

# CARBOHYDRATE RESEARCH, VOL. 181 (1988)

## SUBJECT INDEX

- Action of ultrasound on deoxygenated aqueous solutions of D-glucose, 67
- Aminoglycal derivatives, synthesis of, precursors of glycosidic moieties of antitumor anthracyclines, 253
- Amylosucrase: characterization of its product polysaccharide and a study of its inhibition by sucrose derivatives, *Neisseria perflava*, 163
- Angiogenesis, embryonic, inhibition by sulfated polysaccharide-peptidoglycan from *Arthrobacter* sp. of, 135
- 1,5-Anhydro- $\beta$ -L-arabinofuranose from pyrolysis of plant cell-wall materials (biomass), 189
- Anhydro-D-fructopyranosides prepared from D-mannitol, two methyl, 115
- Anti-complementary acidic heteroglycans from the leaves of *Panax ginseng* C. A. Meyer, characterization of, 175
- Arthrobacter* sp., inhibition of embryonic angiogenesis and tumor growth by sulfated polysaccharide-peptidoglycan from, 135
- Aryl  $\alpha$ -L-arabinofuranosides as substrates for arabinofuranosidase, preparation of some, 262
- Assignment of the O-acetyl carbonyl carbon atoms of cellulose triacetate via 2D, long-range, proton-carbon chemical-shift-correlation data, 233
- Azoacetates, ring expansions in carbohydrate chemistry: *gem*, 97
- Azotobacter chroococcum*, characterization of the exocellular polysaccharides from, 143
- Bacteriophage degradation of the capsular polysaccharide from *Klebsiella* K69: location of the O-acetyl groups, 153
- (Biomass), 1,5-anhydro- $\beta$ -L-arabinofuranose from pyrolysis of plant cell-wall materials, 189
- tert*-Butyl glycosides, a new approach to the synthesis and selective hydrolysis of, 246
- <sup>13</sup>C-N.m.r. study of the 6-deoxy-D-altropyranose-containing pentasaccharide chain present in a polysialoglycoprotein isolated from the eggs of *Salvelinus leucomaenis pluvius*, 229
- Candida utilis*. Methylation analysis and fragmentation analysis by controlled acetolysis of the glucomannan, a glucomannan from *Candida utilis*, 197
- Carbonyl carbon atoms of cellulose triacetate via 2D, long-range, proton-carbon chemical-shift correlation data, assignment of the O-acetyl, 233
- Cation interactions in gellan: an X-ray study of the potassium salt, 23
- Cellulose triacetate via 2D, long-range, proton-carbon chemical-shift-correlation data, assignment of the O-acetyl carbonyl carbon atoms of, 233
- Characterization of anti-complementary acidic heteroglycans from the leaves of *Panax ginseng* C. A. Meyer, 175
- Characterization of the exocellular polysaccharides from *Azotobacter chroococcum*, 143
- Conformational features of  $\alpha$ -panose crystal structure and, 41
- Conformations of disaccharide glycosides, the nuclear Overhauser effect and structural factors determining the, 1
- Cotton fiber, structure of xyloglucan from the cell walls of, 273
- Crystal structure and conformational features of  $\alpha$ -panose, 41
- 6-Deoxy-D-altropyranose-containing pentasaccharide chain present in a polysialoglycoprotein isolated from the eggs of *Salvelinus leucomaenis pluvius*, a <sup>13</sup>C-n.m.r. study of the, 229
- 2-Deoxy-D-arabino-[6-<sup>13</sup>C]hexose, synthesis of, 125
- Disaccharide glycosides, the nuclear Overhauser effect and structural factors determining the conformations of, 1
- Epimerization during the acetolysis of 3-O-acetyl-5-O-benzoyl-1,2-O-isopropylidene-3-C-methyl- $\alpha$ -D-ribofuranose, 77
- Expansions in carbohydrate chemistry: *gem*-azoacetates, ring, 97
- $\alpha$ -L-Fucp-(1 $\rightarrow$ 3)- $\beta$ -D-GlcpNAc-(1 $\rightarrow$ 3)- $\beta$ -D-Galp-(1 $\rightarrow$ 3)- $\alpha$ - and - $\beta$ -D-GalpOC<sub>6</sub>H<sub>4</sub>NO<sub>2</sub>(4), synthesis of, 236
- Fungal preparation, Chán huà (*Cordyceps cicadae*), minor protein-containing galactomannans from the insect-body portion of the, 207
- Fungus, *Nomuraea rileyi*, structure of polysaccharide produced by, 282
- Galactomannans, minor protein-containing, from the insect-body portion of Chán huà (*Cordyceps cicadae*), 207
- Gellan: an X-ray study of the potassium salt cation interactions in, 23

