

SUBJECT INDEX

- Acetolysis of α -D-glucans in the presence of 1,1,3,3-tetramethylurea, 151
- α -Acetoxy-furanurono-6,3-lactones, deacetylation of, by lipases and lyophilised yeast, c9
- Amylopectins with low and high affinities for iodine, structures of rice, 79
- 3,6-Anhydro- β -L-gulofuranoside, X-ray structure of methyl, 115
- Arabinogalactan from the culture medium of *Rubus fruticosus* cells in suspension, 275
- Assay of endo- β -D-xylanase activity with a soluble O-(carboxymethyl) derivative of larchwood xylan, 156
- Basidiomycetous lichen *Cora paviona*, β -D-glucan, heteropolysaccharide, and trehalose from, 55
- Binding positions in oligosaccharides and glycosphingolipids, determination by f.a.b.-m.s. of, 15
- Calcium ion, binding by heparin of, 163
- Carbohydrates, complex, selective degradation of the glycosyluronic acid residues of, by lithium dissolved in ethylenediamine, 219
- CASPER — a computerised approach to structure determination of polysaccharides using information from n.m.r. spectroscopy and simple chemical analyses, 67
- Cellobiosides, benzyl, efficient preparation of, using stannic chloride, 146
- Chromatographic procedures for isolating α , β -trehalose formed during the preparation of β , β -trehalose, 129
- Computerised approach to structure determination of polysaccharides using information from n.m.r. spectroscopy and simple chemical analyses, 67
- Conformation of the (1 \rightarrow 3)- β -D-glucan in the sclerotia of *Sclerotinia sclerotiorum* IFO 9395 assessed by ^{13}C c.p.-m.a.s. n.m.r. spectroscopy, 110
- Cora paviona*, basidiomycetous lichen, β -D-glucan, heteropolysaccharides, and trehalose from, 55
- Counterion-condensation theory, relationship in heparin-calcium binding between ^{13}C -n.m.r. data and, 163
- Crystal and molecular structures of 2,3,4,6-tetra-O-acetyl-1-bromo-D-galactopyranosyl cyanide and 2,3,4,5,7-penta-O-acetyl- β -D-galacto-2-heptulopyranosononitrile, 1
- Crystal structure of diazomethyl β -D-galactopyranosyl ketone, 7
- Culture medium of *Rubus fruticosus* cells in suspension, an arabinogalactan from the, 275
- Cyclodextrins, reaction of, with glycidol or propylene oxide, and analysis of product distribution, 191
- Cyclomalto-oligosaccharides, 6-O- α -maltosyl-, formation of, by transfer action of three debranching enzymes, 285
- Deacetylation of α -acetoxy-furanurono-6,3-lactones by lipases and lyophilised yeast, c9
- 3-Deoxyaldos-2-ulose bis(thiosemicarbazones), synthesis of, 295
- Determination of binding positions in oligosaccharides and glycosphingolipids by fast-atom-bombardment mass spectrometry, 15
- Diacetamidodideoxyuronic acid-containing glycan chain from the S-layer glycoprotein of *Bacillus stearothermophilus*, isolation and structure determination of a, 211
- Diazomethane and water, methylation of methyl α -D-hexopyranosides with, 181
- E. coli* K32, capsular polysaccharide, structure, 89
- Efficient preparation of benzyl glycosides of lactose and cellobiose using stannic chloride, 146
- Formation of 6-O- α -maltosylcyclomalto-oligosaccharides by transfer action of three debranching enzymes, 285
- D-Galactopyranosyl cyanide, crystal and molecular structures of 2,3,4,6-tetra-O-acetyl-1-bromo-, 1
- Glucan in the sclerotia *Sclerotinia sclerotiorum* IFO 9395, conformation of the (1 \rightarrow 3)- β -D-, assessed by ^{13}C c.p.-m.a.s. n.m.r. spectroscopy, 110
- (1 \rightarrow 3)- α -D-Glucan synthase from *Streptococcus mutans* AHT (serotype g), the purification of the, and its inability to synthesise glucan without primer, 120
- α -D-Glucans, acetolysis of, in the presence of 1,1,3,3-tetramethylurea, 151
- Glycoprotein of *Bacillus stearothermophilus*, isolation and structure determination of a diacetamidodideoxyuronic acid-containing glycan chain from the S-layer, 211
- Heparin, binding of calcium ion by, 163
- 2-Heptulopyranosononitrile, crystal and molecular structures of 2,3,4,5,7-penta-O-acetyl- β -D-galacto-, 1

