

CARBOHYDRATE RESEARCH, VOL. 173 (1988)

SUBJECT INDEX

- Ab initio* SCF energy calculations of the rotational orientation of each of the exocyclic groups of 6-*O*-methyl- β -D-tagatofuranose, 197
- O*-(2-Acetamido-2-deoxy- β -D-glucopyranosyl)-(1 \rightarrow 3)- β -D-galactopyranoside, 4-nitrophenyl, *O*- α -L-fucopyranosyl-(1 \rightarrow 3)-, synthesis of, 297
- N*-Acetylglucosaminyltransferase V, synthesis of selective acceptor for, 263
- 2-Acylamino-2,6-dideoxy-D-glucopyranose-6-sulphonates, syntheses of sodium, 33
- Affinity chromatography on chitosan-based materials, evaluation of, 285
- Anti- α -L-arabinofuranose antibodies: purification, immunochemical characterization and use in histochemical studies of plant cell-wall polysaccharides, 133
- Antibodies, anti- α -L-arabinofuranose, purification, immunochemical characterization, and use in histochemical studies of plant cell-wall polysaccharides, 133
- Borate ions, complexes with guar D-galacto-D-mannan of, 175
- The branched malto-oligosaccharides resulting from the action of *Bacillus macerans* cyclamylase glucanotransferase on 6-*O*- α -D-glucopyranosylcyclomaltohexaose plus D-glucose, 324
- Cellulose (3-chlorophenyl)urethane, formation of liquid-crystalline phases by, 75
- Celluloses I and II and related mono- and oligosaccharides, second derivative F.t.-i.r. spectra of, 185
- Characterization of rabbit antibodies that recognize determinants on naturally occurring glycoproteins, 169
- Chitosan-based, affinity-chromatography materials, synthesis and evaluation of, 285
- Conformational and X-ray investigations of 7,8-dideoxy-1,2:3,4-di-*O*-isopropylidene-6-*O*-methyl-D-glycero- α -D-galacto-oct-7-ynopyranose, 151
- Conformational and X-ray investigations of methyl 2,6-di-*O*-acetyl-3,4-anhydro- α -DL-(6,6- 2 H $_2$)talopyranoside, 145
- Determination of the structure of the *Escherichia coli* K100 capsular polysaccharide, cross-reactive with the capsule from Type B *Haemophilus influenzae*, 65
- 1,2-Dideoxy-3-heptulose derivatives, synthesis of, 41
- Disaccharides, (1 \rightarrow 4)- and (1 \rightarrow 6)-linked, interaction of, with the Fenton reagent under physiological conditions, 89
- Enhancement of protonated molecular ions and ammonium molecular ion complexes in direct liquid introduction-mass spectrometry of carbohydrates, 101
- Escherichia coli* K18, K22, and K100, antigens, comparative structural elucidation of, as related ribosyl-ribitol phosphates, 243
- Ethers of *myo*-inositol, synthesis of some benzyl and methyl, 205
- Fenton reagent, interaction of the, with (1 \rightarrow 4)- and (1 \rightarrow 6)-linked disaccharides, under physiological conditions, 89
- F.t.-i.r. spectra of cellulose I and II and related mono- and oligo-saccharides, second derivative, 185
- O*- α -L-Fucopyranosyl-(1 \rightarrow 3)-*O*-(2-acetamido-2-deoxy- β -D-glucopyranosyl)-(1 \rightarrow 3)- β -D-galactopyranoside, 4-nitrophenyl, synthesis of, 297
- G Group streptococcus, structure of the polysaccharide from, 255
- D-Galacto-D-mannan, from *Melilotus officinalis* seeds, 159
- D-Galacto-D-mannan, guar, complexes with borate ions of, 175
- β -D-Galactopyranoside, 4-nitrophenyl, *O*- α -L-fucopyranosyl-(1 \rightarrow 3)-*O*-(2-acetamido-2-deoxy- β -D-glucopyranosyl)-(1 \rightarrow 3)-, synthesis of, 297
- Galactopyranosyluronate derivatives for oligosaccharide synthesis, preparation of, 306
- β -D-GlcNAc-(1 \rightarrow 2)- α -D-Manp-(1 \rightarrow 6)- β -D-ManpO(CH $_2$) $_6$ CO $_2$ Me, synthesis of, 263
- D-Glucan, antitumor, water-soluble, from the carophores of *Tylophilus felleus*, 316
- Glycoproteins, naturally occurring, characteriza-

