

Bibliography of carbohydrate polymers

(4 weeks journals. Search completed at 1st. Aug. 2001)

1. Books, reviews & symposia

Cascone MG, Barbani N, Cristallini C, Giusti P, Ciardelli G, Lazzeri L// Univ Pisa, Dept Chem Engr, Via Diotisalvi 2, IT-56100 Pisa, Italy
J Biomater Sci-Polym Ed 2001 **12** (3) 267
Bioartificial polymeric materials based on polysaccharides

2. Cellulose

Berndes G, Azar C, Kaberger T, Abrahamson D// Chalmers Univ Technol Dept Phys Resource Theory, SE-41296 Gothenburg, Sweden
Biomass Bioenerg 2001 **20** (5) 371
The feasibility of large-scale lignocellulose-based bioenergy production

Fonseca AP, Granja PL, Nogueira JA, Oliveira DR, Barbosa MA// Inst Biomed Engr, Lab Biomat, Rua Campo Alegre 823, PT-4150-180 Oporto, Portugal
J Mater Sci Mater Med 2001 **12** (6) 543
Staphylococcus epidermidis RP62A adhesion to chemically modified cellulose derivatives

Kim UJ, Kuga S// *Univ Tokyo, Grad Sch Agr & Life Sci, Dept Biomat Sci, Bunkyo ku, Yayoi 1-1-1, Tokyo 113 8657, Japan
J Chromatogr A 2001 **919** (1) 29
Ion-exchange chromatography by dicarboxyl cellulose gel

Mosier NS, Sarikaya A, Ladisch CM, Ladisch MR// *Purdue Univ, Dept Agr & Biol Engr, Renewable Resources Engr Lab, West Lafayette, IN 47907, USA
Biotechnol Progr 2001 **17** (3) 474
Characterization of dicarboxylic acids for cellulose hydrolysis

Roussel C, Bonnet B, De Riggis I, Suteu C// Univ Marseille, ENSSPICAM, UMR CNRS 6516, Lab Stereochim Dynam & Chiralite, FR-13397 Marseille 20, France
Biomed Chromatogr 2001 **15** (3) 173
Simultaneous microbatch screening of enantioselectivity on solid chiral selectors using selected mixtures of test-racemates: A case study on cellulose tris(α -phenylpropionate) with configurational diversity

Siepmann J, Peppas NA// Univ Angers, Coll Pharm, 16 Blvd Daviers, FR-49100 Angers, France
Advan Drug Delivery Rev 2001 **48** (2-3) 139
Modeling of drug release from delivery systems based on hydroxypropyl methylcellulose (HPMC)

3. Cellulose-degrading enzymes

Fernandez-Bolanos J, Felizon B, Heredia A*, Rodriguez R, Guillen R, Jimenez A// *Inst Grasa, Avda Garcia Tejero 4, ES-41012 Seville, Spain
Bioresource Technol 2001 **79** (1) 53
Steam-explosion of olive stones: hemicellulose solubilization and enhancement of enzymatic hydrolysis of cellulose

Park J, Park K// Yonsei University, Department Chem Engr, Seoul 120749,

South Korea

Bioresource Technol 2001 **79** (1) 91
Improvement of the physical properties of reprocessed paper by using biological treatment with modified cellulase

4. Chitin/Chitosan

Brown CD, Kreilgaard L, Nakakura M, Caram Lelham N, Pettit DK, Gombotz WR, Hoffman AS// *Univ Washington, Dept Bioengr, Box 352255, Seattle, WA 98195, USA

J Controlled Release 2001 **72** (1-3) 35
Release of PEGylated granulocyte-macrophage colony-stimulating factor from chitosan-glycerol films

Drozdz NN, Sher AI, Makarov VA, Galbraikh LS, Vikhoreva GA, Gorbachiova IN// Natl Haematol Sci Ctr, Lab Pathol Pharmacol & Haemostasis, Novo Zhykovski pr 4A, RU-125167 Moscow, Russia
Thromb Res 2001 **102** (5) 445
Comparison of antithrombin activity of the polysulphate chitosan derivatives in *in vivo* and *in vitro* system

