## CARBOHYDRATE RESEARCH, VOL. 126 (1984)

## SUBJECT INDEX

- α-Abequoside, methyl, preparation of, 343
- 2-Acetamido-2-deoxy-D-glucose, synthesis of S-, N-, and O-glycosyl derivatives of, 27
- L-Arabinopyranosides,  $\alpha$  and  $\beta$ -, 2-O-glycosylated, 2-O-glycosylation shifts of, 177
- Branched-chain sugar, structural studies of yersiniose, a new, 308
- Bromine in the presence of borate, oxidation of dextran T40 with, 162
- Carbohydrate synthesis for nuclear medicine: a new, rapid, and stereospecific route to 2-deoxy-2-fluoro-D-glucose, C6
- N-(Carboxymethyl)chitosans: novel blood anticoagulants, sulfated, 225
- Cellulose, O-(2-hydroxypropyl)-, formation and stereochemistry of 1,2-O-(1-methyl-1,2ethanediyl)-D-glucose acetals formed in the acid-catalyzed hydrolysis, 101
- Chemical-ionization mass spectra of the permethylated sialo-oligosaccharides liberated from gangliosides, 1
- Chitosans, novel blood anticoagulants, sulfated *N*-(carboxymethyl), 225
- Crystal structure and formation of methyl 3-C-acetamidomethyl-3-chloro-2,3,6-trideoxy-4-O-methoxymethyl-α-L-arabino-hexopyranoside, 303
- Cyclohexaamylose, preparation of 6-O-α-D-glucopyranosyl, 215
- Degradation of moenomycin A, stepwise, C1
- 2-Deoxy-2-fluoro-D-glucose, a new, rapid and stereospecific synthesis of, C6
- Determination of the structures of fucosyl-lactose and difucosyl-lactose from the milk of monotremes, using <sup>13</sup>C-n.m.r. spectroscopy, 157
- Determination of the structures of trisaccharides by <sup>13</sup>C-n.m.r. spectroscopy, 125
- Dextransucrase: The direction of chain growth during autopolymerization, 170
- Dextran, the direction of chain growth during autopolymerization to give, 170
- Dextran T40, oxidation of, with bromine in the presence of borate, 162
- 3,6-Dideoxy-4-*C*-(1-hydroxyethyl)-D-*xylo*-hexose, identification of yersiniose as, 308
- Disaccharide,  $O-\beta$ -D-glucopyranosyl- $(1\rightarrow 3)$ -D-

- fructose (laminarabiulose), synthesis of a new, 313
- Dolichyl  $P^2$ - $[O-\beta$ -D-mannopyranosyl- $(1\rightarrow 4)$ -O-(2-acetamido-2-deoxy- $\beta$ -D-glucopyranosyl)- $(1\rightarrow 4)$ -2-acetamido-2-deoxy- $\alpha$ -D-glucopyranosyl] diphosphate and  $P^1$ -dolichyl  $P^2$ - $[O-\alpha$ -D-mannopyranosyl- $(1\rightarrow 3)$ - $O-\beta$ -D-mannopyranosyl- $(1\rightarrow 4)$ -O-(2-acetamido-2-deoxy- $\beta$ -D-glucopyranosyl)- $(1\rightarrow 4)$ -2-acetamido-2-deoxy- $\alpha$ -D-glucopyranosyl] diphosphate, the synthesis of a trisaccharide and a tetrasaccharide lipid intermediate.  $P^1$ -,61
- Efficient synthesis of L-fucose and L-(4-2H)fucose, 165
- Escherichia coli O:7, structural studies of the Ospecific side-chain of the lipopolysaccharide from, 249
- Formation and crystal structure of methyl 3-Cacetamidomethyl-3-chloro-2,3,6-trideoxy-4-Omethoxymethyl-α-L-arabino-hexopyranoside, 303
- Formation, and stereochemistry, of 1,2-O-(1-methyl-1,2-ethanediyl)-D-glucose acetals formed in the acid-catalyzed hydrolysis of O-(2-hydroxypropyl)cellulose, 101
- 2-O-α-L-Fucopyranosyl-3-O-α-D-galactopyranosyl-D-galactose, a new synthesis of, 326
- L-Fucose, and L-(4-<sup>2</sup>H)fucose, an efficient synthesis of, from L-rhamnose, 165
- Fucosyl- and difucosyl-lactose from the milk of monotremes, determination of the structures of, using <sup>13</sup>C-n.m.r. spectroscopy, 157
- β-D-Galactan, isolated from the pods of *Dolichos* lablab Linn., structure of the, 287
- α-D-Galactopyranoside, benzyl 2-acetamido-6-O-(2-acetamido-2-deoxy-β-D-glucopyranosyl)-3-O-[6-O-(2-acetamido-2-deoxy-β-D-glucopyranosyl)-β-D-galactopyranosyl]-2-deoxy-, synthesis of, 115
- α-D-Galactopyranoside, benzyl 2-acetamido-6-O-(2-acetamido-2-deoxy-β-D-glucopyranosyl)-2deoxy-3-O-β-D-galactopyranosyl-, synthesis of, 115
- D-Gluconate, ethyl 2-amino-4,6-O-benzylidene-2deoxy-, reaction of, with acetylenic esters, 81
- Glucopyranoside derivatives: formation of ringcontraction compounds, reactions on methyl 2-

