

## SUBJECT INDEX

- 2-Acetamido-2-deoxy-D-glucose, 6-O-substituted residues, transfer of D-galactosyl group by galactosyltransferase to, 315
- D-Allonitrile, 2,5-anhydro-5-thio-, synthesis of, 81
- 2-O-Allyl-D-glucose, Synthesis of some derivatives of, 325
- 2-Amino-2,4-dideoxy- $\beta$ -D- and -L-threo-pentopyranoside methyl, resolution of, 159
- Amylose in starches or flours, improved colorimetric determination of, 154
- 2,3-Anhydropyranoses, some derivatives of, nuclear magnetic resonance spectra of, 11
- Anti-complementary arabinogalactan from the roots of *Angelica acutiloba* Kitagawa, structural characterisation of an, 275
- Antitumour  $\beta$ -D-glucan produced by *Sclerotinia sclerotiorum* IFO 9395, two different conformations of the, 293
- Approach towards the isolation and characterization of some polysaccharide components of the protozoan *Leishmania donovani*, 328
- Apramycin analogues, synthesis of, 217
- Arabinogalactan for the root of *Angelica acutiloba* Kitagawa, structural characterisation of an anti-complementary, 275
- Arabinoglucuronoxylan and larchwood 4-O-methylglucuronoxylan, mode of action of xylanase II from *Polyporus tulipiferae* on oat-spelt, 165
- D-Arabinose diethyl dithioacetal, 2,4:3,5-di-O-benzylidene-, the crystal structure of, and related molecular-mechanics calculations, 171
- Asialoglycophorin A, synthesis of the sequence 43-48 containing two oligosaccharide chains, 37
- Assignment of carbonyl resonances in  $^{13}\text{C}$ -n.m.r. spectra of peracetylated mono- and oligosaccharides containing D-glucose and D-mannose: an alternative method for structural determination of complex carbohydrates, 191
- Carbohydrates, complex, an alternative method for structural determination of, 191
- Carbon mono- and di-oxide, detection in sterilized D-glucose solutions of, 149
- Chalara Paradoxa*, purification by affinity chromatography and chromatofocusing of the glycoamylase components of, 255
- Chemical synthesis of methyl 2-acetamido-2-deoxy-3-O-( $\alpha$ -L-idopyranosyluronic acid)-4-O-sulfo- $\beta$ -D-galactopyranoside disodium salt and its non-sulfated analogue, 229
- L-chiro-Inositol, the crystal structure of, 211
- C.p.-m.a.s.  $^{13}\text{C}$ -n.m.r. study of some solid-state inclusion complexes of cyclomalto-oligosaccharides with para-substituted benzenes, 1
- Crystal structure of 2,4:3,5-di-O-benzylidene-D-arabinose diethyl dithioacetal, and related molecular-mechanics calculations, 171
- Crystal structure of L-chiro inositol, 211
- Cyclomalto-oligosaccharides, 6-O- $\alpha$ -maltosyl-, formation of, from  $\alpha$ -maltosyl fluoride and cyclomalto-oligosaccharides, by pullulanase, 303
- Dermatan sulfate disaccharide and its non-sulfated analogue chemical synthesis of a, 229
- Dermatan sulfate in aging human skin, 127
- Dermatan sulfate, pig-skin, distribution of D-glucuronic acid units within the chain of, 263
- Derivatives of 2-O-allyl-D-glucose, synthesis of some, 325
- Dissociation of dissolved pectins: Fourier-transform infrared spectroscopy, 185
- Flavobacterium heparinum* with heparin and chondroitin sulfate, preparation of phenyl 4-deoxy- $\alpha$ - and  $\beta$ -L-threo-hex-4-enopyranosiduronic acids and determination of the anomeric specificity of the 4,5-glycosiduronase induced from, 25
- Formation of 6-O- $\alpha$ -maltosylcyclomalto-oligosaccharides from  $\alpha$ -maltosyl fluoride and cyclomalto-oligosaccharides by pullulanase, 303
- D-Galactosyl group, transfer by galactosyltransferase to 6-O-substituted 2-acetamido-2-deoxy-D-glucose residue, 315
- Galactosyltransferase, transfer of D-galactosyl group to two 6-O-substituted 2-acetamido-2-deoxy-D-glucose residue by, 315
- Glucoamylase components of *Chalara paradoxa*, purification by affinity chromatography and chromatofocusing of the, 255
- $\beta$ -D-Glucan produced by *Sclerotinia sclerotiorum* IFO 9395, two different conformations of the antitumour, 293
- D-Glucose and D-mannose, peracetylated mono- and oligo-saccharides containing, the assignment of carbonyl resonances in  $^{13}\text{C}$ -n.m.r. spectra of, 191

