

CARBOHYDRATE RESEARCH, VOL. 165 (1987)

SUBJECT INDEX

- Acetal linkage, formation of an unusually stable, 23
- Acetylation of acylhydrazones of penta-*O*-acetyl-*aldehydo*-D-galactose, substituent effects in the, 318
- Action of alkali on di-*O*-(2-bromoethylidene)-D-mannitols: formation of an unusually acid-stable acetal linkage, 23
- N*-Acyl derivatives of chitosan and their hydrolysis by chitinase, 120
- Acylhydrazones of penta-*O*-acetyl-*aldehydo*-D-galactose, substituent effects in the acetylation of, 318
- Aeromonas salmonicida*, synthesis of *O*-specific chain of lipopolysaccharide from, 207
- Amyloses of various origins and molar fractions of unbranched and branched molecules, structures of branched molecules of, 139
- Ammonium sulfate, fractionation of chondroitin sulfate C in the presence of, 275
- Analogues of apramycin, synthesis of, 129
- Apramycin analogues, synthesis of, 129
- Arabinans and galactans, development of, during the maturation of hypocotyl cells of mung bean (*Vigna radiata* Wilczek), 31
- Binding site of heparin to Antithrombin-III, conformation of the pentasaccharide corresponding to the, c1
- Bovine colostrum, chemical structure of three neutral trisaccharides from, 43
- Branched molecules of amyloses of various origins and molar fractions of unbranched and branched molecules, structures of, 139
- ¹³C chemical-shift tensors, in a single crystal of methyl α -D-glucopyranoside, determination of the, 161
- Celluloses, substituted, solution hydrolysis of the D-glucosidic linkages in, influence of location of substituents on, 69
- Characterization, by the binding of D-mannono-lactone of the subsites adjacent to the catalytic site of glucoamylase from *Rhizopus niveus*, 155
- Chitinases from melon plants infected by *Colletotrichum lagenarium*, purification and some properties of, 93
- Chitins of variable structure, infrared and X-ray diffraction data on, 105
- Chitosan, *N*-acyl derivatives of, and their hydrolysis by chitinase, 120
- Chondroitin sulfate C, shark cartilage, fractionation of, 275
- Colostrum, bovine, chemical structure of three neutral trisaccharides from, 43
- Conformation of the pentasaccharide corresponding to the binding site of heparin to Antithrombin-III, c1
- Conformational analysis of tetrasaccharides related to the structure of *N*-glycoproteins, 251
- "Core" tetrasaccharide of *N*-glycoproteins, synthesis of, 229
- Cork of *Quercus suber*, structural studies of a hemicellulose B fraction from the, 134
- 3-Deoxy-D-manno-oct-2-ulosonic acid (KDO), the reactions in dilute acid of, 17
- 6-Deoxy-1-thio- β -D-glucopyranoside, purin-6-yl, synthesis and biological properties of, 299
- Determination of the ¹³C chemical-shift tensors in a single crystal of methyl α -D-glucopyranoside, 161
- Development of arabinans and galactans during the maturation of hypocotyl cells of mung bean (*Vigna radiata* Wilczek), 31
- Different rotamer populations around the C-5-C-6 bond for α - and β -D-galactopyranosides through the combined interaction of the gauche and anomeric effects, a 300-MHz ¹H-n.m.r. and MNDO study of, 1
- 2,6-Dioxabicyclo[3.3.0]octan-3-one, synthesis from D-glucose of (1*R*,5*R*)-, 313
- Enantiospecific synthesis of (4*R*,5*R*)-5-hydroxy-4-decanolide from D-glucose, 116
- Escherichia coli* O78 O-antigen polysaccharide, structural studies of the, 87
- Fluorinated oligosaccharides, monodeoxy-, mucin-type, synthesis of, c14
- Formation of 6-deoxy-6-iodohexopyranosides as substrates for the hex-5-enose degradation, 281
- D-Fructans, from *Streptococcus mutans* serotype, b, c, e, and f strains, structural determination of, by ¹³C-n.m.r. spectroscopy, 150

