

Bibliography of carbohydrate polymers

(2 weeks journals. Search completed at 2nd. Jan. 2002)

1. Books, reviews & symposia

Lagarrigue S, Alvarez G*// *INRA Cemagref, ENSIA/INAPG, Unite Mixte Rech Genie Ind Alimentaire Cemagref, Parc Tourvoie, BP 44, FR-92163 Antony, France
J Food Eng 2001 **50** (4) 189
 The rheology of starch dispersions at high temperatures and high shear rates: A review

2. Cellulose

El-Khatib RM// Sth Valley Univ, Fac Sci, Dept Chem, Sohag, Egypt
Carbohydr Polym 2002 **47** (4) 377
 Spectrophotometric detection of methyl cellulose-manganate (VI) intermediate complex in the oxidation of methyl cellulose by alkaline permanganate
 Hirsch SG, Spontak RJ*// *Nth Carolina State Univ, Dept Mat Sci & Engn, Raleigh, NC 27695, USA
Polymer 2001 **43** (1) 123
 Temperature-dependent property development in hydrogels derived from hydroxypropylcellulose
 Ito K, Kondo S, Kuzuya M*// *Gifu Pharmaceut Univ, Lab Pharmaceut Phys Chem, 5-6-1 Mitahora Higashi, Gifu 502 8585, Japan
Chem Pharm Bull Tokyo 2001 **49** (12) 1615
 A new drug delivery system using plasma-irradiated pharmaceutical aids: IX. Controlled-release of theophylline from double-compressed tablet composed of cellulose derivatives as wall material
 Levis SR, Deasy PB*// *Univ Dublin Trinity Coll, Sch Pharm, Dept Pharmaceut & Pharmaceut Technol, Dublin 2, Rep Ireland
Int J Pharm 2001 **230** (1-2) 25
 Pharmaceutical applications of size reduced grades of surfactant co-processed microcrystalline cellulose
 Luukkonen P, Maloney T, Rantanen J, Paulapuro H, Yliruusi J// AstraZeneca R&D Molndal, SE-43183 Molndal, Sweden
Pharmaceut Res 2001 **18** (11) 1562
 Microcrystalline cellulose-water interaction: A novel approach using thermoporosimetry
 Rao BS, Seshasayana A, Saradhi SVP, Kumar NR, Narayan CPS, Murthy KVR// Andhra Univ, Dept Pharmaceut Sci, IN-530003 Visakhapatnam, India
Int J Pharm 2001 **230** (1-2) 1
 Correlation of 'in vitro' release and 'in vivo' absorption characteristics of rifampicin from ethylcellulose coated nonpareil beads

3. Cellulose-degrading enzymes

Thirumale S, Rani DS, Nand K*// *Central Food Res Inst, Dept Food Microbiol, IN-570013 Mysore, India
Process Biochem 2001 **37** (3) 241
 Control of cellulase formation by trehalose in *Clostridium papyrosolvens* CFR-703

4. Chitin/Chitosan

Andrade CT, Silva KM, Simao RA, Achete C// Univ Fed Rio de Janeiro, Inst Macromolec Prof Eloisa Mano, PO Box 68525, BR-21945-970 Rio de Janeiro, Brazil

