

SUBJECT INDEX

- Acetan, 319
- Acetobacter xylinum*, 319
- O*-Acetylated cellulose by the reductive-cleavage method, analysis of positions of substitution of *O*-acetyl groups in partially, 167
- Acetylated or benzoylated 1,5-anhydro-*D*-galactitol, authentic standards for the reductive-cleavage method. The positional isomers of partially methylated and, 1
- O*-Acetyl groups in partially *O*-acetylated cellulose by the reductive-cleavage method, analysis of positions of substitution of, 167
- N*-Acetylneuraminic acid and 3-deoxy-*D*-manno-2-octulosonic acid (Kdo), synthesis of carbocyclic analogues, 53
- 6-*O*-Acyl and 6,6'-di-*O*-acylsucroses, a new synthesis, 79
- Alditols, separation and quantitation of enantiomeric galactoses and their mono-*O*-methyl ethers as their diastomeric acetylated 1-deoxy-1-(2-hydroxypropylamino), 333
- Aldulose bis(phenylhydrazones), isopropylideneation of, 349
- Algal galactans by methylation and reductive partial-hydrolysis, the structural analysis of disaccharides from red, 183
- Aliphatic chain packing, 29
- Alkyl-gluconamides, 29
- Amphiphilic molecules, 29
- Bacterial polysaccharides, 319
- Barbital, phenobarbital, metharbital, and mephobarbital, synthesis of *N*- β -*D*-glucopyranosyluronate derivative of, 259
- Benzoylated 1,5-anhydro-*D*-galactitol, authentic standards for the reductive-cleavage method. The positional isomers of partially methylated and acetylated or, 1
- Biantennary penta- and hepta-saccharides having two 6-deoxy-*D*-galactose residues at the nonreducing end and evaluation of 6-deoxy-*D*-galactosyl transfer to glycoprotein using bovine β -(1 \rightarrow 4)-galactosyltransferase and UDP-6-deoxy-*D*-galactose, enzymic transfer of 6-modified residues: Synthesis of, 273
- Bilayer, 43
- Blood group A type glycopeptide present in human blood mucin, stereoselective total synthesis of a, 227
- Bradyrhizobium* species within soybean nodules, the structure of the novel polysaccharide produced by, 303
- Bromination of sugar enones and enonolactones, 99
- Capsular polysaccharide, 295
- Capsular polysaccharide from *Streptococcus pneumoniae* serotype 10A, full assignment of the NMR spectrum, 175
- Carbocyclic analogues of 3-deoxy-*D*-manno-octulosonic acid (Kdo) and *N*-acetylneuraminic acid, synthesis, 53
- Cellulose by the reductive-cleavage method, analysis of positions of substitution of *O*-acetyl groups in partially *O*-acetylated, 167
- Chlorogenic acid: water activity dependence, cyclomaltoheptaose (β -cyclodextrin) and hydroxyethyl-substituted β -cyclodextrin inclusion complex formation with, 201
- Conformational analysis, 17
- Core/lipid A region of the lipopolysaccharide from *Klebsiella pneumoniae* rough mutant R20/O⁻ structural investigation, C1
- Crystal packing, 29
- Crystal structure, 43
- Cyanogenic glycoside, 17
- (η -Cyclodextrin), isolation, purification and characterization of cyclomaltoheptaose, 369
- Cyclomaltoheptaose (η -cyclodextrin), isolation, purification and characterization of, 369
- Cyclomaltoheptaose (β -cyclodextrin) and hydroxyethyl-substituted β -cyclodextrin inclu-