- tion of rabbit antibodies that recognize determinants on, 169
- Group G streptococcal polysaccharide, structure of, 255
- Guar D-galacto-D-mannan, complexes with borate ions of, 175
- Heptulose, synthesis of derivatives of 1,2-dideoxy-, 41
- Heterocycles, synthesis of 4-thio-C-nucleoside analogues by dehydration of 4-thio-polyhydroxyalkyl, 17
- Heterocyclic compounds, synthesis of D-ribosylamines, D-ribosepyranosyl isothiocyanates, and D-ribosepyranosylthiureas and their transformations into, 1
- A ^2H -N.m.r. spectral method for determination of the degree of polymerization of reducing oligosaccharides, 292
- O-Hydroxypropyl)cellulose, phenylalkanoyl esters, formation of liquid-crystalline phases by, 75
- Inositol, synthesis of some benzyl and methyl ethers of *myo*, 205
- Interaction of (1 \rightarrow 4)- and (1 \rightarrow 6)-linked disaccharides with the Fenton reagent under physiological conditions, 89
- O-Isopropylidene-1,5-O-methylene derivative of β -D-ribofuranose, the 2,3-, 303
- Kinetics and subsite mapping of a D-xylobiose-producing *Aspergillus niger* Endo-(1 \rightarrow 4)- β -D-xyylanase, 273
- Liquid-crystalline phases, formation by two phenylalkanoyl esters of O-(hydroxypropyl)cellulose and cellulose (3-chlorophenyl)urethane, 75
- Location of the O-acetyl substituents of a nonasaccharide repeating unit of sycamore extracellular xyloglucan, 113
- Malto-oligosaccharides, the branched, resulting from the action of *Bacillus macerans* cyclodextrin glucanotransferase of 6-O- α -D-glucopyranosylcyclomaltotetraose plus D-glucose, 324
- Mannan, a (1 \rightarrow 3)- α -D-, from a water extract of *Dictyophora indusiata* Fisch., 332
- Mass spectrometry, direct liquid introduction, of carbohydrates, enhancement of protonated molecular ions and ammonium-molecular ion complexes in, 101
- 8-Methoxycarbonyloctyl glycoside, selective acceptor for N-acetylglucosaminyltransferase V, synthesis of, 263
- Methyl (allyl 2,3-di-O-benzyl- β -D-galactopyranosid)uronate, synthesis, 306
- Methyl 2,6-di-O-acetyl-3,4-anhydro- α -DL-(6,6- $^2\text{H}_2$)talopyranoside, X-ray and conformational investigations of, 145
- Methyl (2,3-di-O-benzyl- α - and - β -D-galactopyranosyl fluoride)uronate, synthesis, 306
- O-Methylene derivatives of β -D-ribofuranose, the 1,5- and the 2,3-O-isopropylidene-1,5-, 303
- Oct-7-ynopyranose, X-ray and conformational investigations of 7,8-dideoxy-1,2:3,4-di-O-isopropylidene-6-O-methyl-D-glycero- α -D-galactose-, 151
- Oligosaccharides, reducing, a ^2H -n.m.r.-spectral method for determination of the degree of polymerization of, 292
- Polysaccharide, capsular, of *Escherichia coli* K100, determination of the structure of the, 65
- Polysaccharide from *Streptococcus pneumoniae* type 18A, structural studies of the capsular, 227
- Polysaccharide from *Streptococcus pneumoniae* type 18F, structural studies of the capsular, 217
- Polysaccharides, capsular, of *Escherichia coli* K93 and K53, structural studies of the, 53
- Ribofuranose, the 2,3-O-isopropylidene-1,5-O-methylene and 1,5-O-methylene derivatives of β -D-, 303
- D-Ribosylamines, D-ribosepyranosyl isothiocyanates, and D-ribosepyranosylthiureas, synthesis of, and their transformations into heterocyclic compounds, 1
- Ribosyl-ribitol phosphates, comparative structural elucidation of the *Escherichia coli* K18, K22, and K100 antigens as related, 243
- Second derivative F.t.-i.r. spectra of celluloses I and II and related mono- and oligo-saccharides, 185
- Seeds, of *Melilotus officinalis*, a D-galacto-D-mannan from, 159
- Sodium 2-acylamino-2,6-dideoxy-D-glucopyranose-6-sulphonates, syntheses of, 33
- Solanum neocardenassii* Hawkes & Hjerting (PI 498129), type B glandular trichomes, 2,3,4,3'-tetra-O-acetylated sucrose esters from, 235
- Streptococcus, group G, polysaccharide, structure of, 255
- Streptococcus pneumoniae* type 18A, structural studies of the capsular polysaccharide from, 227
- Streptococcus pneumoniae* type 18F, structural studies of the capsular polysaccharide from, 217
- Structural elucidation of the K18, K22, and K100 antigens of *Escherichia coli* as related ribosyl-ribitol phosphates, comparative, 243
- Structural studies of the capsular polysaccharide