Carbohydr Polym 2002 **47** (1) 59
 Exploring chitin morphologies in cuticle fragments of *Xiphopenaeus kroyeri* by atomic force microscopy
 Bautista J, Jover M, Gutierrez JF, Corpas R, Cremades O, Fontiveros E, Islesias F, Vega J// Univ Sevilla, Fac Farm, Dept Bioquim Bromatol & Toxicol, ES-41012 Seville, Spain
Process Biochem 2001 **37** (3) 229
 Preparation of crayfish chitin by *in situ* lactic acid production
 Bernkop-Schnurch A, Kast CE// Univ Vienna, Inst Pharmaceut Technol & Biopharmaceut, Ctr Pharm, Althanstr 14, AU-1090 Vienna, Austria
Advan Drug Delivery Rev 2001 **52** (2) 127
 Chemically modified chitosans as enzyme inhibitors
 Berth G, Dautzenberg H// Univ Potsdam, Inst Organ Chem & Strukturanal, DE-14467 Potsdam, Germany
Carbohydr Polym 2002 **47** (1) 39
 The degree of acetylation of chitosans and its effect on the chain conformation on aqueous solution
 Borchard G// Leiden Univ, Amsterdam Ctr Drug Res, Div Pharmaceut Technol, POB 9502, NL-2300 RA Leiden, The Netherlands
Advan Drug Delivery Rev 2001 **52** (2) 145
 Chitosans for gene delivery
 Borzacchiello A, Ambrosio L, Netti PA, Nicolais L, Peniche C, Gallardo A, San Roman J// Univ Naples Federico II, CNR, Inst Composite Mat Technol, Ple Tecchio 80, IT-80125 Naples, Italy
J Mater Sci-Mater Med 2001 **12** (10-12) 861
 Chitosan-based hydrogels: Synthesis and characterization
 Chen RH, Win HP, Fang HJ// Natl Taiwan Ocean Univ, Dept Food Sci, 2 Pei Ning Rd, Chilung 20224, Taiwan
J Liposome Res 2001 **11** (2-3) 211
 Vesicle size, size distribution, stability, and rheological properties of liposomes coated with water-soluble chitosans of different molecular weights and concentrations
 Chen SP, Wang YT*// *Wuhan Univ, Dept Environm Sci, CN-430072 Wuhan, Hubei, Peoples Rep China
J Appl Polym Sci 2001 **82** (10) 2414
 Study on β -cyclodextrin grafting with chitosan and slow release of its inclusion complex with radioactive iodine
 Chow KS, Khor E*// *Nat Univ Singapore, Dept Chem, 3 Sci Drive 3, Kent Ridge 119260, SG-117543 Singapore, Rep Singapore
Carbohydr Polym 2002 **47** (4) 357
 New fluorinated chitin derivatives: Synthesis, characterization and cytotoxicity assessment
 Cremades O, Ponce E, Corpas R, Gutierrez JF, Jover M, Alvarez-Ossorio MC, Parrado J, Bautista J// *Univ Sevilla, Fac Farm, Dept Bioquim Bromatol & Toxicol, ES-41012 Seville, Spain
J Agric Food Chem 2001 **49** (11) 5468
 Processing of crawfish (*Procambarus clarkii*) for the preparation of carotenoproteins and chitin
 Kim YH, Gihm SH, Park CR*, Lee KY, Kim TW, Kwon IC, Chung H, Jeong SY// *Seoul Natl Univ, Enviropolymers Design Lab, Seoul 151744, South Korea
Bioconjug Chem 2001 **12** (6) 932
 Structural characteristics of size-controlled self-aggregates of deoxycholic acid-modified chitosan and their application as a DNA delivery carrier
 Kurita K, Hayakawa M, Nishiyama Y, Harata M// Seikei Univ, Fac Engn, Dept Ind Chem, Musashino-shi, Tokyo 180 8633, Japan

As a service to subscribers of the journal, this bibliography contains 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.

Carbohydr Polym 2002 **47** (1) 7

Polymeric asymmetric reducing agents: Preparation and reducing performance of chitosan/dihydroneicotinamide conjugates having L- and D-phenylalanine spacer arms

Liu WG, Yao KD*, Liu QG// *Tianjin Univ, Res Inst Polymer Mat, CN-300072 Tianjin, Peoples Rep China

J Appl Polym Sci 2001 **82** (14) 3391

Formation of a DNA/N-dodecylated chitosan complex and salt-induced gene delivery

Mi FL, Tan YC, Liang HC, Huang RN, Sung HW// *Natl Tsing Hua Univ, Dept Chem Engn, Hsinchu 300, Taiwan

J Biomater Sci-Polym Ed 2001 **12** (8) 835

In vitro evaluation of a chitosan membrane cross-linked with genipin

Mi FL, Tan YC, Liang HF, Sung HW// *Natl Tsing Hua Univ, Dept Chem Engn, Hsinchu 30013, Taiwan

Biomaterials 2002 **23** (1) 181

In vivo biocompatibility and degradability of a novel injectable-chitosan-based implant

Park SY, Jun ST, Marsh KS// *Woodstock Inst Sci Serv Humanity, 102 B Ole Towne Square, Central, SC 29630, USA

Food Hydrocolloid 2001 **15** (4-6) 499

Physical properties of PVOH/chitosan-blended films cast from different solvents

Thanou M, Florea BI, Geldof M, Junginger HE, Borchard G// *Leiden Amsterdam Ctr Drug Res, Div Pharmaceut Technol, POB 9502, NL-2300 RA Leiden, The Netherlands

Biomaterials 2002 **23** (1) 153

Quaternized chitosan oligomers as novel gene delivery vectors in epithelial cell lines

Thanou M, Verhoef JC, Junginger HE// *Leiden Univ, Amsterdam Ctr Drug Res, Div Pharmaceut Technol, POB 9502, NL-2300 RA Leiden, The Netherlands

Advan Drug Delivery Rev 2001 **52** (2) 117

Oral drug absorption enhancement by chitosan and its derivatives

Ueno H, Mori T, Fujinaga T// Obihiro Univ Agr & Vet Med, Dept Vet Clin, Obihiro, Hokkaido 080 855, Japan