C12 SUBJECT INDEX

- deoxy 2 trifluoroacetamido 3 O trifluoromethylsulfonyl- $\alpha$ -D-, 45
- Glucopyranosylcyclohexaamylose, preparation of  $6-O-\alpha$ -D-, 215
- 2-O-β-D-Glucopyranosyl- and -β-D-galactopyranosyl-α-D-allopyranoside, synthesis of methyl 3-acetamido-3-deoxy-, 331
- D-Glucose, 2-acetamido-2-deoxy-, synthesis of S-, N-, and O-glycosyl derivatives of, 27
- D-Glucose, 1,2-O-(1-methyl-1,2-ethanediyl)-, acetals, formed in the acid-catalyzed hydrolysis of O-(2-hydroxypropyl)cellulose, formation and stereochemistry of, 101
- D-Glucose 6-phosphate, kinetics of oxidation of, by hexachloroiridate(IV) and tetrachloroaurate(III), 321
- Glycosides, 2-linked, n.m.r.-spectral studies of, 177
- S-, N-, and O-Glycosyl derivatives of 2-acetamido-2-deoxy-D-glucose, synthesis of, 27
- Heptasaccharide, branched, preparation of a, by bacteriophage depolymerization of *Klebsiella* K60 capsular polysaccharide, 261
- Heptitols, the <sup>13</sup>C-n m.r. spectra and the conformations of, in solution, 15
- Hexopyranoside, methyl 3,6-dideoxy-α-D-xylo, and its α-L-lyxo-isomer, preparation of, by reduction of epoxides with lithium triethylborohydride, 343
- 2-Imidazolines, 1-aryl-2-(benzylthio)-(1,2-dideoxy-D-glycero-β-L-gluco-heptofurano)[1,2-d]-, preparation of, 91
- Isolation of sulfited oligosaccharides from glycoproteins treated with alkaline sulfite, 279
- Kinetics of oxidation of D-glucose 6-phosphate by hexachloroiridate(IV) and tetrachloroaurate(III), 321
- Laminarabiulose, synthesis of a new disaccharide:  $O-\beta$ -D-glucopyranosyl- $(1\rightarrow 3)$ -D-fructose, 313
- Lipid intermediate.  $P^1$ -Dolichyl  $P^2$ -[O- $\beta$ -D-mannopyranosyl-(1 $\rightarrow$ 4)-O-(2-acetamido-2-deoxy- $\beta$ -D-glucopyranosyl)-(1 $\rightarrow$ 4)-2-acetamido-2-deoxy- $\alpha$ -D-glucopyranosyl] diphosphate and  $P^1$ -dolichyl  $P^2$ -[O- $\alpha$ -D-mannopyranosyl-(1 $\rightarrow$ 3)-O- $\beta$ -D-mannopyranosyl-(1 $\rightarrow$ 4)-O-(2-acetamido-2-deoxy- $\beta$ -D-glucopyranosyl)-(1 $\rightarrow$ 4)-2-acetamido-2-deoxy- $\alpha$ -D-glucopyranosyl] diphosphate, the synthesis of a trisaccharide and a tetrasaccharide, 61
- Lipopolysaccharide from Escherichia coli O:7, structural studies of the O-specific side-chain of the, 249
- Lithium triethylborohydride, for reduction of epoxides, 343