Evyernie D, Morimoto K, Karita S, Kimura T, Sakka K, Ohmiya K// *Mie Univ, Fac Bioresources, 1515 Kamihama, Tsu, Mie 514 8507, Japan
J Biosci Bioeng 2001 **91** (4) 339
Conversion of chitinous wastes to hydrogen gas by *Clostridium paraputrificum* M-21

Krajewska B// Jagiellonian Univ, Fac Chem, Ingardena 3, PL-30060 Krakow, Poland
J Chem Technol Biotechnol 2001 **76** (6) 636
Diffusional properties of chitosan hydrogel membranes

Krause TJ, Zazanis G, Malatesta P, Solina A// Univ Med & Dent New Jersey, Robert Wood Johnson Med Sch, Dept Surg, POB 19, New Brunswick, NJ 08903, USA
J Invest Surg 2001 **14** (2) 93
Prevention of pericardial adhesions with N-O carboxymethylchitosan in the rabbit model

Lauto A, Ohebsshalom M, Esposito M, Mingin J, Li PS, Felsen D, Goldstein M, Poppas DP// Mem Hosp, Dept Med Phys, Room F113, 1275 York Ave, New York, NY 10021, USA
Biomaterials 2001 **22** (13) 1869
Self-expandable chitosan stent: Design and preparation

Nam KS, Choi YR, Shon YH// Dongguk Univ, Coll Med, Dept Pharmacol, Kyongu 780714, South Korea
Biotechnol Lett 2001 **23** (12) 971
Evaluation of the antimutagenic potential of chitosan oligosaccharide: Rec, Ames and Umu tests

Sato T, Ishii T, Okahata Y// Keio Univ, Fac Sci & Technol, Dept Appl Chem, Kohoku ki, 3-14-1 Hiyoshi, Kanagawa 223 8522, Japan
Biomaterials 2001 **22** (15) 2075
In vitro gene delivery mediated by chitosan. Effect of pH, serum, and molecular mass of chitosan on the transfection efficiency

Shanmugasundaram N, Ravichandran P, Reddy PN, Ramamurthy N, Pal S, Rao

As a service to subscribers, each issue of the Journal contains a bibliography of newly published material in the field of carbohydrate polymers. The bibliography is divided into thirteen sections: 1 Books, reviews & symposia; 2 Cellulose; 3 Cellulose-degrading enzymes; 4 Chitin/Chitosan; 5 Cyclodextrins; 6 Lignin; 7 Lipopolysaccharides; 8 Pectin; 9 Starch; 10 Starch-degrading enzymes; 11 Polysaccharides - Microbial; 12 Polysaccharides - Plant; 13 Polysaccharides - Other. Within each section, articles are listed in alphabetical order with respect to author. When there are no publications to appear under one of these headings, that section will be omitted.

KP*// *Cent Leather Res Inst, Biomat Division, IN-600020 Madras, India
Biomaterials 2001 **22** (14) 1943

Collagen-chitosan polymeric scaffolds for the *in vitro* culture of human epidermoid carcinoma cells

Teng WL, Khor E*, Tan TK, Lim LY, Tan SC// *National University Singapore, Faculty Sci, Department Chem, 3 Sci Dr, SG-117543 Singapore, Rep Singapore

Carbohydr Res 2001 **332** (3) 305

Concurrent production of chitin from shrimp shells and fungi

Ueno H, Nakamura F, Murakami M, Okumura M, Kadosawa T, Fujinaga T*// *Hokkaido Univ, Grad Sch Vet Med, Dept Vet Clin Sci, Lab Vet Surg, Sapporo, Hokkaido 060 081, Japan

Biomaterials 2001 **22** (15) 2125

Evaluation effects of chitosan for the extracellular matrix production by fibroblasts and the growth factors production by macrophages

Vandenberg GW, De la Noue J*// *Univ Laval, Dept Anim Science, Grp Rech Recyclage Biol & Aquiculture, St Foy, Quebec, Canada G1K 7P4

J Microencapsul 2001 **18** (4) 433

Evaluation of protein release from chitosan-agginate microcapsules produced using external or internal gelation

5. Cyclodextrins

Arima H, Yunomae K, Miyake K, Irie T, Hirayama F, Uekama K*// *Kumamoto Univ, Fac Pharmaceut Sci, 5-1 Oe Honmachi, Kumamoto 862 0973, Japan