Advan Drug Delivery Rev 2001 **52** (2) 105

Topical formulations and wound healing applications of chitosan

Van der Lubben IM, Verhoef JC, Borchard G, Junginger HE// *Leiden Amsterdam Ctr Drug Res, Div Pharmaceut Technol, POB 9502, NL-2300 RA Leiden, The Netherlands

Advan Drug Delivery Rev 2001 **52** (2) 139

Chitosan for mucosal vaccination

5. Cyclodextrins

Castro-Hermida JA, Gonzalez-Losada Y, Freire-Santos F, Mezo-Menendez M, Ares-Mazas E// *Univ Santiago de Compostela, Fac Farm, Dept Microbiol & Parasitol, Parasitol Lab, Avda Vigo s/n, ES-15782 La Coruna, Spain

Vet Parasitol 2001 **101** (2) 85

Evaluation of β -cyclodextrin against natural infections of cryptosporidiosis in calves

Kikuchi T, Narita M, Hamada F// *Akita Univ, Fac Engn & Resources Sci, Dept Mat Proc Engn & Appl Chem Environm, Akita 010 8502, Japan

Tetrahedron 2001 **57** (45) 9317

Synthesis of bis dansyl-modified β -cyclodextrin liner trimer having multi-recognition sites and high hydrophobic environment

Lutka A// K Marcinkowsk Univ Med Sci, Dept Inorgan & Analyt Chem, ul Grunwaldzka 6, PL-60780 Poznan, Poland

Pharmazie 2001 **55** (2) 120

Effect of cyclodextrin complexation on aqueous solubility and photostability of phenothiazine

Matsuoka K, Takahashi H, Saito Y, Terunuma D, Kuzuhara H// Saitama Univ, Fac Engn, Dept Funct Mat Sci, Saitama 338 8570, Japan

Carbohydr Polym 2002 **47** (4) 373

Improved solubility of β -cyclodextrin inclusion complexes by using liquid ammonia as a solvent and the possibility of asymmetric reduction

Mocanu G, Vizitiu D, Carpop A// Petru Poni Inst Macromol Chem, Alea Gr Ghica Voda 41A, RO-6600 Iasi, Romania

J Biact Compat Polym 2001 **16** (4) 315

Cyclodextrin polymers

Okada Y, Semma M, Ito Y, Hamayasu K, Fujita K, Hashimoto H, Koizumi K, Kitahata S// Mukogawa Womens Univ, Sch Pharmaceut Sci, 11-68 Koshien Kyuban cho, Nishinomiya, Hyogo 663 8179, Japan

Carbohydr Res 2001 **336** (3) 203

Isolation and structural analyses of positional isomers of 6¹,6ⁿ-di-O- (N-acetyl-

β -D-glucosaminyl)cyclomaltoheptaose (n=2, 3, and 4) and 6-O- [6-O-(N-acetyl- β -D-glucosaminyl)-N-acetyl- β -D-glucosaminyl]-cyclomaltoheptaose

Palin R, Grove SJA, Prosser AB, Zhang MQ// Organon Res Labs Ltd, Dept Med Chem, Newhouse ML1 5SH, Scotland

Tetrahedron Lett 2001 **42** (50) 8897

Mono-6-(O-2,4,6-trisopropylbenzenesulfonyl)- γ -cyclodextrin, a novel intermediate for the synthesis of mono-functionalised γ -cyclodextrins

Uekama K, Hieda Y, Hirayama F, Arima H, Sudoh M, Yagi A, Terashima H// Kumamoto Univ, Fac Pharmaceut Sci, 5-1 Oe Honmachi, Kumamoto 862 0973, Japan

Pharmaceut Res 2001 **18** (11) 1578

Stabilizing and solubilizing effects of sulfobutyl ether β -cyclodextrin on prostaglandin E₁ analogue

7. Lipopolysaccharides

Hussein A, Skultety L, Toman R// *Slovak Acad Sci, Inst Virol, Dept Rickettsiol & Chlamydiol, Dubravská cesta 9, Bratislava, Slovakia

Carbohydr Res 2001 **336** (3) 213

Structural analyses of the lipopolysaccharides from *Chlamydophila psittaci* strain 6BC and *Chlamydophila pneumoniae* strain Kajaani 6

MacLean LL, Perry MH// *Natl Res Council Canada, Inst Biol Sci, 100 Sussex Dr, Ottawa, Ontario, Canada K1A 0R6

Eur J Biochem 2001 **268** (22) 5740

Structural studies on the O-polysaccharide of the lipopolysaccharide produced by *Citrobacter rodentium* (ATCC 51459)

Soderman P, Widmalm G// *Univ Stockholm, Arrhenius Lab, Dept Organ Chem, SE-10691 Stockholm, Sweden