Macromolecular structure of wrinkled- and smooth-pea starch components, 233

- Methyl 3-acetamido-3-deoxy-2-O- $\beta$ -D-glucopyranosyl- and - $\beta$ -D-galactopyranosyl- $\alpha$ -D-allopyranoside, synthesis of, 331
- Methyl 3-C-acetamidomethyl-3-chloro-2,3,6-trideoxy-4-O-methoxymethyl-α-L-arabino-hexopyranoside, the formation and crystal structure of, 303
- Milk of monotremes, determination of the structures of fucosyl- and difucosyl-lactose from the, using <sup>13</sup>C-n.m.r. spectroscopy, 157
- Moenomycin A, stepwise degradation of, Cl
- Mucilage, isolated from the leaves of *Litsea* polyantha, some structural aspects of the, 297 Mucin, synthetic fragments of, 115
- New method of oligosaccharide synthesis: rhamnobioses, 191
- New method of oligosaccharide synthesis: rhamnotrioses, 205
- New synthesis of 2-O-α-L-fucopyranosyl-3-O-α-D-galactopyranosyl-D-galactose, 326
- <sup>13</sup>C-N.m.r. spectra and the conformations of heptitols in solution, 15
- N.m.r.-spectral studies of 2-linked glycosides: 2-O-glycosylation shifts of 2-O-glycosylated  $\alpha$ -and  $\beta$ -L-arabinopyranosides, 177
- <sup>13</sup>C-N.m.r. spectroscopy, determination of the structures of trisaccharides by, 125
- C-Nucleosides, new acyclic, of an imidazole, 91
- Oligosaccharides, sulfited, isolation of, from glycoproteins treated with alkaline sulfite, 279
- Oligosaccharide synthesis, preparation of rhamnobioses by a new method of, 191
- Oligosaccharide synthesis, preparation of rhamnotrioses by a new method of, 205
- Oxidation of dextran T40 with bromine in the presence of borate, 162
- Oxidation of D-glucose 6-phosphate by hexachloroiridate(IV) and tetrachloroaurate(III), kinetics of, 321
- Polysaccharide, capsular, from *Streptococcus* pneumoniae Type 23, structure of the, 271
- Polysaccharide, capsular, of *Klebsiella* K60, preparation of a branched heptasaccharide by bacteriophage depolymerization of, 261
- Preparation of a branched heptasaccharide by bacteriophage depolymerization of *Klebsiella* K60 capsular polysaccharide, 261
- Preparation of 1-aryl-2-(benzylthio)-(1,2-dideoxy-D-glycero-β-L-gluco-heptofurano)[1,2-d]-2-imidazolines, and new, acyclic C-nucleosides of the imidazole, 91
- Preparation of 6-*O*-α-D-glucopyranosylcyclohexaamylose, 215