J Pharm Sci 2001 **90** (6) 690

Comparative studies of the enhancing effects of cyclodextrins on the solubility and oral bioavailability of tacrolimus in rats

Garcia-Barrientos A, Garcia-Lopez JJ, Isac-Garcia J, Ortega-Caballero F, Uriel C, Vargas-Berenguel A, Santoyo-Gonzalez F*// *Univ Almeria, Area Quim Organ, ES-04120 Almeria, Spain
Synthesis-Stuttgart 2001 (7) 1057

Synthesis of β -cyclodextrin, *per-O*-glycosylated through an ethylene glycol spacer arm

Haque W, Diakur J*// *Univ Alberta, Fac Pharm & Pharmaceut Sci, Edmonton, Alberta, Canada T6G 2N8

J Carbohydr Chem 2001 **20** (1) 17

Cyclodextrin: A carrier or synthon? Synthesis of *per-o*-methyl- β -cyclodextrin-GM₃

Harada A// Osaka Univ Grad Sch Sci, Dept Macromol Sci, Toyonaka, Osaka 560 0043, Japan

Account Chem Res 2001 **34** (6) 456

Cyclodextrin-based molecular machines

Piel G, Dive G, Evrard B, Van Hees T, De Hassonville SH, Delattre L// Univ Liege, CHU Inst Pharm, Pharmaceut Technol Lab, Tour 4, Bat B36, Ave Hop 1, BE-4000 Liege 1, Belgium

Eur J Pharm Sci 2001 **13** (3) 271

Molecular modeling study of β - and γ -cyclodextrin complexes with miconazole

Pose-Vulamovo B, Perdomo-Lopez I, Echezarreta-Lopez M, Schroth-Pardo P, Estrada E, Torres-Labandeira JJ*// *Univ Santiago de Compostela, Fac Farm, Dept Farm & Tecnol Farmaceut, Campus Sur, ES-15782 Santiago de Compostela, Spain

Eur J Pharm Sci 2001 **13** (3) 325

Improvement of water solubility of sulfamethizole through its complexation with β - and hydroxypropyl- β -cyclodextrin: Characterization of the interaction in solution and in solid state

Schurig V, Mayer S// Univ Tubingen, Inst Organ Chem, Morgenstelle 18, DE-72076 Tubingen, Germany

J Biochem Biophys Methods 2001 **48** (2) 117

Separation of enantiomers by open capillary electrochromatography on polysiloxane-bonded permethyl- β -cyclodextrin

6. Lignin

Beaton CR, Argyropoulos DS*// *McGill Univ, Dept Chem, Pulp & Paper Res Ctr, 3420 Univ St, Montreal, Quebec, Canada H3A 2A7

Photochem Photobiol 2001 **73** (6) 605

Photostabilizing milled wood lignin with benzotriazoles and hindered nitroxide

Capanema EA, Balakshin MY, Chen CL, Gratzl JS, Gracz H// Univ Aveiro, Dept Chem, PT-3810 Aveiro, Portugal

Holzforchung 2001 **55** (3) 302

Structural analysis of residual and technical lignins by ¹H-¹³C correlation 2D NMR spectroscopy

Seino T, Yoshioka A, Fujiwara M, Chen KL, Erata T, Tabata M, Takai M// Hokkaido Univ, Grad Sch Engn, Sapporo, Hokkaido 060 862, Japan

Wood Sci Technol 2001 **35** (1-2) 97

ESR studies of radicals generated by ultrasonic irradiation of lignin solution. An application of the spin trapping method

7. Lipopolysaccharides

Kocharova NA, Knirel YA, Jansson PE*, Weintraub A// *Huddinge University Hosp, Karolinska Inst, Clin Res Ctr, NOVUM, SE-14186 Huddinge, Sweden

Carbohydr Res 2001 **332** (3) 279

Structure of the O-specific polysaccharide of *Vibrio cholerae* O9 containing 2-acetamido-2-deoxy-D-galacturonic acid

Kunii K, Nakamura S, Sato C, Fukuoka S*// *NIST, 2217-14 Hayashi cho, Kagawa 761 0395, Japan