Eur J Org Chem 2001 (18) 3453

Synthesis of trisaccharides related to the branching region of the O-antigen polysaccharides from *Escherichia coli* O35 and *Salmonella arizona* O62

Torzevska A, Kondakova AN, Perepelov AV, Senchenkova SN, Shashkov AS, Rozalski A*, Knirel YA// *Univ Lodz, Inst Microbiol & Immunol, Dept Immunobiol Bacteria, Banacha 12/16, PL-90237 Lodz, Poland

FEMS Immunol Med Microbiol 2001 **31** (3) 227

Structure of the O-specific polysaccharide of *Proteus vulgaris* O37 and close serological relatedness of the lipopolysaccharides of *P. vulgaris* O37 and *P. vulgaris* O46

Zhang JJ, Zhu YL, Kong FZ// *Acad Sinica, Res Ctr Ecoenvironment Sci, POB 2871, CN-100085 Beijing, Peoples Rep China

Carbohydr Res 2001 **336** (3) 229

Synthesis of an L-rhamnose tetrasaccharide, the common and major structure of the repeating unit of the O-antigenic polysaccharide of a strain of *Klebsiella pneumoniae* and *Pseudomonas holci*

8. Pectin

Bosco M, Miertus S, Turchini S, Prosperi T, Ascone I, Rizzo R// *Univ Trieste, Dipt Biochim Biofis & Chim Macromolec, via Licio Giorgieri 1, IT-34127 Trieste, Italy

Carbohydr Polym 2002 **47** (1) 15

Structural studies on polygalacturonate gels: An EXAFS investigation combined with molecular modelling

De Mars LL, Ziegler GR// *Pennsylvania State Univ, Dept Food Sci, 116 Borland Lab, University Park, Pa 16802, USA

Food Hydrocolloid 2001 **15** (4-6) 643

Texture and structure of gelatin/pectin-based gummy confections

Jiang CM, Wu MC, Chang WH, Chang HM// *Natl Taiwan Univ, Grad Inst Food Sci & Technol, Taipei 10617, Taiwan

J Agric Food Chem 2001 **49** (11) 5584

Determination of random- and blockwise-type de-esterified pectins by capillary zone electrophoresis

Kawakatsu T, Tragardh G*, Tragardh C// *Lund Univ, Ctr Chem & Chem Engn, POB 124, SE-22100 Lund, Sweden

Colloid Surface A 2001 **189** (1-3) 257

Production of W/O/W emulsions and S/O/W pectin microcapsules by micro-channel emulsification

Kawakatsu T, Tragardh G*, Tragardh C// *Lund Univ, POB 124, SE-22100 Lund, Sweden

J Food Eng 2001 **50** (4) 247

The formation of oil droplets in a pectin solution and the viscosity of the oil-in-pectin solution emulsion

Norziah MH, Kong SS, Abd-Karim A, Seow CC// Univ Sains Malaysia, Sch Indust Technol, Food Technol Div, Food Biomat Res Grp, MY-11800 Minden, Penang, Malaysia

Food Hydrocolloid 2001 **15** (4-6) 491

Pectin-sucrose-Ca²⁺ interactions: Effects on rheological properties
 Ralet MC, Dronnet V, Buchholt HC, Thibault JF// INRA, Unite Rech Polysaccharides Leurs Org & Interact, rue Geraudiere, BP 71627, FR-44316 Nantes 3, France
Carbohydr Res 2001 **336** (2) 117
 Enzymatically and chemically de-esterified lime pectins: Characterisation, polyelectrolyte behaviour and calcium binding properties