- sion complex formation with chlorogenic acid: water activity dependence, 201
- 6-Deoxy-D-galactose residues at the nonreducing end and evaluation of 6-deoxy-D-galactosyl transfer to glycoprotein using bovine β -(1 \rightarrow 4)-galactosyltransferase and UDP-6-deoxy-D-galactose, enzymic transfer of 6-modified residues: Synthesis of biantennary penta- and hepta-saccharides having two, 273
- 6-Deoxy-D-galactosyl transfer to glycoprotein using bovine β -(1 \rightarrow 4)-galactosyltransferase and UDP-6-deoxy-D-galactose, enzymic transfer of 6-modified residues: Synthesis of biantennary penta- and hepta-saccharides having two 6-deoxy-D-galactose residues at the nonreducing end and evaluation of, 273
- 3-Deoxy-D-manno-2-octulosonic acid (Kdo) and N-acetylneuraminic acid, synthesis of carbocyclic analogues, 53
- Diaminopyranoses forming the repeating unit, the structure of the O-specific polysaccharide from *Thiobacillus* sp. IFO 14570, with three different, 157
- Diastereomeric acetylated 1-deoxy-1-(2-hydroxypropylamino)alditols, separation and quantitation of enantiomeric galactoses and their mono-O-methyl ethers as their, 333
- Disaccharides from red algal galactans by methylation and reductive partial-hydrolysis, the structural analysis of, 183
- 3D structure, 17
- Enones and enonolactones, bromination of sugar, 99
- Enonolactones, bromination of sugar enones, 99
- Escherichia coli*, 295
- Galactans by methylation and reductive partial-hydrolysis, the structural analysis of disaccharides from red algal, 183
- D-Galactitol, authentic standards for the reductive-cleavage method. The positional isomers of partially methylated and acetylated or benzoylated 1,5-anhydro-, 1
- Galactoses and their mono-O-methyl ethers as their diastereomeric acetylated 1-deoxy-1-(2-hydroxypropylamino)alditols, separation and quantitation of enantiomeric, 333
- β -(1 \rightarrow 4)-Galactosyltransferase and UDP-6-deoxy-D-galactose, enzymic transfer of 6-modified residues: Synthesis of biantennary penta- and hepta-saccharides having two 6-deoxy-D-galactose residues at the nonreducing end and evaluation of 6-deoxy-D-galactosyl transfer to glycoprotein using bovine, 273
- N- β -D-Glucopyranosyluronate derivatives of barbital, phenobarbital, metharbital, and mephobarbital, synthesis of, 259
- Glucosidase, 17
- D-Glucose, an alternative synthesis of (+)-*epi-allo*-muscarine from, 343
- Glycopeptide present in human blood mucin, stereoselective total synthesis of a blood group A type, 227
- Glycoprotein using bovine β -(1 \rightarrow 4)-galactosyltransferase and UDP-6-deoxy-D-galactose, enzymic transfer of 6-modified residues: Synthesis of biantennary penta- and hepta-saccharides having two 6-deoxy-D-galactose residues at the nonreducing end and evaluation of 6-deoxy-D-galactosyl transfer to, 273
- Glycosaminoglycan, 111
- Glycosurfactant, 43
- Glycosylated hexapeptide of human sialophorin, solid-phase synthesis using the trichloroacetimidate method, 217
- Hafnia alvei* strain 1192 lipopolysaccharide, structural studies of the O-specific chain and a core hexasaccharide, 125
- Heparin, characterisation by LSI-MS and ^1H NMR spectroscopy of oligosaccharides of porcine intestinal, 139
- Heterodendrin, 17
- ^1H NMR spectroscopy and liquid secondary ion mass spectrometry, characterisation of oligosaccharides of porcine intestinal heparin, 139
- Human blood mucin, stereoselective total synthesis of a blood group A type glycopeptide present in, 227
- Hydrogen bond, 43
- Hydrogen bonding, 29
- Inclusion complex formation with chlorogenic acid: water activity dependence, cyclomaltoheptaose (β -cyclodextrin) and hydroxyethyl-substituted β -cyclodextrin, 201
- Interdigitated structure, 43
- Isopropylidenation of aldulosulose bis(phenylhydrazones), 349
- K43 antigen, 295
- Klebsiella pneumoniae* rough mutant R20/O1 $^-$, structural investigation on the carbohydrate backbone of the lipopolysaccharide, C1
- Lipopolysaccharide from *Klebsiella pneumoniae* rough mutant R20/O1 $^-$, structural investigation of the carbohydrate backbone, C1

