SUBJECT INDEX

- 4-O-Acetyl-1,5-anhydro-2,3,6-trideoxy-3-trifluoroacetamido-ι-lyxo-hex-1-enitol, synthesis of, 145
- N-Acetylneuraminic acid, stereoselective synthesis of 2-thioglycosides of, 35
- Agar polymers from *Gracilaria verrucosa*, linkage of 4-O-methyl-L-galactopyranose in, 93
- Alginate, an electron microscopic study of guluronate-rich, 313
- Angelica acutiloba kitagawa, structure of the neutral carbohydrate side-chains in anti-complementary acidic polysaccharides from the root of, 255
- Anthracycline glycosides specifically labeled at the 2'-position, synthesis, 149
- L-Arabinose, dialkyl dithioacetals of, cyclization of, through the 5-tosylates, 159
- Arabinoxylans from rye and wheat seed that interact with ice, 173
- Bacterial polysaccharides K54 and XM6, 2D-n.m.r. studies of the related, 103
- Base-catalysed β -elimination in the presence of sodium borodeuteride, structural analysis of pectic polysaccharides by, 117
- 5-Bromomethyl-2-furancarboxaldehyde, synthesis of, 15
- tert-Butyldimethylsilylation, selective chemical modification of cyclomalto-oligosaccharides via, 203
- Candida albicans NIH A-207 (serotype A) strain, mannooligosaccharides residues containing β-D-linkages in D-mannan of, 239
- Carbohydrate chains of N-glycoproteins, maps of, 165
- Carbohydrate contrast agents for n.m.r. imaging: enhancement of the relaxation of water by paramagnetic metal complexes of polysaccharides, c6
- Carbohydrate side-chains, an X-ray study of a new dioxopiperazine containing, 187
- Characterization of cyclomalto-hexaose and -heptaose derivatives by the reductive-cleavage method, 197
- 6-Chloromethyl-2-furancarboxaldehyde, synthesis of, 15

- Crystal and molecular structure of 4-(D-arabinotetritol-1-yl)-4-imidazolin-2-ylideneammonium chloride, synthesis and, 139
- Cyclic and linear oligo(mannosyl phosphates) from partially protected α-D-mannopyranosyl hydrogenphosphonate, C1
- Cyclization of dialkyl dithioacetals of L-arabinose through the 5-tosylates, 159
- Cyclomalto-hexaose and -heptaose derivatives, characterization of, by the reductive-cleavage method, 197
- Cyclomalto-oligosaccharides, selective chemical modification of, via tert-butyldimethylsilylation, 203
- Daunosamine glycosides, synthesis of intermediate in the synthesis of, 145
- N-(1-Deoxyalditol-1-yl)octadecylamine derivatives in the analysis of methanolysates of neoglycolipids obtained by reductive amination, g.l.c.-m.s. of, 25
- 2-Deoxyglycosides by a new approach permitting access to anthracycline glycosides specifically labeled at the 2'-position, 149
- Dialkyl dithioacetals, of L-arabinose, cyclization of, through the 5-tosylates, 159
- Dibutylstannylene derivatives of glycals, regioselectivity in the reactivity of, 154
- Dioxopiperazine containing carbohydrate sidechains, an X-ray study of a new, 187
- Electron microscopic study of guluronate-rich alginate, 313
- C-2 Epimerisation in aqueous solutions of thiazolidine-4(R)-carboxylic acids derived from, 223
- Facile formation of 2,5-anhydro sugars by ring contraction in methyl hexopyranoside 2-triflates under conditions of nucleophilic displacement, 67
- 2-Furancarboxaldehyde, 5-bromo- and 5-chloro-, synthesis of, 15
- Galactoglucomannan from the O3 reference strain (C.D.C. 863-57) of Serratia marcescens, structural studies of an acidic, 295

c12 Subject index

- L-Galactopyranose, 4-O-methyl, linkage in the agar polymers from Gracilaria verrucosa of, 93
- G.l.c.-m.s. of N-(1-deoxyalditol-1-yl)octadecylamine derivatives in the analysis of methanolysates of neoglycolipids obtained by reductive amination, 25
- α-D-Glucopyranosyl phosphates, deoxy- and deoxyfluoro-, the synthesis and hydrolysis of a series of, 43
- D-Glucosyltransferases, of Streptococcus sobrinus, inhibition of the synthesis of highmolecular-weight D-glucans by the, by maltose, isomaltose, and nigerose, 131
- Glycals, regioselectivity in the reactivity of dibutylstannylene derivatives of, 154
- Glycofurano[2,1-d]imidazolidin-2-ones, synthesis of, 1
- N-Glycoproteins, oligosaccharide maps of, 165 Gracilaria verrucosa, linkage of 4-O-methyl-Lgalactopyranose in agar polymers from, 93
- Guluronate-rich alginate, an electron microscopic study of, 313
- L-lyxo-Hex-1-enitol-4-O-acetyl-1,5-anhydro-2,3,6-trideoxy-3-trifluoroacetamido-, synthesis of, 145
- Ice, interactions with arabinoxylans from rye and wheat seed, 173
- Imidazolidin-2-ones, synthesis of glycofurano[2,1-d], 1
- Inhibition by maltose, isomaltose, and nigerose of the synthesis of high-molecular-weight D-glucans by the D-glucosyltransferases of *Streptococcus sobrinus*, 117
- Isolation and structural studies of phosphatecontaining oligosaccharides from alkaline and acid hydrolysates of *Streptococcus pneumoniae* Type 6^B capsular polysaccharide, 267
- Lipopolysaccharide of the O10 reference strain of *Serratia marcescens*, structural studies of a neutral polymer isolated from the, 303
- D-Mannan from Candida albicans NIH A-207 (serotype A) strain, mannooligosaccharides residues containing β-D-linkages in, 239
- Mannooligosaccharides residues containing β-Dlinkages from *Candida albicans* NIH A-207 (serotype A) strain D-mannan, 239
- α-D-Mannopyranosyl hydrogenphosphonate, cyclic and linear oligo(mannosyl phosphates) from partially protected, Cl
- 4-O-Methyl-L-galactopyranose, linkage in the agar polymers from *Gracilaria verrucosa* of, 93