9. Starch

Abd-Aziz S, Ng DC, Yusof HM, Karim MIA, Ariff AB, Uchiyama K, Shioya S// Univ Putra Malaysia, Inst Biosci, Dept Biotechnol, MY-43400 Serdang, Selangor, Malaysia
World J Microbiol Biotechnol 2001 **17** (7) 713
 Effect of C/N ratio and starch concentration on ethanol production for sago starch using recombinant yeast
 Bhandari PN, Singhal RS*, Kale DD// *Univ Mumbai, Dept Chem Technol, Food & Ferment Tech Div, IN-400019 Matunga, India
Carbohydr Polym 2002 **47** (4) 365
 Effect of succinylation on the rheological profile of starch pastes
 Boutboul A, Giampaoli P, Feigenbaum A, Ducret V// *INRA, Squale, Lab Nutrit & Securite Aliment, FR-78352 Jouy-en-Josas, France
Carbohydr Polym 2002 **47** (1) 73
 Influence of the nature and treatment of starch on aroma retention
 Hreczuk-Hirst D, Chicco D, German L, Duncan R// *Univ Wales Coll Cardiff, Welsh Sch Pharm, Redwood Bldg, King Edward VII Ave, Cardiff CF10 3XF, Wales
Int J Pharm 2001 **230** (1-2) 57
 Dextrans as potential carriers for drug targeting: Tailored rates of dextrin degradation by introduction of pendant groups
 Kim S, Willett JL, Carriere CJ, Felker FC// USDA/ARS, Nat Ctr Agric Util Res, 1815 Nth Univ St, Peoria, IL 61614, USA
Carbohydr Polym 2002 **47** (4) 347
 Shear-thickening and shear-induced pattern formation in starch solutions
 Paterson JL, Hardacre A, Li P, Rao MA// *Cornell Univ, Dept Food Sci & Technol, NYS AES, Geneva, NY 14456, USA
Food Hydrocolloid 2001 **15** (4-6) 453
 Rheology and granule size distributions of corn starches dispersions from two genotypes and grown in four regions
 Sun R, Sun XF// Sth China Univ Technol, Coll Pulp & Paper Sci & Environ Engn, State Key Lab Pulp & Paper Engn, Guangzhou, Peoples Rep China
Carbohydr Polym 2002 **47** (4) 323
 Succinoylation of sago starch in the *N,N*-dimethylacetamide/lithium chloride system
 Svegmark K, Helmersson K, Nilsson G, Nilsson PO, Andersson R, Svensson E// Lyckeby Starkelsen, SE-29191 Kristianstad, Sweden
Carbohydr Polym 2002 **47** (4) 331
 Comparison of potato amylopectin starches and potato starches: Influence of year and variety
 Vaz CM, Reis RL, Cunha AM// Univ Minho, Dept Polymer Engn, Campus Azuren, PT-4800-058 Guimaraes, Portugal
Biomaterials 2002 **23** (2) 629
 Use of coupling agents to enhance the interfacial interactions in starch-EVOH/hydroxylapatite composites
 Wesslen KB, Wesslen B// Lund Univ, Polymer Sci & Engn, Inst Technol, PO Box 124, SE-22100 Lund, Sweden
Carbohydr Polym 2002 **47** (4) 303
 Synthesis of amphiphilic amylose and starch derivatives
 Woo BH, Jiang G, Jo YW, De Luca PP// *Univ Kentucky, Fac Pharmaceut Sci, Coll Pharm, Rose St, Lexington, Ky 40536, USA
Pharmaceut Res 2001 **18** (11) 1600
 Preparation and characterization of a composite PLGA and poly(acryloyl hydroxyethyl starch) microsphere system for protein delivery

10. Starch-degrading enzymes

Andersson L, Rydberg U, Larsson H, Andersson R, Aman P// Swedish Univ Agric Sci, Dept Food Sci, PO Box 7051, SE-75007 Uppsala, Sweden
Carbohydr Polym 2002 **47** (1) 53
 Preparation and characterisation of linear dextrans and their use as substrates in *in vitro* studies of starch branching enzymes
 Ozbek B, Yuces S// Yildiz Tech Univ, Dept Chem Engn, Davit Pas Pasca Campus, TR-34210 Esenler, Istanbul, Turkey
Process Biochem 2001 **37** (1) 87
 α -Amylase inactivation during wheat starch hydrolysis process
 Varavinit S, Chaokasem N, Shobsngob S// Mahidol Univ, Fac Sci, Dept

Biotechnol, Rama VI Rd, TH-10400 Bangkok, Thailand
World J Microbiol Biotechnol 2001 **17** (7) 721
 Covalent immobilization of a glucoamylase to bagasse dialdehyde cellulose
 Wojciechowski PM, Kozio A, Noworyta A// Wroclaw Tech Univ, Inst Inorgan Chem, Wybrzeze St Wyspianskiego 27, PL-50370 Wroclaw, Poland
Biotechnol Bioeng 2001 **75** (5) 530
 Iteration model of starch hydrolysis by amylolytic enzymes