Microbios 2001 **105** (412) 153

A new extraction method for *Acinetobacter* species ODB-L2 rough form lipopolysaccharide from culture broth

Watanabe Y, Miura K, Shiozaki M*, Kanai S, Kurakata S, Nishijima M// *Sankyo Co Ltd, Exploratory Chem Res Labs, Shinagawa ku, Hiromachi 1-2-58, Tokyo 140 8710, Japan

Carbohydr Res 2001 **332** (3) 257

Synthesis of GLA-60 type pyran carboxylic acids with an alkyl chain instead of an ester chain as LPS-antagonists

Zdorovenko GM, Shashkov AS, Zdorovenko EL, Kocharova NA, Yakovleva LM, Knirel YA, Rudolph K// Natl Acad Sci Ukraine, Inst Microbiol & Virol, Zabolotny 154, UA-252143 Kiev, Ukraine

Biochemistry (Mosc) 2001 **66** (4) 369

Characterization of the lipopolysaccharide and structure of the O-specific polysaccharide of the bacterium *Pseudomonas syringae* pv. *atropaciens* IMV 948

8. Pectin

Monsoor MA, Kalapathy U, Proctor A*// *Univ Arkansas, Dept Food Sci, 2650 Nth Young Ave, Fayetteville, Ar 72704, USA

J Agric Food Chem 2001 **49** (6) 2756

Improved method for determination of pectin degree of esterification by diffuse reflectance Fourier transform infrared spectroscopy

Zhu L, Lee HK*// *Nat Univ Singapore, Dept Chem, 3 Sci Dr, SG-117543 Singapore, Rep Singapore

Rapid Commun Mass Spectrom 2001 **15** (12) 975

Preliminary study of the analysis of oligogalacturonic acids by electrospray ionization mass spectrometry

9. Starch

Ahmad FB, Williams PA*// *NE Wales Inst, Ctr Water Soluble Polymers, Mold Rd, Wrexham LL11 2AW, Wales

J Agric Food Chem 2001 **49** (3) 1578

Effect of galactomannans on the thermal and rheological properties of sago starch

Beta T, Corke H*, Taylor JRN, Rooney LW// *Univ Hong Kong, Dept Bot, Pokfulam Rd, Hong Kong, Peoples Rep China

Cereal Chem 2001 **78** (3) 303

Effect of steeping treatment on pasting and thermal properties of sorghum starches

Carvalho CWP, Mitchell JR// Univ Nottingham, Sch Biosci, Div Food Sci, Loughborough LE12 RD, England

Cereal Chem 2001 **78** (3) 342

Effect of sucrose on starch conversion and glass transition of nonexpanded maize and wheat extrudates

Chong CK, Xing J, Phillips DL*, Corke H// *Univ Hong Kong, Dept Chem, Pokfulam Rd, Hong Kong, Peoples Rep China
J Agric Food Chem 2001 **49** (6) 2702

Development of NMR and Raman spectroscopic methods for the determination of the degree of substitution of maleate in modified starches

De Kerf M, Mondelaers W, Lahorte P, Vervaeke C, Remon JP*// *State Univ Ghent, Pharmaceut Technol Lab, Harelbekestr 72, BE-9000 Ghent, Belgium
Int J Pharm 2001 **221** (1-2) 69

Characterisation and disintegration properties of irradiated starch

Gomes ME, Reis RL, Cunha AM, Blitterswijk CA, De Bruijn JD// Univ Minho, Department Polymer Engn, Campus Gualtar, PT-4710-057 Braga, Portugal
Biomaterials 2001 **22** (13) 1911

Cytocompatibility and response of osteoblastic-like cells to starch-based polymers: Effect of several additives and processing conditions

Heinemann C, Conde Petit B*, Nuessli J, Escher F// *ETH-Swiss Fed Inst Technol, Inst Food Sci, CH-8092 Zurich, Switzerland
J Agric Food Chem 2001 **49** (3) 1370

Evidence of starch inclusion complexation with lactones

Kawas ML, Moreira RG*// *Texas A&M Univ, Dept Agr Engn, College Station, Tx 77843, USA
J Food Sci 2001 **66** (2) 300

Effect of degree of starch gelatinization on quality attributes of fried tortilla chips