- D-Glucuronic acid units, distribution within the chain of pig-skin dermatan sulfate of, 263
- D-Glucose solutions, detection of carbon mono- and di-oxide in sterilized, 149
- Glycophorin A, asialo-, synthesis of the sequence 43-48 containing two oligosaccharide chains of, 37
- Glycoprotein of bonnet-monkey (*Macaca radiata*) cervical mucus, structure of acidic oligosaccharides isolated from pronase-treated, 95
- 4,5-Glycosiduronase induced from *Flavobacterium heparinum* with heparin and chondroitin sulfate, preparation of phenyl 4-deoxy- $\alpha$ - and  $\beta$ -L-threo-hex-4-enopyranosiduronic acids and determination of the anomeric specificity of the, 25
- Glycosyl cyanides, improved and large-scale synthesis of certain, 81
- Heteroxylan from the outer pericarp (beeswing bran) of wheat kernel, investigation of the structure of a, 109
- Hexapeptide sequence 43-48 of glycophorin A containing two oligosaccharide chains, synthesis of, 37
- Hexopyranoside and methyl 2,2'-anhydro-3-C-[(S)-1,2-dihydroxyethyl]- $\alpha$ -D-glucopyranoside derivatives, synthesis of methyl 4-deoxy-3-C-[(S)-1,2-dihydroxyethyl]- $\alpha$ -D-xylo-, 65
- Hyaluronic acid in aging human skin, 127
- Improved colorimetric determination of amylose in starches or flours, 154
- Improved and large-scale synthesis of certain glycosyl cyanides. Synthesis of 2,5-anhydro-5-thio-D-allononitrile, 81
- Inclusion complexes of cyclomalto-oligosaccharides with para-substituted benzenes, a c.p.-m.a.s.  $^{13}\text{C}$ -n.m.r. study of some solid-state, 1
- Infrared spectroscopy, Fourier-transform, for study of dissociation of dissolved pectins, 185
- Investigation of the structure of a heteroxylan from the outer pericarp (beeswing bran) of wheat kernel, 109
- Lectin, an  $\alpha$ -D-galactosyl-binding, from *Artocarpus lakoocha* seeds, purification and characterization of, 137
- Methyl 2-acetamido-2-deoxy-3-O-( $\alpha$ -L-idopyranosyluronic acid)-4-O-sulfo- $\beta$ -D-galactopyranoside disodium salt and its non-sulfated analogue, chemical synthesis of, 229
- Methyl 4-deoxy-3-C-[(S)-1,2-dihydroxyethyl]- $\alpha$ -D-xylo-hexopyranoside and methyl 2,2'-anhydro-3-C-[(S)-1,2-dihydroxyethyl]- $\alpha$ -D-glucopyranoside derivatives, synthesis of, 65
- O-Methyl S-(3,4,6-tri-O-acetyl-2-deoxy- $\alpha$ -D-arabino-hexopyranosyl)-(R)-dithiophosphate ion, synthesis of, and the X-ray crystal structure of the dipropylammonium salt, 53
- Mode of action of xylanase II from *Polyporus tulipiferae* on oat-spelt arabinoglucuronoxylan and larchwood 4-O-methylglucuronoxylan, 165
- Neutral seed-gum from *Cassia renigera*, 336
- $^{13}\text{C}$ -N.m.r. study of some solid-state inclusion complexes of cyclomalto-oligosaccharides with para-substituted benzenes, a c.p.-m.a.s., 1
- Nuclear magnetic resonance spectra of some 2,3-anhydropyranose derivatives, 11
- Oligosaccharides isolated from pronase-treated glycoprotein of bonnet-monkey (*Macaca radiata*) cervical mucus, structure of acidic, 95
- Pectins, dissolved, dissociation of, studied by Fourier-transform infrared spectroscopy, 185
- $\beta$ -D- and L-Pentopyranoside, methyl 2-amino-2,4-dideoxy-, resolution of, 159
- Phenyl 4-deoxy- $\alpha$ - and  $\beta$ -L-threo-hex-4-enopyranosiduronic acids and determination of the anomeric specificity of the 4,5-glycosiduronase induced from *Flavobacterium heparinum* with heparin and chondroitin sulfate, preparation of, 25
- Pig-skin dermatan sulfate, distribution of D-glucuronic acid units within the chain of, 263
- Polysaccharide components of the protozoan *Leishmania donovani*, an approach towards the isolation and characterization of some, 328
- Purification and characterization of an  $\alpha$ -D-galactosyl-binding lectin from *Autocarpus lakoocha* seeds, 137
- Purification of the glucoamylase components of *Chalara paradoxa* by affinity chromatography and chromatofocusing, 255
- Resolution of methyl 2-amino-2,4-dideoxy- $\beta$ -D- and -L-threo-pentopyranoside, 159
- Seed-gum, a neutral, from *Cassia renigera*, 336
- Skin, human, dermatan sulfate and hyaluronic acid in, 127
- Sterilized D-glucose solutions, detection of carbon mono- and di-oxide in, 149
- Structural characterisation of an anti-complementary arabinogalactan from the roots of *Angelica acutiloba* Kitagawa, 275
- Structure of acidic oligosaccharides isolated from pronase-treated glycoprotein of bonnet-monkey (*Monkey radiata*) cervical mucus, 95
- Synthesis of apramycin analogues, 217
- Synthesis of methyl 4-deoxy-3-C-[(S)-1,2-di-

- hydroxyethyl]- $\alpha$ -D-xylo-hexopyranoside and methyl 2,2'-anhydro-3-C-[(S)-1,2-dihydroxyethyl]- $\alpha$ -D-glucopyranoside derivatives, 65
- Synthesis of O-methyl S-(3,4,6-tri-O-acetyl-2-deoxy- $\alpha$ -D-arabino-hexopyranosyl) (R)-dithiophosphate ion and the X-ray crystal structure of the dipropylammonium salt, 53
- Synthesis of some derivatives of 2-O-allyl-D-glucose, 325
- Two-different conformations of the antitumour  $\beta$ -D-glucan produced by *Sclerotinia sclerotiorum* IFO 9395, 293
- Wheat kernel, investigation of the structure of a heteroxylan from the outer pericarp (beeswing bran) of, 109
- X-Ray crystal structure and synthesis of dipropylammonium O-methyl S-(3,4,6-tri-O-acetyl-2-deoxy- $\alpha$ -D-arabino-hexopyranosyl) (R)-dithiophosphate, 53
- Xylanase II from *Polyporus tulipiferae* on oat-spelt arabinoglucuronoxylan and larchwood 4-O-methylglucuronoxylan, mode of action of, 165