11. Polysaccharides - Microbial

Bao XF, Duan JY, Fang XY, Fang JN// *Chinese Academy Sci, Inst Biol Sci, Inst Mat Med, 294 Tai Yuan Rd, CN-200031 Shanghai, Peoples Rep China
Carbohydr Res 2001 **336** (2) 127
 Chemical modifications of the (1→3)- α -D-glucan from spores of *Ganoderma lucidum* and investigation of their physicochemical properties and immunological activity
 Cansell M, Moussaoui N, Lefrancos C// Univ Bordeaux 1, ISTAB, Lab Lipochim Alimentaire, Ave Faculte, FR-33405 Talence, France
J Liposome Res 2001 **11** (2-3) 229
 Stability of marine lipid based-liposomes under acid conditions. Influence of xanthan gum
 Feikin DR, Elie CM, Goetz MB, Lennox JL, Carbone GM, Romero-Steiner S, Holder PF, O'Brien WA, Whitney CG, Butler JC, Breiman RF// CDCP, Natl Ctr Infect Dis, Div Bacterial & Mycot Dis, Resp Dis Branch, 1600 Clifton Rd, MS-C23, Atlanta, Ga 30332, USA
Vaccine 2001 **20** (3-4) 545
 Randomized trial of the quantitative and functional antibody responses to a 7-valent pneumococcal conjugate vaccine and/or 23-valent polysaccharide vaccine among HIV-infected adults
 Gianni R, Delben F, Liut G, Bernstorff S, Amenitsch H, Rizzo R// *Univ Trieste, Dipt Biochim Biofis & Chim Macromolec, via Licio Giorgieri 1, IT-34127 Trieste, Italy
Carbohydr Polym 2002 **47** (4) 387
 Synthesis and conformational properties of cyanoethyl-scleroglucan
 Hemar Y, Tamehara M, Munro PA, Singh H// *Massey University, Inst Food, Nutrit & Human Hlth, Private Bag 11222, Palmerston North, New Zealand
Food Hydrocolloid 2001 **15** (4-6) 513
 Influence of xanthan gum on the formation and stability of sodium caseinate oil-in-water emulsions
 Hemar Y, Tamehara M, Munro PA, Singh H// Massey Univ, Inst Food, Nutrit & Human Hlth, Private Bag 11 222, Palmerston Nth, New Zealand
Food Hydrocolloid 2001 **15** (4-6) 565
 Viscosity, microstructure and phase behavior of aqueous mixtures of commercial milk protein products and xanthan gum
 Iseki T, Takahashi M*, Hattori H, Hatakeyama T, Hatakeyama H// *Shinshu Univ, Fac Textile Sci & Technol, Dept Fine Mater Engn, 3-15-1 Okida, Ueda, Nagano 386 8567, Japan
Food Hydrocolloid 2001 **15** (4-6) 503
 Viscoelastic properties of xanthan gum hydrogels annealed in the sol state
 Kiho T, Kochi M, Usui S, Hirano K, Aizawa K, Inakuma T// Gifu Pharmaceut Univ, 5-6-1 Mitahara higashi, Gifu 502 8585, Japan
Biol Pharm Bull 2001 **24** (12) 1400
 Antidiabetic effect of an acidic polysaccharide (TAP) from *Tremella aurantia* and its degradation product (TAP-H)
 Livney YD, Ramon O, Kesselman E, Cogan U, Mizrahi S, Cohen Y// *Technion Israel Inst Technol, Dept Chem Engn, IL-32000 Haifa, Israel
J Polym Sci B-Polym Phys 2001 **39** (22) 2740
 Swelling of dextran gel and osmotic pressure of soluble dextran in the presence of salts
 Moreira AS, Vendruscolo JLS, Gil-Turnes C, Vendruscolo CT// *Fed Univ Pelotas, Ctr Biotechnol, CP 354, BR-96010-900 Pelotas, RS, Brazil
Food Hydrocolloid 2001 **15** (4-6) 469
 Screening among 18 novel strains of *Xanthomonas campestris* pv *pruni*
 Moresi M, Lo Presti S, Mancini M// Univ Tuscia, Ist Tecnol Agroalimentari, via San Camillo de Lellis, IT-01100 Viterbo, Italy
J Food Eng 2001 **50** (4) 235
 Rheology of scleroglucan dispersions
 Paoletti LC, Peterson DL, Legmann R, Collier RJ// Brigham & Women's Hosp, Dept Med, Channing Lab, 181 Longwood Ave, Boston, Ma 02115, USA
Vaccine 2001 **20** (3-4) 370
 Preclinical evaluation of group B streptococcal polysaccharide conjugate vaccines prepared with a modified diphtheria toxin and a recombinant duck hepatitis B core antigen
 Papagianni M, Psomas SK, Batsilas L, Paras SV, Kyriakidis DA, Liakos