- D-Glucan, produced by fungus, *Nomuraea rileyi* structure of, 282
- D-Glucan, D-xylo-, from the cell walls of cotton fiber structure of, 273
- Glucmannan from *Candida utilis*. Methylation analysis and fragmentation analysis by controlled acetolysis of the glucmannan, a 197
- D-Glucose, action of ultrasound on deoxygenated aqueous solutions of, 67
- Glyceraldehyde, synthesis of 2,3-*O*-isopropylidene- and 3-*O*-benzoyl-2-*O*-benzyl-2-*C*-methyl-L-, 267
- Glycosides, a new approach to the synthesis and selective hydrolysis of *tert*-butyl, 246
- Glycosidic moieties of antitumor anthracyclines, synthesis of aminoglycal derivatives as precursors of, 253
- Glycuronans: u.v. absorption and circular dichroism spectra, the interaction of lead(II) with, 13
- Gum, neutral, from seed of *Crotalaria verrucosa*, 287
- Heteroglycans from the leaves of *Panax ginseng* C. A. Meyer, characterization of anti-complementary acidic, 175
- Interaction of lead(II) with glycuronans: u.v. absorption and circular dichroism spectra, 13
- 2,3-*O*-Isopropylidene- and 3-*O*-benzoyl-2-*O*-benzyl-2-*C*-methyl-L-glyceraldehyde, synthesis of, 267
- Ketohexose nucleosides, n.m.r. data on, 217
- Klebsiella* K69, bacteriophage degradation of the capsular polysaccharide from, and location of the *O*-acetyl groups, 153
- Lead(II) with glycuronans: u.v. absorption and circular dichroism spectra, the interaction of, 13
- $\beta$ -D-ManpNAc-(1 $\rightarrow$ 4)- $\alpha$ -D-Glcp-(1 $\rightarrow$ 3)- $\alpha,\beta$ -L-Rhap, synthesis of, 242
- D-Mannitol, two methyl anhydro-D-fructopyranosides prepared from, 115
- Methyl anhydro-D-fructopyranosides prepared from D-mannitol, two, 115
- Methylation analysis and fragmentation analysis by controlled acetolysis of the glucmannan, a glucmannan from *Candida utilis*, 197
- Minor, protein-containing galactomannans from the insect-body portion of the fungal preparation Chán huá (*Cordyceps cicadae*), 207
- Mucin-type tetrasaccharides synthesis of, 236
- N.m.r. data on ketohexose nucleosides, 217
- Neisseria perflava* amylosucrase: characterization of its product polysaccharide and a study of its inhibition by sucrose derivatives, 163
- Neutral seed-gum from *Crotalaria verrucosa*, 287
- Nomuraea rileyi*, fungus, structure of polysaccharide produced by, 282
- Nuclear Overhauser effect and structural factors determining the conformations of disaccharide glycosides, 1
- Nucleosides, n.m.r. data on ketohexose, 217
- Nucleosides with the  $\beta$ -D-ribo and  $\alpha$ -D-arabino configurations, synthesis of 3'-*C*-methyl-, 77
- Olive pulp, structural studies of a xyloglucan from, 278
- $\alpha$ -Panose, crystal structure and conformational features of, 41
- Polysaccharide from *Klebsiella* K69, bacteriophage degradation of the capsular, and location of the *O*-acetyl groups, 153
- Polysaccharides, exocellular, from *Azotobacter chroococcum*, characterization of the, 143
- Polysialoglycoprotein isolated from the eggs of *Salvelinus leucomaenis pluvius*, a <sup>13</sup>C-n.m.r. study of the 6-deoxy-D-altropyranose-containing pentasaccharide chain present in a, 229
- Preparation of some aryl  $\alpha$ -L-arabinofuranosides as substrates for arabinofuranosidase, 262
- Pseudo-trehaloses, synthesis of, 57
- Pyranosides and other carbohydrate model compounds, semiempirical sodium-D rotations of, 223
- Pyrolysis of plant cell-wall materials (biomass), 1,5-anhydro- $\beta$ -L-arabinofuranose from, 189
- Ring expansions in carbohydrate chemistry: gem-azoacetates, 97
- Rotations of pyranosides and other carbohydrate model compounds, semiempirical sodium-D, 223
- Semiempirical sodium-D rotations of pyranosides and other carbohydrate model compounds, 223
- Streptococcus pneumoniae* type 19A polysaccharide, synthesis of trisaccharide from, 242
- Substrates for arabinofuranosidase, preparation of some aryl  $\alpha$ -L-arabinofuranosides as, 262
- Sucrose derivatives, *Neisseria perflava* amylosucrase: characterization of its product polysaccharide and a study of its inhibition by sucrose derivatives, 163
- Sucrose, synthesis of 6-*O*-acetyl-2,3,4-tri-*O*-[(*S*)-3-methylpentanoyl]-, a naturally occurring flavour precursor of tobacco, 89
- Synthesis and selective hydrolysis of *tert*-butyl glycosides, a new approach to the, 246
- Synthesis of 6-*O*-acetyl-2,3,4-tri-*O*-[(*S*)-3-methyl-

- pentanoyl]sucrose, a naturally occurring flavour precursor of tobacco, 89
- Synthesis of aminoglycal derivatives, precursors of glycosidic moieties of antitumor anthracyclines, 253
- Synthesis of 2-deoxy-D-*arabino*-[6-<sup>13</sup>C]hexose, 125
- Synthesis of 2,3-*O*-isopropylidene- and 3-*O*-benzoyl-2-*O*-benzyl-2-*C*-methyl-L-glyceraldehyde, 267
- Synthesis of 3'-*C*-methylnucleosides with the β-D-*ribo* and α-D-*arabino* configurations, 77
- Synthesis of pseudo-trehalose [(1,2,4/3,5)-2,3,4-trihydroxy-5-hydroxymethyl-1-cyclohexyl] D-glucopyranosides, 57
- Tetrasaccharides, mucin-type synthesis of, 236
- Tobacco, synthesis of 6-*O*-acetyl-2,3,4-tri-*O*-[(*S*)-3-methylpentanoyl]sucrose a naturally occurring flavour precursor of, 89
- Trehaloses, synthesis of pseudo-, 57
- Tumor growth, inhibition by sulfated polysaccharide-peptidoglycan from *Arthrobacter* sp. of, 135
- Type 19A polysaccharide of *Streptococcus pneumoniae*, synthesis of trisaccharide component of, 242
- Ultrasound, action of, on deoxygenated aqueous solutions of D-glucose, 67
- X-ray study of the potassium salt cation interactions in gellan: an, 23
- Xyloglucan from olive pulp, structural studies of a, 278
- D-Xylo-D-glucan from the cell walls of cotton fiber, structure of, 273