N.m.r. imaging, enhancement of the relaxation of water by paramagnetic metal complexes of polysaccharides and their use as contrast agents for, C6

- N.m.r. studies of the related bacterial polysaccharides K54 and XM6, 2D-, 103
- Octadecylamine derivatives, g.l.c.-m.s. of, in the analysis of methanolysates of neoglycolipids obtained by reductive amination, 25
- Oligo(mannosyl phosphates) from partially protected α -D-mannopyranosyl hydrogenphosphonate, cyclic and linear, C1
- Oligosaccharide maps of N-glycoproteins, 165
- Paramagnetic metal complexes of polysaccharides, enhancement of the relaxation of water by, and their use as contrast agents for n.m.r. imaging, C6
- Pectic polysaccharides, structural analysis of, by base-catalysed β-elimination in the presence of sodium borodeuteride, 117
- Phosphate-containing oligosaccharides from alkaline and acid hydrolysates of *Streptococcus* pneumonae Type 6^B capsular polysaccharide, isolation and structural studies of, 267
- Polysaccharides from the root of Angelica acutiloba kitagawa, structure of the neutral carbohydrate side-chains in anti-complementary acidic, 255
- Polysaccharides K54 and XM6, 2D-n.m.r. studies of the related bacterial, 103
- Reductive-cleavage method, characterization of cyclomalto-hexaose and -heptaose derivatives by the, 197
- Regioselectivity in the reactivity of dibutylstannylene derivatives of glycals, 154
- Rice starches having intermediate affinities for iodine, structures of indica, 287
- Selective chemical modification of cyclomaltooligosaccharides *via tert*-butyldimethylsilylation, 203
- Serratia marcescens, structural studies of a neutral polymer isolated from the lipopolysaccharide of the O10 reference strain of, 303
- Serratia marcescens, structural studies of an acidic galactoglucomannan from the O3 reference strain (C.D.C. 863-57) of, 295
- Starches having intermediate affinities for iodine structures of indica rice, 287
- Stereoselective synthesis of 2-thioglycosides of *N*-acetylneuraminic acid, 35
- Streptococcus pneumoniae Type 6^B capsular polysaccharide, isolation and structural studies of phosphate-containing oligosaccharides from alkaline and acid hydrolysates of, 267

SUBJECT INDEX C13

Structural analysis of pectic polysaccharides by base-catalysed β-elimination in the presence of sodium borodeuteride, 117

- Structural studies of a neutral polymer (the putative O10 antigen) isolated from the lipopolysaccharide of the O10 reference strain of Serratia marcescens, 303
- Structural studies of an acidic galactoglucomannan from the O3 reference strain (C.D.C.) 863-57) of Serratia marcescens, 295
- Structure of the neutral carbohydrate sidechains in anti-complementary acidic polysaccharides from the root of *Angelica* acutiloba kitagawa, 255
- Structure of indica rice starches (IR 48 and IR 64) having intermediate affinities for iodine, 287
- Sugars, 2,5-anhydro, a facile formation of, by ring contraction in methyl hexopyranoside 2triflates under conditions of nucleophilic displacement, 67

- Sugars, C-2 epimerisation in aqueous solutions of thiazolidine-4(R)-carboxylic acids derived from, 223
- Synthesis and crystal and molecular structure of 4-(p-arabino-tetritol-1-yl)-4-imidazolin-2-ylideneammonium chloride, 139
- Synthesis and hydrolysis of a series of deoxyand deoxyfluoro-α-D-glucopyranosyl phosphates, 43
- Synthesis of glycofurano[2,1-d]imidazolidin-2-ones, 1
- 4-(D-arabino-Tetritol-1-yl)-4-imidazolin-2-ylideneammonium chloride, synthesis and crystal and molecular structure of, 139
- Thiazolidine-4(R)-carboxylic acids derived from sugars, C-2 epimerisation in aqueous solutions of, 223
- 2-Thioglycosides of N-acetylneuraminic acid, stereoselective synthesis of, 35
- X-ray study of a new dioxopiperazine containing carbohydrate side-chains, an, 187