- poulou-Kyriakides M// Aristotle Univ, Dept Chem Engn, GR-54006 Thessaloniki, Greece
Process Biochem 2001 **37** (1) 73
 Xanthan production by *Xanthomonas campestris* in batch cultures
- Teramoto N, Saitoh M, Kuroiwa J, Shibata M, Yosomiya R// Chiba Inst Technol, Dept Ind Chem, 2-17-1 Tsudanuma, Narashino, Chiba 275 0016, Japan
J Appl Polym Sci 2001 **82** (9) 2273
 Morphology and mechanical properties of pullulan/poly(vinyl alcohol) blends crosslinked with glyoxal
- Teratsubo M, Tanaka Y*, Saeki S// *Fukui Univ, Fac Engn, Dept Mat Sci Engn, Bunkyo, Fukui 910 8507, Japan
Carbohydr Polym 2002 **47** (1) 1
 Measurement of stress and strain during tensile testing of gellan gum gels: Effect of deformation speed
- Torino MI, Taranto MP, Sesma F, De Valdez GF// *Consejo Nacl Invest Cient & Tecn, CERELA, Chacabuco 145, AR-4000 San Miguel Tucuman, Argentina
J Appl Microbiol 2001 **91** (5) 846
 Heterofermentative pattern and exopolysaccharide production by *Lactobacillus helveticus* ATCC 15807 in response to environmental pH
- Wang F, Sun Z, Wang YJ// *Univ Arkansas, Dept Food Sci, Fayetteville, AR 72704, USA
Food Hydrocolloid 2001 **15** (4-6) 575
 Study of xanthan gum/waxy corn starch interaction in solution by viscometry
- 12. Polysaccharides - Plant**
- Bixler HJ, Johndro K, Falshaw R// Ingredients Solutions Inc, PO Box 407, Searsport, Me 04794, USA
Food Hydrocolloid 2001 **15** (4-6) 619
 κ -2 Carrageenan: Structure and performance of commercial extracts II. Performance in two simulated dairy applications
- Chowdhury P, Samui S, Kundu T, Nandi MM// Visva Bharati Univ, Dept Chem, Siksha Bhavana, IN-731235 Santiniketan, West Bengal, India
J Appl Polym Sci 2001 **82** (14) 3520
 Graft polymerization of methyl methacrylate onto guar gum with ceric ammonium sulfate/dextrose redox pair
- Csavas M, Borbas A, Janossy L, Batta G, Liptak A// *Hungarian Acad Sci, Res Grp Carbohydrates, POB 70, HU-4010 Debrecen, Hungary
Carbohydr Res 2001 **336** (2) 107
 Synthesis of the α -L-Araf-(1 \rightarrow 2)- β -D-Galp-(1 \rightarrow 6)-(β -D-Galp-(1 \rightarrow 6)-[α -L-Araf-(1 \rightarrow 2)- β -D-Galp-(1 \rightarrow 6)-D-Gal] hexasaccharide as a possible repeating unit of the cell-cultured exudates of *Echinacea purpurea* arabinogalactan
- De Pinto GL, Matinez M, Sanabria L// Univ Zulia, Fac Humanidades & Educ, Ctr Invest Quim Prod Naturales, Apdo 526, Maracaibo, Venezuela
Food Hydrocolloid 2001 **15** (4-6) 461
 Structural features of the polysaccharide gum from *Acacia glomerosa*
- Deters A, Dauer A, Schnetz E, Fartasch M, Hensel A// *Univ Appl Sci, Hsch Wadenswil, Glycopharm Res Grp, CH-8820 Wadenswil, Switzerland
Phytochemistry 2001 **58** (6) 949
 High molecular compounds (polysaccharides and proanthocyanidins) from *Hamamelis virginiana* bark: Influence on human skin keratinocyte proliferation and differentiation and influence on irritated skin
- Draget KI, Gaserod O, Aune I, Andersen PO, Storbakken B, Stokke BT, Smidsrod O// Norwegian University Science & Technol-NTNU, Department Biotechnol, Norwegian Biopolymer Lab-NOBIPOL, NO-7491 Trondheim, Norway
Food Hydrocolloid 2001 **15** (4-6) 485
 Effects of molecular weight and elastic segment flexibility on syneresis in Ca-alginate gels
- Dunstan DE, Chen Y, Liao ML, Slavatore R, Boger DV, Prica M// Univ Melbourne, Sch Bot, Dept Chem Engn, Co-operative Res Ctr Bioprod, Parkville, Vic 3010, Australia
Food Hydrocolloid 2001 **15** (4-6) 475
 Structure and rheology of the κ -carrageenan/locust bean gum gels
- Flashaw R, Boxler HJ, Johndro K// Ind Res Ltd, PO Box 31-310, Lower Hutt, New Zealand
Food Hydrocolloid 2001 **15** (4-6) 441
 Structure and performance of commercial κ -2 carrageenan extracts. I. Structure analysis
- Hongshu Z, Jinggan Y, Yan Z// Acad Sinica, Inst Chem, Lab Cellulose & Lignocellulosic Chem, Guangzhou, Peoples Rep China
Carbohydr Polym 2002 **47** (1) 83
 The glucomannan from ramie
