

SUBJECT INDEX

- Acacia senegal*, molecular characterisation of the polysaccharide gum from, 303
- 1,6-Anhydro-3,4-dideoxy- β -D-glycero-hex-3-enopyranos-2-ulose (levoglucosenone), a novel synthesis of 4-deoxy-D-lyxo-hexose (“4-deoxy-D-mannose”) from, 345
- Alginate concentration in calcium alginate gels, mapping by magnetic resonance imaging of the spatial variation in, 43
- Alginate lyase from *Haliotis*, a study of substrate conversion and product inhibition for an, 229
- Allyl 2-acetamido-2-deoxy-3,6-di-O-(α -L-fucopyranosyl)- β -D-glucopyranoside, a short synthesis, 353
- C-(2-Amino-2-deoxy- β -D-glucosyl) compounds, stereospecific synthesis by Wittig-type olefination of D-glucosamine derivatives, 361
- Amylomaize, structure of the amylopectin fraction of, 273
- Amylopectin fraction of amylomaize, structure of the, 273
- Amylose–Rose Bengal complex, FT-IR and Raman spectroscopy study, 253
- Amylose–Rose Bengal complex, UV-vis absorption, fluorescence, and optical rotatory study of the, 243
- Amylose, structures of branched and linear molecules of rice, 267
- 1,5-Anhydro-D-fucitol, the positional isomers of partially methylated and acetylated or benzoylated. Authentic standards for the reductive-cleavage method, 1
- Benzylidene acetal groups bridging the contiguous glucose residues in malto-oligosaccharide derivatives, chemical behavior, 61
- Branched and linear molecules of rice amylose, structures of, 267
- Butyrivibrio fibrisolvens* strain X6C61, structural studies of the extracellular polysaccharide from, 291
- Calcium alginate gels, mapping by magnetic resonance imaging of the spatial variation in alginate concentration, 43
- Calorimetric studies of the glass transition occurring in fructose solutions, 13
- Capsular polysaccharide of *E. coli* serotype K101, structural elucidation by high resolution NMR spectroscopy, 283
- Carrageenan identification by FT IR diffuse reflectance spectroscopy directly on dried ground algal material, a new and rapid method for, 51
- Chitosan using conductometric titration and solid-state NMR, degree of deacetylation of, 331
- Conformational analysis of nitrilium intermediates in glycosylation reactions, 23
- Deacetylation of chitosan using conductometric titration and solid-state NMR, 331
- Degree of deacetylation of chitosan using conductometric titration and solid-state NMR, 331
- 3-Deoxyaldulosonic acid esters, synthesis by one-carbon chain extension of glycal-derived lactone precursor, 105
- 2-Deoxyglycosyl phosphates, synthetic approaches to, 173
- 4-Deoxy-D-lyxo-hexose (“4-deoxy-D-mannose”) from 1,6-anhydro-3,4-dideoxy- β -D-glycero-hex-3-enopyranos-2-ulose (levoglucosenone), a novel synthesis of, 345
- Deoxyhexopyranosides and deoxyhexopyranosid-2-uloses from 2-hydroxyglycal-derived precursors, stereoselective synthesis of, 371
- 1,5-Dideoxy-1,5-imino-L-iditol (1-deoxy-L-idonojirimycin), synthesis and activity towards yeast α -glucosidase of, 377
- E. coli* serotype K101, structural elucidation by high resolution NMR spectroscopy of the capsular polysaccharide of, 283

Escherichia coli O11:K10:H10, structure of the K10 capsular polysaccharide containing 4,6-dideoxy-4-malonylamino-D-glucose, 219

Extracellular polysaccharide from *Butyrivibrio fibrisolvens* strain X6C61, structural studies, 291

Fructose solutions, calorimetric studies of the glass transition occurring in, 13

FT-IR and Raman spectroscopy study of the amylose-Rose Bengal complex, 253

FT IR diffuse reflectance spectroscopy, a new and rapid method for carrageenan identification by, directly on dried ground algal material, 51

L-Fucopyranosyl)- β -D-glucopyranoside, a short synthesis of allyl 2-acetamido-2-deoxy-3,6-di-O-(α -), 353

Ganglioside GD₃, total synthesis by an approach general for polysialogangliosides containing α -sialyl-(2 \rightarrow 8)-sialic acid, 75

Glass transition occurring in fructose solutions, calorimetric studies, 13

D-Glucose, structure of the *E. coli* K10 capsular polysaccharide containing 4,6-dideoxy-4-malonylamino-, 219

Glucosidase, synthesis and activity of 1,5-dideoxy-1,5-imino-L-iditol (1-deoxy-L-idonojirimycin) towards yeast α -, 377

Glycal-derived lactone, conversion into 3-deoxyaldulosonic acid esters by one-carbon chain extension, 105

Glycolchitosan as glycan spacer for crosslinked proteins, 205

Glycosides of lipid A derivatives, synthesis of Kdo- α -, 137

Glycosylated derivatives of helper-T-cell immunogenic peptides from hen-egg lysozyme, solid-phase synthesis and conformational studies, 89

Glycosylation reactions, conformational analysis of nitrilium intermediates in, 23