- Hexopyranoside *p*-tolylsulfonates, n.m.r. studies of some *cis*- and *trans*-fused, 125
- α -D-Hexopyranosides, methyl, methylation with diazomethane and water of, 181
- Isolation and structure determination of a diacetamidodideoxyuronic acid-containing glycan chain from the S-layer glycoprotein of *Bacillus stearothermophilus*, 211
- Ketone, diazomethyl β -D-galactopyranosyl, the crystal structure of, 7
- Lactosides, benzyl, efficient preparation of, using stannic chloride, 146
- Lichen, basidiomycetous, *Cora paviona*, β -D-glucan, heteropolysaccharide, and trehalose from, 55
- Lipases and lyophilised yeast, deacetylation of α -acetoxy-furanurono-6,3-lactones by, c9
- Liquid chromatography, preparative, of carbohydrates, 33
- Methanolysis of polysaccharides: a new method, 103
- Methyl 2,3-anhydro-4,6-*O*-benzylidene- α -D-allopyranoside, reaction of ethanolamine and 1,4,7,10-tetraoxa-13-azacyclopentadecane with, 143
- Methyl 3,6-anhydro- β -D-gulofuranoside, X-ray structure of, 115
- Methylation of methyl α -D-hexopyranosides with diazomethane and water, 181
- Neuraminic acids, *N*-acetyl and *N*-glycoloyl, *O*-acetylated, 2,3-unsaturated, occurrence and preparation of, 199
- N.m.r. studies of some *cis*- and *trans*-fused hexopyranoside *p*-tolylsulfonates, 125
- Octitols from D-glucose and D-mannose derivatives *via* osmylation, the synthesis of new, c1
- Oligosaccharides and glycosphingolipids, determination by f.a.b.-m.s. of binding positions in, 15
- One-step method for the preparation of 2-pyridyl 2-deoxy-1-thiohexopyranosides from glycol esters, 136
- Osmylation, the synthesis of new octitols from D-glucose and D-mannose derivatives *via*, c1
- Oxirane-oxetane-1,4-dioxane anhydro-ring migration in sucrose derivatives, c5
- Polysaccharides, a computerised approach to structure determination of, using information from n.m.r. spectroscopy and simple chemical analyses, 67
- Polysaccharides, a new method for methanolysis of, 103
- Polysaccharide of *E. coli* K32, capsular, structure, 89
- Preparation and structural determination of methyl 4,6-*O*-benzylidene-2,3-dideoxy- β -D-erythro-hexopyranosido[2,3-*d*]triazole and of its adducts with 3-nitrohex-2-enopyranosides, 47
- Preparation of 2-pyridyl 2-deoxy-1-thiohexopyranosides from glycol esters, a one-step method for the, 136
- Preparative liquid chromatography of carbohydrates: mono- and di-saccharides, uronic acids and related derivatives, 33
- 2-Pyridyl 2-deoxy-1-thiohexopyranosides from glycol esters, a one-step method for the preparation of, 136
- Reaction of cyclodextrins with propylene oxide or with glycidol: analysis of product distribution, 191
- Reaction of methyl 2,3-anhydro-4,6-*O*-benzylidene- α -D-allopyranoside with ethanolamine and 1,4,7,10-tetraoxa-13-azacyclopentadecane, 143
- Rhamnogalacturonan I, treatment of, with lithium in ethylenediamine, 245
- Rice amylopectins with low and high affinities for iodine, structures of, 79
- Ring migration in sucrose derivatives, oxirane-oxetane-1,4-dioxane anhydro, c5
- Rubus fruticosus* cells in suspension, an arabinogalactan from the culture medium of, 275
- Saccharides, mono- and di-, preparative liquid chromatography of, 33
- Sclerotinia sclerotiorum* IFO 9395, conformation of the (1 \rightarrow 3)- β -D-glucan in the sclerotia of, assessed by ^{13}C c.p.-m.a.s. n.m.r. spectroscopy, 110
- Selective degradation of the glycosyluronic acid residues of complex carbohydrates by lithium dissolved in ethylenediamine, 219
- Sialic acids, *O*-acylated, 2,3-unsaturated, occurrence and preparation of, 199
- Starch: properties and potential (*book review*), c1
- Streptococcus mutans* AHT (serotype g), purification of the (1 \rightarrow 3)- α -D-glucan synthase from, and its inability to synthesise glucan without primer, 120
- Structure of the capsular polysaccharide of *Escherichia coli* O9:K32(A):H19, 89
- Structures of rice amylopectins with low and high affinities for iodine, 79

- Sucrose derivatives, oxirane-oxetane-1,4-dioxane anhydro-ring migration in, C5
- Synthase from *Streptococcus mutans* AHT (serotype *g*), purification of the (1→3)- α -D-glucan, and its inability to synthesise glucan without primer, 120
- Synthesis of new octitols from D-glucose and D-mannose derivatives *via* osmylation, C1
- 1,4,7,10-Tetraoxa-13-azacyclopentadecane and ethanolamine, reaction of methyl 2,3-anhydro-4,6-*O*-benzylidene- α -D-allopyranoside with, 143
- Thiosemicarbazones, bis, of 3-deoxy-2-uloses, synthesis of, 295
- Treatment of Rhamnogalacturonan I with lithium in ethylenediamine, 245
- α,β -Trehalose, formed during the preparation of β,β -trehalose, chromatographic procedures for isolating, 129
- Triazole, methyl 4,6-*O*-benzylidene-2,3-dideoxy- β -D-*erythro*-hexopyranosido[2,3-*d*]-, and its adducts with 3-nitrohex-2-enopyranosides, preparation and structural determination of, 47
- 2-Ulose, 3-deoxyaldos-, bis(thiosemicarbazones), synthesis of, 295
- 2,3-Unsaturated sialic acids, *O*-acetylated, occurrence and preparation of, 199
- Urea, 1,1,3,3-tetramethyl-, use of, in the acetolysis of α -D-glucans, 151
- Uronic acids, preparative liquid chromatography of, 33
- X-Ray structure of methyl 3,6-anhydro- β -L-gulofuranoside, 115
- Xylan, larch-wood, a soluble *O*-(carboxymethyl) derivative of, for assay of endo- β -D-xylanase activity, 156