- Kardosova A, Malovikova A, Patoprsty V, Nosal'ova G, Matakova T// Slovak Acad Sci, Inst Chem, SK-84238 Bratislava, Slovakia
Carbohydr Polym 2002 **47** (1) 27
 Structural characterization and antitussive activity of a glucuronoxylan from *Mahonia aquifolium* (Pursh) Nutt
- Marais MF, Joseleau JP// *CNRS, Ctr Rech Macromol Vegetales, UPR 5301, BP 53, FR-38041 Grenoble, France
Carbohydr Res 2001 **336** (2) 155
 A fucoidan fractions from *Ascophyllum nodosum*
- Nedovic VA, Obradovic B, Leskosek-Cukalovic I, Trifunovic O, Pesic R, Bugarski B// Univ Belgrade, Fac Agric, Inst Food Technol & Biochem, Nemanjina 6, PO Box 127, YU-11081 Belgrade Zemun, Yugoslavia
Process Biochem 2001 **37** (1) 17
 Electrostatic generation of alginate microbeads loaded with brewing yeast
- Pazur JH, Reed AS, Scrano RS// Penn State Univ, Dept Biochem & Mol Biol, University Park, Pa 16802, USA
Carbohydr Res 2001 **336** (3) 195
 Antibodies with specificities for D-xylose and for D-galacturonic acid residues of flaxseed polysaccharides
- Pugh N, Ross SA, ElSohly HN, ElSohly MA, Pasco DS// *Univ Mississippi, Sch Pharm, Pharmaceut Sci Res Inst, Natl Ctr Nat Prod Res, University, Ms 38677, USA
Planta Med 2001 **67** (8) 737
 Isolation of three high molecular weight polysaccharide preparations with potent immunostimulatory activity from *Spirulina platensis*, *Aphanizomenon flos-aquae* and *Chlorella pyrenoidosa*
- Simonet F, Garnier C, Doublier JL// *INRA, Unite Physico-Chim Macromol, BP 71627, FR-44316 Nantes 3, France
Carbohydr Polym 2002 **47** (4) 313
 Description of the thermodynamic incompatibility of the guar-dextran aqueous two-phase system by light scattering
- Turgeon SL, Beaulieu M// Univ Laval, Fac Sci Agric & Aliment, Ctr Rech Sci Technol Lait-STELA, Pavillon Paul-Comtois, Sainte-Foy, Quebec, Canada G1K 7P4
Food Hydrocolloid 2001 **15** (4-6) 583
 Improvement and modification of whey protein gel texture using polysaccharides
- Wang Q, Wood PJ, Cui W// AAFC, Food Res Prog, 93 Stone Road West, Guelph, Ontario, Canada N1G 5C9
Carbohydr Polym 2002 **47** (1) 35
 Microwave assisted dissolution of β -glucan in water: Implications for the characterisation of this polymer
- Yang J, Goto M, Ise H, Cho CS, Akaike T// *Tokyo Inst Technol, Dept Biomol Engn, Midori ku, 4259 Nagatsuta cho, Yokohama, Kanagawa 226 850, Japan
Biomaterials 2002 **23** (2) 471
 Galactosylated alginate as a scaffold for hepatocytes entrapment
- 13. Polysaccharides - Other**
- Al-Assaf S, Phillips GO*, Gunning AP, Morris VJ// *2 Plymouth Drive, Radyr, Cardiff CF15 8BL, Wales
Carbohydr Polym 2002 **47** (4) 341
 Molecular interaction studies of the hyaluronan derivative, hylan A using atomic force microscopy
- De Kruif CG, Tuinier R// NIZO Food Res, PO Box 20, NL-6710 BA Ede, The Netherlands
Food Hydrocolloid 2001 **15** (4-6) 555
 Polysaccharide protein interactions
- Gu GF, Yang F, Du YG*, Kong FZ// *Acad Sinica, Ecoenvironm Sci Res Ctr, POB 2871, CN-100085 Beijing, Peoples Rep China
Carbohydr Res 2001 **336** (2) 99
 Synthesis of a hexasaccharide that relates to the arabinogalactan epitope
- Kobayashi S, Morii H, Itoh R, Kimura S, Ohmiae M// Kyoto Univ, Grad Sch Engn, Dept Chem Mat, Kyoto 606 8501, Japan
J Am Chem Soc 2001 **123** (47) 11825
 Enzymatic polymerization to artificial hyaluronan: A novel method to synthesize a glycosaminoglycan using a transition state analogue monomer
- Momose T, Amadio PC*, Sun YL, Zhao CF, Zobitz ME, Harrington JR, An KN// *Mayo Clin, 200 1st St SW, Rochester, Mn 55905, USA
J Biomed Mater Res 2002 **59** (2) 219
 Surface modification of extrasynovial tendon by chemically modified hyaluronic acid coating
- Rinaudo M// Joseph Fourier Univ, Ctr Rech Macromole Veg-CNRS, BP 53, FR-38041 Grenoble 9, France
Food Hydrocolloid 2001 **15** (4-6) 433
 Relation between the molecular structure of some polysaccharides and original properties in sol and gel states