SUBJECT INDEX

- N-Acetyl-D-neuraminic acid, a facile preparation of alkyl α -glycosides of the methyl ester of, 121
- Advances in carbohydrate chemistry and biochemistry, Volume 39 (book review), c5
- Aldoses, kinetics of oxidation of, by thallium(III) in acid perchlorate medium, 23
- Alkyl α-glycosides of the methyl ester of Nacetyl-p-neuraminic acid, a facile preparation of, 121
- 7-Aminovalienamine, synthesis by [3.3]-sigmatrope rearrangement of, 83
- Amylopectin, location of phosphate groups in potato, 321
- Analysis of 1,2-anhydro-3,4,6-tri-O-benzyl- α -D-glucopyranose and - β -D-mannopyranose, conformational, 1
- Analysis of sugars and sugar derivatives with aid of an enzyme thermistor, calorimetric analysis, 273
- Anhydro-3,4,6-tri-O-benzyl-α-D-glucopyranose and -β-D-mannopyranose, conformational analysis of 1,2-, 1
- L-Ascorbic acid, dehydro-, 3-oxime 2 phenylhydrazone, studies on, and conversion into substituted triazoles, 231
- Ascorbic acid, the reaction of 1,1-dibromopinacolone with L-, 302
- Branched tetrasaccharide from marsupial milk, structure of a, 316
- Calorimetric analysis of sugars and sugar derivatives with aid of an enzyme thermistor, 273
- Carbohydrate hydroxyl groups, diphenylmethylation of, by the reaction with diazo-(diphenyl)methane, 147
- Chain elongation by use of an iron carbonyl reagent: a facile synthesis of 6-deoxyhepto-siduronic acids, 169
- Characterization of keto disaccharides in solution by deuterium-induced, differential isotopeshift ¹³C-n.m.r. spectroscopy, 11
- Chemical investigations on the gum exudate from sajna (Moringa oleifera), 253
- Complexes of methyl glycofuranosides with metal ions in aqueous solution, stoichiometry of the, 312

- Complex-formation between dyes and β -D-glucans, factors affecting precipitation and spectral changes associated with, 283
- Conformational analysis of 1,2-anhydro-3,4,6tri-O-benzyl-α-D-glucopyranose and -β-D-mannopyranose, 1
- Crystal structure of heptyl 1-thio-α-D-mannopyranoside, a liquid-crystal precursor, 59
- Cyclomaltoheptaose (cycloheptaamylose), structure of the benzocaine adduct of, 31
- Deoxy-D-erythro-pentose ("4-deoxy-D-ribose"), synthesis of 4-, 298
- Deuterium-induced, differential isotope-shift ¹³C-n.m.r. spectroscopy, characterization of keto disaccharides in solution by, 11
- Diazo(diphenyl)methane, diphenylmethylation of carbohydrate hydroxyl groups by the reaction with, 147
- Dibromopinacolone with L-ascorbic acid, the reaction of 1,1-, 302
- Diglycolaldehyde thioacetals, synthesis and structure of some, 69
- Diphenylmethylation of carbohydrate hydroxyl groups by the reaction with diazo(diphenyl)-methane, 147
- Disaccharides and their protein conjugates, the synthesis of α and β -(1 \rightarrow 2)- and -(1 \rightarrow 3)-linked glucopyranose, 131
- Disaccharides in solution by deuterium-induced, lifferential isotope-shift ¹³C-n.m.r. spectrosopy, characterization of keto, 11
- Erzyme thermistor, calorimetric analysis of sugars and sugar derivatives with aid of an, 273
- Facile preparation of alkyl α-glycosides of the methyl ester of N-acetyl-p-neuraminic acid, 121
- Factors affecting precipitation and spectral changes associated with complex-formation between dyes and β -p-glucans, 283
- p-Fructose, 5-keto-, solid-state ¹³C-n.m.r. spectroscopy of, 294

c12 SUBJECT INDEX

- Galactopyranose residues having chain extension at position 3, or positions 3 and 2, "Standardized intermediates" for oligosaccharide synthesis. Precursors of D-, 99
- Glucans, factors affecting precipitation and spectral changes associated with complex-formation between dyes and β -D-, 283
- D-Glucopyranose disaccharides and their protein conjugates, the synthesis of α and β -(1 \rightarrow 2)-and -(1 \rightarrow 3)-linked, 131
- β-p-Glucopyranose, 1,2,3,4,6-penta-O-acetyl-5-deoxy-5-C-[(R)-ethylphosphinyl]-, synthesis of, Cl
- D-Glucopyranoses, having phosphorus in the hemiacetal ring, a new route for preparation of, Cl
- β-p-Glucopyranose, 1,2,4-tri-*O*-acetyl-3,6-di-*O*-benzyl-5-deoxy-5-*C*-[(*S*)-phenylphosphinyl]-, synthesis of, 159
- α-D-Glucopyranoside, methyl, regioselective alkylation of, via trialkylstannylation, 207
- Gum exudate, from Sajna (Moringa oleifera), chemical investigations on, 253
- Heptosiduronic acids, 6-deoxy-, a facile synthesis of, 169
- 2,5-Hexodiulose, D-threo-, solid-state ¹³C-n.m.r. spectroscopy of, 294
- Hexopyranose, having phosphorus in the hemiacetal ring, the first gluco type of, 159
- Hexopyranosid-3-ulose, methyl 2-O-acetyl-4-O-benzoyl-α-D-ribo-, 308
- L-2-Hexuloses, 3-epimeric, studies on phenylosazones of, 197
- Iron carbonyl reagent, use of, for chain elongation, 169
- Kinetics of oxidation of aldoses by thallium(III) in acid perchlorate medium, 23
- Levoglucosenone, Michael-addition reactions of, 217
- Location of phosphate groups in potato amylopectin, 321
- L-Lyxofuranose, 4,5-dideoxy-4-C-[(R,S)-phenyl-phosphinyl]-, and 1,2,3-triacetate, synthesis of, 185
- α-D-Mannopyranoside, heptyl 1-thio-, a liquidcrystal precursor, the crystal structure of, 59
 Marsupial milk, structure of a branched tetrasaccharide from, 316
- Methyl 2-O-acetyl-4-O-benzoyl-α-D-ribo-hexopyranosid-3-ulose, 308