- F.t.-i.r. spectra of sugars, vibrational assignments and isomerization rate-constants from time-dependent, 173
- β -D-Galactopyranoside protected at O-3 and O-6, synthesis of β -D-mannopyranoside from, c11
- Galactopyranosides, an n.m.r. and MNDO study of different rotamer populations around the C-5-C-6 bond for α - and β -D-, 1
- Gauche and anomeric effects, an n.m.r. and MNDO study of different rotamer populations around the C-5-C-6 bond for α - and β -D-galactopyranosides through the combined interactions of the, 1
- β -D-Glucan secreted by *Phanerochaete chrysosporium* in continuous culture, structure of the, 146
- Glucoamylase, from *Rhizopus niveus*, characterization of the subsites adjacent to the catalytic site of, by the binding of D-mannonolactone, 155
- β -D-Glucopyranose, molecular dynamics simulations of, 306
- α -D-Glucopyranoside, methyl determination of the ^{13}C chemical-shift tensors in a single crystal of, 161
- 4-O- β -D-Glucopyranosyl- α -L-rhamnopyranoside, 2,3,3',6'-tetra-O-methyl. allyl and benzyl, synthesis of, 197
- D-Glucose, synthesis of (1R,5R)-2,6-dioxabicyclo[3.3.0]octan-3-one from, 313
- N-Glycoproteins, synthesis of tetrasaccharides related to the core of, 229
- N-Glycoproteins, conformational analysis of tetrasaccharides related to the structure of, 251
- Hemicellulose B fraction from the cork of *Quercus suber*, structural studies of a, 134
- Hex-5-enose degradation, formation of 6-deoxy-6-iodo-hexopyranosides as substrates for the, 281
- Hexopyranosides, 6-deoxy-6-iodo-, formation of, as substrates for the hex-5-enose degradation, 281
- Hydrolysis of N-acyl derivatives of chitosan by chitinase, 120
- Hydroperoxides derived from sugars, stable enantiomerically pure, 111
- 5-Hydroxy-4-decanolide from D-glucose, an enantiospecific synthesis of (4R,5R)-, 116
- Hypocotyl cells of mung bean (*Vigna radiata* Wilczek), development of arabinans and galactans during the maturation of, 31
- Influence of the location of substituents in substituted celluloses on solution hydrolysis of the D-glucosidic linkages, 69
- Infrared and X-ray diffraction data on chitins of variable structure, 105
- Inversion at C-2 and C-4 of a β -D-galactopyranoside protected at O-3 and O-6, c11
- Light-scattering studies of pectic polysaccharides from the middle lamellae and primary cell walls of cider apples, static and dynamic, 53
- Lipopolysaccharide from *Aeromonas salmonicida*, O-specific chain, synthesis of, 207
- D-Mannitols, di-O-(2-bromomethylidene)-, the action of alkali on, 23
- β -D-Mannopyranoside protected at O-3 and O-6, synthesis of, c11
- 3-O- α -D-Mannopyranosyl- α -D-talopyranoside, methyl, synthesis of, 189
- Melon plants infected by *Colletotrichum lagenarium*, purification and some properties of chitinases from, 93
- Molecular dynamics simulations of β -D-glucopyranose, 306
- Mucin-type oligosaccharides. monodeoxyfluorinated, synthesis of, c14
- Mycobacterium leprae*, synthesis of the antigenic disaccharide of, 197
- Nigeran, synthesis of trisaccharide glycosides related to, 123
- Oct-2-ulosonic acid (KDO), the reactions in dilute acid of 3-deoxy-D-manno-, 17
- Oligosaccharides, Mucin-type. monodeoxyfluorinated, synthesis of, c14
- Pectic polysaccharides form the middle lamellae and primary cell walls of cider apples, static and dynamic light-scattering studies of, 53
- Pentasaccharide corresponding to the binding site of heparin to Antithrombin-III, conformation of the, c1
- Phanerochaete chrysosporium*, structure of the β -D-glucan secreted in continuous culture by, 146
- Polysaccharide, capsular, of *Klebsiella* serotype K 40, structure of the, 77
- Polysaccharide, structural studies of the *Escherichia coli* O78 O-antigen, 87
- Purification and some properties of chitinases from melon plants infected by *Colletotrichum lagenarium*, 93
- Purin-6-yl 6-deoxy-1-thio- β -D-glucopyranoside, synthesis and biological properties of, 299
- Reactions of 3-deoxy-D-manno-oct-2-ulosonic acid (KDO) in dilute acid, 17
- α -L-Rhamnopyranoside, allyl and benzyl 4-O- β -D-glucopyranosyl-, 2,3,3',6'-tetra-O-methyl, synthesis of, 197

- Ribavirin, 5'-*O*- β -D-glucopyranosyl and 5'-*O*- β -D-galactopyranosyl derivatives, synthesis of, 267
- Shark cartilage chondroitin sulfate C, fraction of, 275
- O*-Specific chain of lipopolysaccharide from *Aeromonas salmonicida*, synthesis of, 207
- Stable, enantiomerically pure hydroperoxides derived from sugars, 111
- Static and dynamic light-scattering studies of pectic polysaccharides from the middle lamellae and primary cell walls of cider apples, 53
- Structural determination of D-fructans from *Streptococcus mutans* serotype b, c, e, and f strains, by ^{13}C -n.m.r. spectroscopy, 150
- Structural studies of a hemicellulose B fraction from the cork of *Quercus suber*, 134
- Structural studies of the *Escherichia coli* O78 O-antigen polysaccharide, 87
- Structure of the capsular polysaccharide of *Klebsiella* serotype K 40, 77
- Structure of the β -D-glucan secreted by *Phanerochaete chrysosporium* in continuous culture, 146
- Structures of branched molecules of amyloses of various origins, and molar fractions of unbranched and branched molecules, 139
- Substituent effects in the acetylation of acylhydrazones of penta-*O*-acetyl-aldehydo-D-galactose, 318
- Sugars, stable enantiomerically pure hydroperoxides derived from, 111
- Synthesis of apramycin analogues, 129
- Synthesis of 5'-*O*- β -D-glucopyranosyl and 5'-*O*- β -D-galactopyranosyl derivatives of ribavirin, 267
- Synthesis of (4*R*,5*R*)-5-hydroxy-4-decanolide from D-glucose, an enantiospecific, 116
- Synthesis of (1*R*,5*R*)-2,6-dioxabicyclo[3.3.0]octan-3-one from D-glucose, 313
- Synthesis of trisaccharide glycosides related to nigeran, 123
- α -D-Talopyranoside, 3-*O*- α -D-mannopyranosyl- and 3-*O*- α -D-talopyranosyl-, synthesis of, 189
- 3-*O*- α -D-Talopyranosyl- α -D-talopyranoside, methyl, synthesis of, 189
- Tetrasaccharides related to the core of *N*-glycoprotein, synthesis of, 229
- Tetrasaccharides related to the structure of *N*-glycoproteins, conformational analysis of, 251
- 1-Thio- β -D-glucopyranoside, 6-deoxy-, purin-6-yl, synthesis and biological properties of, 299
- Trisaccharide glycosides related to nigeran, synthesis of, 123
- Trisaccharides, neutral, from bovine colostrum, chemical structures of, 43
- Vibrational assignments and isomerization rate-constants from time-dependent F.t.-i.,r. spectra of sugars, 173
- X-Ray diffraction and infrared data on chitins of variable structure, 105