromatography phases, chiral recognition of, 125
- Reaction of sugars with Meldrum's acid: a route to 3,6-anhydro-2-deoxyaldono-1,4-lactones, 223

- Semisynthetic ϵ -isorhodomycins: their synthesis using glycals and their structure-activity relationship, 249
- Septanose, acetals from methyl α -D-glucopyranoside, 150
- Solid-state ^{13}C -n.m.r. spectra of *Vigna* primary cell walls and their polysaccharide components, 327
- Staphylococcus aureus*, Type 5, structure of capsular polysaccharide of, 285
- Structure-activity relationship, semisynthetic ϵ -isorhodomycins: their synthesis using glycals and their, 249
- Substrate analogue of α amylase, synthesis of *O*- α -D-glucopyranosyl (1 \rightarrow 4)-*O*- α -D-xylopyranosyl-(1 \rightarrow 4)-*O*- α -D-xylopyranosyl-(1 \rightarrow 4)-D-glucopyranose as a natural substrate analogue of α amylase, 261
- Sugar nitrates, synthesis of some, 334
- Sulfation of *O*-isopropylidenated lactose derivatives at the 2'-position induces an unusual 3_0B -boat conformation of the D-galactose residue, 161
- Synthesis and characterization of cyclomaltoheptaose (Z)-2-butenedioic monoesters, 241
- Synthesis, a regio- and stereo-controlled, of β -D-GlcNAc6SO₃-(1 \rightarrow 3)- β -D-Galp6SO₃-(1 \rightarrow 4)- β -D-GlcNAc6SO₃-(1 \rightarrow 3)-D-Galp. A linear acidic glycan fragment of keratin sulfate I, 51
- Synthesis of 3-(D-arabinofuranosyl)pyrazoles by cyclodehydration of 3-(D-manno-pentitol-1-yl)-pyrazoles, 233
- Synthesis of *O*- α -D-glucopyranosyl (1 \rightarrow 4)-*O*- α -D-xylopyranosyl-(1 \rightarrow 4)-*O*- α -D-xylopyranosyl-(1 \rightarrow 4)-D-glucopyranose as a natural substrate analogue of α amylase, 261
- Synthesis of α -D-Manp-(1 \rightarrow 3)-[β -D-GlcNAc-(1 \rightarrow 4)]-[α -D-Manp-(1 \rightarrow 6)]- β -D-Manp-(1 \rightarrow 4)- β -D-GlcNAc-(1 \rightarrow 4)-[α -L-Fucp-(1 \rightarrow 6)]-D-GlcNAc, a core glycoheptaose of a "bisected" complex-type glycan of glycoproteins, 31
- Synthesis of some C-8-modified 3-deoxy- β -D-manno-2-octulosonic acid analogs as inhibitors of CMP-Kdo synthetase, 185
- Synthesis of some sugar nitrates, 334
- Synthesis of stereospecifically labeled 3,6-dideoxyhexoses, 95
- Trehalulose from the excrement of the sweet potato whitefly, *Bemisia tabaci*, n.m.r. characterization of, 342
- Trifluoroacetic acid-acetic anhydride, acetylation of (4-*O*-methyl-D-glucurono)-D-xylan under homogeneous conditions using, 346
- Tropical grass, borohydride-soluble lignin-carbohydrate complex esters of *p*-coumaric acid from the cell walls of a, 299
- Type 5 capsular polysaccharide of *Staphylococcus aureus*, structure of, 285
- Whitefly, *Bemisia tabaci*, n.m.r. characterization of trehalulose from the excrement of the sweet potato, 342
- X-Ray and conformational investigations of a 4:1 mixture of 6-(*N*-benzyl-*N*-tert-butoxycarbonylamino)-2,3,6,7-tetradeoxy- α -DL-erythro-and- β -DL-threo-hept-2-enopyranos-4-ulose, 153