Kim HYL, Yeom HW, Lim HS, Lim ST*// *Korea Univ, Grad Sch Biotechnol, Seoul 136701, South Korea
Cereal Chem 2001 **78** (3) 267

Replacement of shortening in yellow layer cakes by corn dextrins

Mellin V, Salonen J, Laine E*// *Univ Turku, Dept Phys, FI-20014 Turku, Finland
Int J Pharm 2001 **220** (1-2) 85

The stimulated acoustic relaxation emission of maize starch tablets

Mendes SC, Reis RL, Bovell YP, Cunha AM, Van Bitterswijk CA, De Bruijn JD// IsoTis BV, Professor Bronkhorstlaan 10, NL-3723 MB Biltoven, The Netherlands
Biomaterials 2001 **22** (14) 2057

Biocompatibility testing of novel starch-based materials with potential application in orthopaedic surgery: A preliminary study

Mousia Z, Farhat IA*, Pearson M, Chesters MA, Mitchell JR// *Univ Nottingham, Sch Biol Sci, Div Food Sci, Sutton Bonington Campus, Loughborough LE12 5RD, England
Biopolymers 2001 **62** (4) 208

FTIR microspectroscopy study of composition fluctuations in extruded amylopectin-gelatin blends

Sekine M, Horiuchi H// Ind Technol Ctr, Nthn Lab, Suehiro 2-133, Kumagaya, Saitama 360 0031, Japan
J Jpn Soc Food Sci Technol 2001 **48** (5) 321

Evaluation of gelatinization thermal properties of various starches using dynamic viscoelasticity measurements in xanthan-gum gel matrices and rapid visco-analysis (Japanese, English Abstract)

Sekine M, Horiuchi H// Address as above.

J Jpn Soc Food Sci Technol 2001 **48** (5) 328

Evaluation of viscoelasticity of high concentrated starch suspension using dynamic viscoelasticity measurements in xanthan-gum gel matrices (Japanese, English Abstract)

Singh SK, Johnson LA*, White PJ, Jane JL, Pollak LM// *Iowa State Univ, Dept Food Sci & Human Nutr, Ames, Ia 50011, USA
Cereal Chem 2001 **78** (3) 315

Thermal properties and paste and gel behaviors of starches recovered from accessions used in the Germplasm Enhancement of Maize Project

Wanek W, Heintel S, Richter A*// *Univ Vienna, Inst Ecol & Conservation Biol, Althanstr 14, AU-1090 Vienna, Austria
Rapid Commun Mass Spectrom 2001 **15** (14) 1136

Preparation of starch and other carbon fractions from higher plant leaves for stable carbon isotope analysis

10. Starch-degrading enzymes

Cepeda E, Hermosa M, Ballesteros A// Univ Pais Vasco, Fac Farm, Dept Ingn Quim, C/ Paseo Univ 7, ES-01006 Vitoria-Gasteiz, Alava, Spain

Biotechnol Bioeng 2001 **76** (1) 70

Optimization of maltodextrin hydrolysis by glucoamylase in a batch reactor

Lee HS, Gilliland SE*, Carter S// *Oklahoma State Univ, Dept Anim Sci, Stillwater, Ok 74078, USA
J Food Sci 2001 **66** (2) 338

Amylolytic cultures of *Lactobacillus acidophilus*: Potential probiotics to improve dietary starch utilization

Rosell CM, Haros M, Escrivá C, De Barber CB// CSIC, Inst Agroquim & Tecnol Alimentos, POB 73, ES-46100 Burjassot, Spain
J Agric Food Chem 2001 **49** (6) 2973

Experimental approach to optimize the use of α -amylases in breadmaking

Teotia S, Khare SK, Gupta MN*// Indian Inst Technol, Dept Chem, Hauz Khas, IN-110016 New Delhi, India

Enzyme Microb Technol 2001 **28** (9-10) 792

An efficient purification process for sweet potato β -amylase by affinity precipitation with alginate

11. Polysaccharides - Microbial

Biely P, Puchart V, Cote GL*// *USDA/ARS, Natl Ctr Agr Utilizat Res, Fermentat Biochem Res Unit, 1815 Nth Univ St, Peoria, IL 61604, USA