- from *Streptococcus pneumoniae* type 18A 227
- Structural studies of the capsular polysaccharide from *Streptococcus pneumoniae* type 18F 217
- Structural studies of the *Escherichia coli* K93 and K53 capsular polysaccharides, 53
- Sucrose esters, 2,3,4,3'-tetra-*O*-acetylated, from the type B glandular trichomes of *Solanum neocardenassi* Hawkes & Hjerting (PI 498129), 235
- Syntheses of D-ribosylamines, D-ribopyranosyl isothiocyanates, and D-ribopyranosylthioureas, and their transformations into heterocyclic compounds, 1
- Syntheses of sodium 2-acylamino-2,6-dideoxy-D-glucopyranose-6-sulphonates, 33
- Synthesis of 1,2-dideoxy-3-heptulose derivatives, 41
- Synthesis of some benzyl and methyl ethers of myo-inositol, 205
- Synthesis of 4-thio-C-nucleoside analogues by dehydration of 4-thiopolyhydroxyalkyl heterocycles, 17
- β -D-Tagatofuranose, 6-*O*-methyl-, *ab initio* SCF energy calculations of the rotational orientation of each of the exocyclic groups of, 197
- 4-Thio-C-nucleoside analogues, synthesis of, by dehydration of 4-thiopolyhydroxyalkyl heterocycles, 17
- 1-Thio- β -D-glucopyranosyl groups, synthesis of chitosan containing, 285
- Towards Better Carbohydrate Vaccines, (*book review*), C2
- Trichomes, type B glandular, of *Solanum neocardenassi* Hawkes & Hjerting (PI 498129), 2,3,4,3'-tetra-*O*-acetylated sucrose esters from, 235
- Tylophilus felleous*, structure of D-glucan from the carpophores of, 318
- Tylopylan, structure of, 318
- Wood and cellulose: Industrial utilisation, biotechnology, structure and properties, (*book review*), C1
- X-ray and conformational investigations of 7,8-dideoxy-1,2:3,4-di-*O*-isopropylidene-6-*O*-methyl-D-glycero- α -D-galacto-oct-7-ynopyranose, 151
- X-Ray and conformational investigations of methyl 2,6-di-*O*-acetyl-3,4-anhydro- α -DL-(6,6- $^2\text{H}_2$)talopyranoside, 145
- β -D-Xylanase, endo-(1 \rightarrow 4)-, from *Aspergillus niger*, kinetics and subsite mapping of a D-xylobiose- and D-xylose-producing, 273
- Xyloglucan, sycamore extracellular, location of the *O*-acetyl substituents of a nonasaccharide repeating unit of, 113