SUBJECT INDEX C13

- Preparation of methyl 3,6-dideoxy- $\alpha$ -D-xylo-hexopyranoside (methyl  $\alpha$ -abequoside) and its  $\alpha$ -L-lyxo isomer by reduction of epoxides with lithum triethylborohydride, 343
- Reaction of ethyl 2-amino-4,6-O-benzylidene-2deoxy-D-gluconate with acetylenic esters, 81
- Reactions on methyl 2-deoxy-2-trifluoroacetamido-3-O-trifluoromethylsulfonyl-α-D-glucopyranoside derivatives: formation of ring-contraction compounds, 45
- Release of sialic acid from substrates by sialidase in the presence of H<sub>2</sub>[<sup>18</sup>O], 338
- Rhamnobioses, preparation of, by a new method of oligosaccharide synthesis, 191
- Rhamnotrioses, preparation of, by a new method of oligosaccharide synthesis, 205
- Ring-contraction compounds, reactions on methyl 2-deoxy-2-trifluoroacetamido-3-O-trifluoromethylsulfonyl-\alpha-D-glucopyranoside derivatives: formation of, 45
- Sialic acid, release of, by sialidase in the presence of  $H_2[^{18}O]$ , 338
- Stalidase, release of stalic acid from substrates by, in the presence of  $H_2[^{18}O]$ , 338
- Sialo-oligosaccharides liberated from gangliosides, chemical-ionization mass spectra of the permethylated, 1
- Spectra of the permethylated sialo-oligosaccharides liberated from gangliosides, chemicalionization mass, I
- Starch components of the wrinkled and smooth pea, macromolecular structure of the, 233
- Stepwise degradation of moenomycin A, C1
- Structural aspects of the mucilage isolated from the leaves of *Litsea polyantha*, 297
- Structural studies of the O-specific side-chain of the lipopolysaccharide from *Escherichia coli* O:7, 249

- Structure of the capsular polysaccharide from Streptococcus pneumoniae Type 23, 271
- Structure of the β-D-galactan isolated from the pods of *Dolichos lablab* Linn.. 287
- Sulfated N-(carboxymethyl)chitosans: novel blood anticoagulants, 225
- Synthesis of a new disaccharide: O- $\beta$ -D-gluco-pyranosyl- $(1\rightarrow 3)$ -D-fructose (laminarabiulose), 313
- Synthesis of a trisaccharide and a tetrasaccharide lipid intermediate.  $P^1$ -Dolichyl  $P^2$ -[O- $\beta$ -D-mannopyranosyl-( $1\rightarrow 4$ )-O-(2-acetamido-2-deoxy- $\beta$ -D-glucopyranosyl)-( $1\rightarrow 4$ )-2-acetamido-2-deoxy- $\alpha$ -D-glucopyranosyl] diphosphate and  $P^1$ -dolichyl  $P^2$ -[O- $\alpha$ -D-mannopyranosyl·( $1\rightarrow 4$ )-O-(2- acetamido-2-deoxy- $\beta$ -D-glucopyranosyl)-( $1\rightarrow 4$ )-2-acetamido-2-deoxy- $\beta$ -D-glucopyranosyl] diphosphate, 61
- Synthesis of 2-deoxy-2-fluoro-D-glucose, a new, rapid and stereospecific, C6
- Synthesis of  $2-O-\alpha$ -L-fucopyranosyl-3- $O-\alpha$ -D-galactopyranosyl-D-galactose, a new, 326
- Synthesis of methyl 3-acetamido-3-deoxy-2-O- $\beta$ -D-glucopyranosyl- and - $\beta$ -D-galactopyranosyl- $\alpha$ -D-allopyranoside, 331
- Synthetic mucin fragments: benzyl 2-acetamido-6-O-(2-acetamido-2-deoxy-β-D-glucopyranosyl)-2-deoxy-3-O-β-D-galactopyranoside and benzyl 2-acetamido-6-O-(2-acetamido-2-deoxy-β-D-glucopyranosyl)-3-O-[6-O-(2-acetamido-2-deoxy-β-D-glucopyranosyl]-β-D-galactopyranosyl]-2-deoxy-α-D-galactopyranoside, 115
- Trisaccharides, determination by <sup>13</sup>C-n.m.r. spectroscopy of the structures of, 125
- Wrinkled and smooth pea, macromolecular structure of the starch components of the, 233

Yersiniose, a new branched-chain sugar, 308