Carbohydr Res 2001 **332** (3) 299

Enzymic α -galactosylation of a cyclic glucotetrasaccharide derived from alternan

Coviello T, Grassi M, Rambone G, Alhaique F*// *Univ Roma La Sapienza, Dipt Studi Chim & Tecnol Sostanze Biol Attive, Piazzale Aldo Moro 5, IT-00185 Rome, Italy
Biomaterials 2001 **22** (13) 1899

A crosslinked system from scleroglucan derivative: Preparation and characterization

Crich D, Li HM, Yao QJ, Wink DJ, Sommer RD, Rheingold AL// Univ Illinois, Dept Chem, 845 West Taylor St, Chicago, IL 60607, USA
J Am Chem Soc 2001 **123** (24) 5826

Direct synthesis of beta-mannans. A hexameric [$\rightarrow 3$]- β -D-Man-(1 $\rightarrow$ 4)- β -D-Man-[1]₃ subunit of the antigenic polysaccharides from *Leptospira biflexa* and the octameric (1 $\rightarrow$ 2)-linked β -D-mannan of the *Candida albicans* phospholipomannan. X-ray crystal structure of a protected tetramer

De Jong SJ, De Smedt SC, Demeester J, Van Nostrum CF, Kettenes-van den Bosch JJ, Hennink WE*// *Univ Utrecht, UIPS, Dept Pharmaceut, POB 80-082, NL-3508 TB Utrecht, The Netherlands

J Controlled Release 2001 **72** (1-3) 47

Biodegradable hydrogels based on stereocomplex formation between lactic acid oligomers grafted to dextran

Denner EBM, Paukner S, Kampfer P, Moore ERB, Abraham WR, Busse HJ, Wanner G, Lubitz W// Univ Vienna, Inst Mikrobiol & Genet, AU-1030 Vienna, Austria

Int J Syst Evol Microbiol 2001 **51** (3) 827

Sphingomonas pituitosa sp nov., an exopolysaccharide-producing bacterium that secretes an unusual type of sphingane

Ferro V, Fewings K, Palermo MC, Li CP// Progen Ind Ltd, Dept Res & Dev, POB 28, Richlands BC, Qld 4077, Australia

Carbohydr Res 2001 **332** (2) 183

Large-scale preparation of the oligosaccharide phosphate fraction of *Pichia holstii* NRRL Y-2448 phosphomannan for use in the manufacture of PI-88

Guentas L, Pheulpin P, Michaud P, Heyraud A, Gey C, Courtois B, Courtois J*// *Univ Picardie, Inst Univ Technol, Dept Gen Biol, Lab Polysaccharides Microbiens & Vegetaux, Ave Fac, FR-80025 Amiens, France

Carbohydr Res 2001 **332** (2) 167

Structure of a polysaccharide from a *Rhizobium* species containing 2-deoxy- β -D-arabino-hexuronic acid

Hashimoto M, Kirikae F, Dohi T, Kusumoto S, Suda Y, Kirikae T*// *Int Med Ctr Japan, Res Inst, Shinjuku ku, Tokyo 162 8655, Japan

Eur J Biochem 2001 **268** (11) 3139

Structural elucidation of a capsular polysaccharide from a clinical isolate of

Bacteroides vulgatus from a patient with Crohn's disease

Jampen S, Britt IJ*, Yada S, Tung MA// *Univ Guelph, Dept Food Sci, Guelph, Ontario, Canada N1G 2W1
J Food Sci 2001 **66** (2) 289

Rheological properties of gellan gels containing filler particles

Mattos KA, Jones C, Neise N, Previato JO, Mendonca-Previato L*// *Univ Fed Rio de Janeiro, Inst Microbiol, CCS Bloco 1, Cidade Univ, BR-21944-970 Rio de Janeiro, Brazil
Eur J Biochem 2001 **268** (11) 3174

Structure of an acidic exopolysaccharide produced by the diazotrophic endophytic bacterium *Burkholderia brasiliensis*

Stenekes RJH, Talsma H, Hennink WE*// *Univ Utrecht, UIPS, Dept Pharmaceut, POB 80082, NL-3508 TB Utrecht, The Netherlands
Biomaterials 2001 **22** (13) 1891