- Lipopolysaccharide, structural studies of the O-specific chain and a core hexasaccharide of *Hafnia alvei* strain 1192, 125
- Liquid secondary ion mass spectrometry (LSIMS), 111
- D-Mannitol. Comparison of NMR spectral results for the solid state and solution with those of the X-ray structural determination, synthesis of 3,4-di-O-acetyl-2,5-anhydro-1,6-dideoxy-1,6-diiodo-, 191
- Mephobarbital, synthesis of *N*- β -D-glucopyranosyluronate derivatives of barbital, phenobarbital, metharbital, and, 259
- Metharbital, and mephobarbital, synthesis of *N*- β -D-glucopyranosyluronate derivatives of barbital, phenobarbital, 259
- Methylated and acetylated or benzoylated 1,5-anhydro-D-galactitol, authentic standards for the reductive-cleavage method. The positional isomers of partially, 1
- Methylation and reductive partial-hydrolysis, the structural analysis of disaccharides from red algal galactans by, 183
- MM2, 17
- (+)-*epiallo*-Muscarine, an alternative synthesis from D-glucose, 343
- Neoglycolipids, 111
- Nitroxyl radical-mediated oxidation of primary alcohol groups in water-soluble glucans, 89
- NMR, 17
- NMR spectral results for the solid state and solution with those of the X-ray structural determination, synthesis of 3,4-di-O-acetyl-2,5-anhydro-1,6-dideoxy-1,6-diiodo-D-mannitol. Comparison of, 191
- NMR spectroscopy, 295, 319
- Nonionic surfactant, 43
- Oligosaccharides of porcine intestinal heparin, characterisation by LSI-MS and ^1H NMR spectroscopy, 139
- Oxymercuration, 111
- Phenobarbital, metharbital, and mephobarbital, synthesis of *N*- β -D-glucopyranosyluronate derivatives of barbital, 259
- Polysaccharide from *Streptococcus pneumoniae* serotype 10A, full assignment of the NMR spectrum of the capsular, 175
- Polysaccharide produced by *Bradyrhizobium* species within soybean nodules, the structure of the novel, 303
- Primary alcohol groups oxidation in water soluble glucans with nitroxyl radicals, 89
- Reductive-cleavage method, analysis of positions of substitution of O-acetyl groups in partially O-acetylated cellulose by the, 167
- Reductive-cleavage method. The positional isomers of partially methylated and acetylated or benzoylated 1,5-anhydro-D-galactitol, authentic standards for the, 1
- Reductive partial-hydrolysis, the structural analysis of disaccharides from red algal galactans by methylation and, 183
- Solid-phase synthesis of a glycosylated hexapeptide of human sialophorin, using the trichloroacetimidate method, 217
- O-Specific polysaccharide and a core hexasaccharide of the *Hafnia alvei* strain 1192 lipopolysaccharide, structural studies, 125
- O-Specific polysaccharide from *Thiobacillus* sp. IFO 14570, with three different diaminyranoses forming the repeating unit, the structure of the, 157
- Stereospecific synthesis of (+)-*epiallo*-muscarine from D-glucose, 343
- Streptococcus pneumoniae* serotype 10A, full assignment of the NMR spectrum of the capsular polysaccharide, 175
- Structural analysis of disaccharides from red algal galactans by methylation and reductive partial-hydrolysis, the, 183
- Structure of the novel polysaccharide produced by *Bradyrhizobium* species within soybean nodules, the, 303
- Structure of the O-specific polysaccharide from *Thiobacillus* sp. IFO 14570, with three different diaminyranoses forming the repeating unit, the, 157
- Substitution of O-acetyl groups in partially O-acetylated cellulose by the reductive-cleavage method, analysis of positions of, 167
- Sucrose and sodium phosphate, the preparation of sucrose monophosphates from dried mixtures of, 359
- Sucrose monophosphates from dried mixtures of sucrose and sodium phosphate, the preparation of, 359
- Surfactant, 43
- Synthesis of a blood group A type glycopeptide present in human blood mucin, stereoselective total, 227
- Synthesis of 3,4-di-O-acetyl-2,5-anhydro-1,6-dideoxy-1,6-diiodo-D-mannitol. Comparison of NMR spectral results for the solid state and solution with those of the X-ray structural determination, 191

TLC-LSIMS, 111

Trichloroacetimidate method, use in the solid-phase synthesis of a glycosylated hexapeptide of human sialophorin, 217

UDP-6-deoxy-D-galactose, enzymic transfer of 6-modified residues: Synthesis of biantennary penta- and hepta-saccharides having two 6-deoxy-D-galactose residues at the nonreducing end and an evaluation of 6-deoxy-D-galactosyl transfer to glycoprotein using

bovine β -(1 \rightarrow 4)-galactosyltransferase and, 273

Water-soluble glucans oxidation of primary alcohol groups with nitroxyl radicals, 89

X-ray analysis, 43

X-ray structural determination, synthesis of 3,4-di-O-acetyl-2,5-anhydro-1,6-dideoxy-1,6-diiodo-D-mannitol. Comparison of NMR spectral results for the solid state and solution with those of the, 191