Gum from *Acacia senegal*, molecular characterisation of the polysaccharide, 303

Haemophilus influenzae strain AH1-3 (lic3 +), structural studies of the saccharide part of the cell envelope lipopolysaccharide, 319

Heparin and heparan sulphate, synthesis of the methyl glycosides of a tri- and a tetra-saccharide related to, 161

Heterobifunctional crosslinking agent cleaved by lysozyme, 205

Hydroxyglycal-derived precursors, stereoselective synthesis of deoxyhexopyranosides and deoxyhexopyranosid-2-ulosos from 2-, 371

Immunogenic peptides from hen-egg lysozyme, solid-phase synthesis and conformational studies of glycosylated derivatives of helper-T-cell, 89

Kdo- α -glycosides of lipid A derivatives, synthesis of, 137

Lactoside, synthesis of the monodeoxy derivatives of 2-(trimethylsilyl)ethyl β -, 119

Lipid A derivatives, synthesis of Kdo- α -glycosides of, 137

Lipopolysaccharide from *Haemophilus influenzae* strain AH1-3 (lic3 +), structural studies of the saccharide part of the cell envelope, 319

Magnetic resonance imaging, mapping of the spatial variation in alginate concentration in calcium alginate gels by, 43

Malto-oligosaccharide derivatives, chemical behavior of benzylidene acetal groups bridging the contiguous glucose residues in, 61

Mannuronate lyase from *Haliotis*, substrate conversion and product inhibition, 229

Monodeoxy derivatives of 2-(trimethylsilyl)ethyl β -lactoside, synthesis of, 119

Nitrilium intermediates in glycosylation reactions, conformational analysis of, 23

Olefination of D-glucosamine derivatives, stereospecific synthesis of C-(2-amino-2-deoxy- β -D-glucosyl) compounds by Wittig-type, 361

Oligosaccharide conformations, the systematic use of nuclear Overhauser constraints in the determination of, 337

Overhauser constraints in the determination of oligosaccharide conformations, the systematic use of, 337

Peptides from hen-egg lysozyme, solid-phase synthesis and conformational studies of glycosylated derivatives of helper-T-cell immunogenic, 89

Phosphates, synthetic approaches to 2-deoxyglycosyl, 173

Physicochemical properties of native, defatted, and heat-moisture-treated pigeon pea (*Cajanus cajan* L.) starch, studies on the, 185

- Polysaccharide containing 4,6-dideoxy-4-malon-ylamino-D-glucose, structure of the K10 capsular antigen from *E. coli* O11:K10:H10, 219
- Polysaccharide from *Butyrivibrio fibrisolvens* strain X6C61, structural studies of the extracellular polysaccharide from, 291
- Polysaccharide gum from *Acacia senegal*, molecular characterisation of the, 303
- Polysaccharide of *E. coli* serotype K101, structural elucidation by high resolution NMR spectroscopy of the capsular, 283
- Polysialogangliosides containing α -sialyl-(2 \rightarrow 8)-sialic acid, synthetic approach to; total synthesis of ganglioside GD₃, 75
- Reductive-cleavage method, authentic standards for the. The positional isomers of partially methylated and acetylated or benzoylated 1,5-anhydro-D-fucitol, 1
- Rice amylose, structures of branched and linear molecules of, 267
- Rose Bengal-amylose complex, FT-IR and Raman spectroscopy study, 253
- Rose Bengal-amylose complex, UV-vis absorption, fluorescence, and optical rotatory study of the, 243
- Saccharide part of the cell envelope lipopolysaccharide from *Haemophilus influenzae* strain AH1-3 (lic3 +), structural studies, 319
- Sialyl-Lewis X, the systematic use of negative Overhauser constraints in the determination of oligosaccharide conformations as applied to, 337
- α -Sialyl-(2 \rightarrow 8)-sialic acid: synthetic approach to polysialogangliosides containing this moiety, and total synthesis of ganglioside GD₃, 75
- Spectroscopic study of the amylose-Rose Bengal complex, 243
- Starch, studies on the physicochemical properties of native, defatted, and heat-moisture-treated pigeon pea (*Cajanus cajan L.*), 185
- Stereoselective synthesis of deoxyhexopyranosides and deoxyhexopyranosid-2-uloses from 2-hydroxyglycal-derived precursors, 371
- Structure of the amylopectin fraction of amylo-maize, 273
- Substrate conversion and product inhibition of manuronate lyase from *Haliotis*, 229
- Synthesis of the methyl glycosides of a tri- and a tetra-saccharide related to heparin and heparan sulphate, 161
- Synthetic approaches to 2-deoxyglycosyl phosphates, 173
- Tetra-saccharide related to heparin and heparan sulphate, synthesis of the methyl glycosides of a tri- and a, 161
- 2-(Trimethylsilyl)ethyl β -lactoside, synthesis of the monodeoxy derivatives of, 119
- Trisaccharide derivative, preparation by di- α -L-fucosylation of allyl 2-acetamido-2-deoxy- β -D-glucopyranoside, 353
- Wittig-type olefination of D-glucosamine derivatives, stereospecific synthesis of C-(2-amino-2-deoxy- β -D-glucosyl) compounds by, 361