Formation of dextran hydrogels by crystallization

West TP, Fullenkamp NA// Sth Dakota State Univ, Dept Chem & Biochem, Olson Biochem Labs, Brookings, SD 57007, USA
Microbios 2001 **105** (412) 133

Effect of culture medium pH on bacterial gellan production

Yang BY, Montgomery R*// *Univ Iowa, Coll Med, Dept Biochem, Iowa City, Ia 52242, USA
Carbohydr Res 2001 **332** (3) 317

β -Elimination of glucosyluronic residues during methylation of an acidic polysaccharide from *Erwinia chrysanthemi* CU 643

Yang HH, Kilgore PE*, Yang LH, Park JK, Pan YF, Kim YD, Lee YJ, Xu ZY, Clemens JD// *Int Vaccine Inst, Kwanak POB 14, Seoul, South Korea
J Infect Dis 2001 **183** (12) 1775

An outbreak of typhoid fever, Xing-An County, People's Republic of China, 1999: Estimation of the field effectiveness of Vi polysaccharide typhoid vaccine

Zou W, Li J, Larocque S, Jennings HJ// Natl Res Council Canada, Inst Biol Sci, 100 Sussex Dr, Ottawa, Ontario, Canada K1A 0R6
Carbohydr Res 2001 **332** (3) 249

Construction of multivalent sialyl Le^x from the type Ia group B *Streptococcus* capsular polysaccharide

12. Polysaccharides - Plant

Ackloo S, Terlouw JK, Ruttink PJA, Burgers PC*// *Hercules BV, Hercules Eur Research Centre, PO Box 252, NL-3770 AG Barneveld, The Netherlands
Rapid Commun Mass Spectrom 2001 **15** (14) 1152

Analysis of carrageenans by matrix-assisted laser desorption/ionization and electrospray ionization mass spectrometry. I. κ -Carrageenans

Chun H, Jun WJ, Shin DH, Hong BS*, Cho HY, Yang HC// *Korea Univ, Grad Sch Biotechnol, Sungbuk ku, Anam dong 5-Ka, Seoul 136701, South Korea
Chem Pharm Bull Tokyo 2001 **49** (6) 762

Purification and characterization of anti-complementary polysaccharide from leaves of *Thymus vulgaris* L

Gern RMM, Furlan SA, Ninow JL, Jonas R*// *Gesell Biotechnol Forsch, Mascheroder Weg 1, DE-38124 Braunschweig, Germany
Appl Microbiol Biotechnol 2001 **55** (5) 632

Screening for micro-organisms that produce only *endo*-inulinase

Hassairi I, Ben Amar R, Nonus M, Gupta BB*// *Univ Franche Comte, IUT, BP 527, rue Engel Gros, FR-90016 Belfort, France
Bioresource Technol 2001 **79** (1) 47

Production and separation of α -agarase from *Altermonas agarlyticus* strain GJ1B

Iguchi C, Nio Y*, Takeda H, Yamasawa K, Hirahara N, Toga T, Itakura M, Tamura K// *Shimane Med Univ, Dept Surg I, 89-1 Enya cho, Izumo, Shimane 693 8501, Japan
Anticancer Res 2001 **21** (2A) 1007

Plant polysaccharide PSK: Cytostatic effects on growth and invasion-modulating effect on the expression of HLA and adhesion molecules on human gastric and colonic tumor cell surface

Narang S, Sahai V, Bisaria VS*// *Indian Inst Technol, Dept Biochem Engn & Biotechnol, Hauz Khas, IN-110016 New Delhi, India
J Biosci Bioeng 2001 **91** (4) 425

Optimization of xylanase production by *Melanocarpus albomyces* IIS68 in solid state fermentation using response surface methodology

Thompson JE, Fry SC*// *Univ Edinburgh, ICMB, Cell Wall Grp, Daniel Rutherford Bldg, Kings Bldg, Edinburgh EH9 3JH, Scotland
Carbohydr Res 2001 **332** (2) 175

Density-labelling of cell wall polysaccharides in cultured rose cells: Comparison of incorporation of ²H and ¹³C from exogenous glucose