Methyl glycofuranosides, stoichiometry of the complexes of metal ions in aqueous solution with, 312

- Michael-addition reactions of levoglucosenone, 217
- Neuraminic acid, N-acetyl-α-, mode of binding of Mn²⁺ and Gd³⁺ to, ¹³C-n.m.r.-spectral study of, 47
- ¹³C-N.m.r.-spectral study of the mode of binding of Mn²⁺ and Gd³⁺ to N-acetyl-α-neuraminic acid, 47
- Nucleoside 5'-(β-D-glucopyranosyl monophosphates) by the sugar ortho ester route, synthesis of, 139
- C-Nucleosides, preparation of, by dehydration of pentahydroxypentyl-heterocycles, 111
- Oligosaccharide synthesis. Precursors of pgalactopyranose residues having chain extension at position 3, or positions 3 and 2, "Standardized intermediates" for, 99
- Ortho ester route, synthesis of nucleoside 5'- (β-D-glucopyranosyl monophosphates) by the sugar, 139
- Osazones, 3,6-anhydro-, derivatives obtained from L-xylo- and L-lyxo-2-hexulose phenylosazone, studies on, 197
- Pentose ("4-deoxy-p-ribose"), synthesis of 4-deoxy-p-erythro-, 298
- Phosphate groups in potato amylopectin, location of, 321
- Polysaccharide, capsular, of *Escherichia coli K7* (K56), structural and immunological studies of, 263
- Polysaccharide, from Shigella dysenteriae type 7, structural studies on a, 241
- Preparation of C-nucleosides by dehydration of pentahydroxypentyl-heterocycles: steric course and mechanism, 111
- Reaction of 1,1-dibromopinacolone with Lascorbic acid, 302
- Regioselective alkylation via trialkylstannylation: methyl α -p-glucopyranoside, 207
- D-Ribofuranose, 4,5-dideoxy-4-C-[(R,S)-phenyl-phosphinyl]-, and 1,2,3-triacetate, synthesis of, 185
- [3.3]-Sigmatrope rearrangement, synthesis of 7aminovalienamin by, 83
- Solid-state, ¹³C-n.m.r. spectroscopy of p-threo-2,5-hexodiulose ("5-keto-p-fructose"), 294
- Spectroscopy, characterization of keto disaccharides in solution by deuterium-induced, differential isotope-shift ¹³C-n.m.r., 11

SUBJECT INDEX C13

- Standardized intermediates for oligosaccharide synthesis. Precursors of p-galactopyranose residues having chain extension at position 3, or positions 3 and 2, 99
- Steric course and mechanism for the preparation of C-nucleosides by dehydration of pentahydroxypentyl-heterocycles, 111
- Stoichiometry of the complexes of methyl glycofuranosides with metal ions in aqueous solution, 312
- Structural and immunological studies on the Escherichia coli K7 (K56) capsular polysaccharide, 263
- Structural studies on a polysaccharide from Shigella dysenteriae type 7, 241
- Structure of a branched tetrasaccharide from marsupial milk, 316
- Structure of inclusion complexes of cyclomaltoheptaose (cycloheptaamylose): crystal structure of the benzocaine adduct, 31
- Studies on dehydro-L-ascorbic acid 3-oxime 2phenylhydrazone: conversion into substituted triazoles, 231
- Studies on 3-epimeric L-2-hexulose phenylosazones. Structure and configuration of the 3,6-anhydro-osazone derivatives obtained from L-xylo- and L-lyxo-2-hexulose phenylosazone, 197

- Synthesis and structures of some diglycolaldehyde thioacetals, 69
- Synthesis of α and β -(1 \rightarrow 2)- and -(1 \rightarrow 3)-linked D-glucopyranose disaccharides and their protein conjugates, 131
- Synthesis of 4-deoxy-p-erythro-pentose ("4-deoxy-p-ribose"), 298
- Synthesis of 4,5-dideoxy-4-C-[(R,S)-phenylphosphinyl]-D-ribo- and L-lyxo-furanose and their 1,2,3-triacetates, 185
- Synthesis of nucleoside 5'-(β-D-glucopyranosyl monophosphates) by the sugar ortho ester route, 139
- Synthesis of 1,2,3,4,6-penta-O-acetyl-5-deoxy-5-C-[(R)-ethylphosphinyl]-β-D-glucopyranose: A new route for preparation of D-glucopyranoses having phosphorus in the hemiacetal ring, c1
- Synthesis of 1,2,4-tri-O-acetyl-3,6-di-O-benzyl-5-deoxy-5-C-[(S)-phenylphosphinyl]-β-D-gluco-pyranose: the first gluco type of hexopyranose derivative having phosphorus in the hemiacetal ring, 159
- Thioacetals, synthesis and structures of some diglycolaldehyde, 69
- Valienamine, 7-amino-, synthesis by [3.3]-sigmatrope rearrangement of, 83