Trento F, Cattaneo F, Pescador R*, Porta R, Ferro L// *Pharma Res Labs, Piazza 20 Settembre 2, IT-22079 Villa Guardia, Como, Italy
Thromb Res 2001 **102** (5) 457

Antithrombin activity of an algal polysaccharide

Vierhuis E, York WS, Kolli VSK, Vincken JP, Schols HA, Van Alebeek GJWM, Voragen AGJ*// *Univ Wageningen & Res Ctr, Dept Agrotechnol & Food Sci, Food Chem Lab, Bomenweg 2, NL-6700 EV Wageningen, The Netherlands
Carbohydr Res 2001 **332** (3) 285

Structural analyses of two arabinose containing oligosaccharides derived from olive fruit xyloglucan: XXSG and XLSG

You JO, Park SB, Park HY, Haam S*, Chung CH, Kim WS// *Yonsei Univ, Coll Engr, Dept Chem Engr, Seoul 120749, South Korea
J Microencapsul 2001 **18** (4) 521

Preparation of regular sized Ca-alginate microspheres using membrane emulsification method

Zhang H, Yoshimura M, Nishinari K*, Williams MAK, Foster TJ, Norton IT// *Osaka City Univ, Fac Human Life Sci, Dept Food & Nutr, Osaka 558 8585, Japan
Biopolymers 2001 **59** (1) 38

Gelation behaviour of konjac glucomannan with different molecular weights

13. Polysaccharides - Other

Ahola MS, Sailynoja ES, Raitavuo MH, Vaahtio MM, Salonen JI, Yli-Urpo AUO// Leiras Oy, Pharmaceut Dev, FC/HT, POB 415, FI-20101 Turku, Finland
Biomaterials 2001 **22** (15) 2163

In vitro release of heparin from silica xerogels

Borzacchiello A, Ambrosio L// Univ Naples Federico II, Inst Composite Mat Technol, CNR, Interdisciplinary Res Ctr Biomater, IT-80125 Naples, Italy
J Biomater Sci-Polym Ed 2001 **12** (3) 307

Network formation of low molecular weight hyaluronic acid derivatives

Burger K, Illes J, Gyurcsik B*, Gazdag M, Forrai E, Dekany I, Mihalyfi K// *Univ Szeged, Dept Inorgan & Analyt Chem, POB 440, HU-6701 Szeged, Hungary
Carbohydr Res 2001 **332** (2) 197

Metal ion co-ordination of macromolecular bioligands: Formation of zinc(II) complex of hyaluronic acid

Jin Y, Yamanaka J, Sato S, Miyata I, Yomota C, Yonese M*// *Nagoya City Univ, Fac Pharmaceut Sci, Mizuho ku, 3-1 Tanabedori, Nagoya, Aichi 467 8603, Japan
J Controlled Release 2001 **73** (2-3) 173

Recyclable characteristics of hyaluronate-polyhydroxyethyl acrylate blend hydrogel for controlled releases

Lisignoli G, Zini N, Remiddi G, Piacentini A, Puggioli A, Trimarchi C, Fini M, Maraldi NM, Facchini A*// *Ist Ortoped Rizzoli, Inst Ric Codivilla Putti, Lab Immunol & Genet, via Barbiano 1-10, IT-40136 Bologna, Italy
Biomaterials 2001 **22** (15) 2095

Basic fibroblast growth factor enhances *in vitro* mineralization of rat bone marrow stromal cells grown on non-woven hyaluronic acid based polymer scaffold

Nishi H, Kuwahara Y// Tanabe Seiyaku Co Ltd, Prod Technol Dev Lab, Dept Analyt Chem, 16-89 Kashima 3 chome, Yodogawa, Osaka 532 8505, Japan
J Biochem Biophys Methods 2001 **48** (2) 89

Enantiomer separation by capillary electrophoresis utilizing noncyclic mono-, oligo- and polysaccharides as chiral selectors

Tamir E, Robinson D, Koren R, Agar G, Halperin N// Assaf Haroffe Hosp, Dept Orthoped, IL-70300 Zerifin, Israel
Clin Exp Rheumatol 2001 **19** (3) 265

Intra-articular hyaluronan injections for the treatment of osteoarthritis of the knee: A randomized, double blind, placebo controlled study