

## 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 Tourvoic, 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 & Engr, 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 & Struktural, 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  $\beta$ -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, Environpolymers Design Lab, Seoul 151744, South Korea  
*Bioconj 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 Engr, 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/dihydronicotinamide 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\*// \*Nat'l Tsing Hua Univ, Dept Chem Engrn, 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\*// \*Nat'l Tsing Hua Univ, Dept Chem Engrn, 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  $\beta$ -cyclodextrin against natural infections of cryptosporidiosis in calves

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

*Tetrahedron* 2001 **57** (45) 9317

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

Lutka A// K Marcinkowski 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 Engrn, Dept Funct Mat Sci, Saitama 338 8570, Japan

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

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

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

*J Bioact 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 6',6"-di-O- (N-acetyl-

$\beta$ -D-glucosaminyl)cyclomaltoheptaose (n=2, 3, and 4) and 6-O- [6-O-(N-acetyl- $\beta$ -D-glucosaminyl)-N-acetyl- $\beta$ -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-triisopropylbenzenesulfonyl)- $\gamma$ -cyclodextrin, a novel intermediate for the synthesis of mono-functionalised  $\gamma$ -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  $\beta$ -cyclodextrin on prostaglandin E<sub>1</sub> analogue

## 7. Lipopolysaccharides

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

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

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

MacLean LL, Perry MH\*// \*Nat'l 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 arizonae* O62

Torzewska A, Kondakova AN, Perepelov AV, Senchenkova SN, Shashkov AS, Rozalski A\*, Knirel YA// \*Univ Lodz, Inst Microbiol & Immunol, Dept Immunobiol Bacteria, Banacha 12116, 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 Ecoenvironm 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\*// \*Nat'l 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 Engrn, 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 microchannel 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-Ca<sup>2+</sup> 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, Ducruet 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

Dextrins 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

Succinylation 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 Azurem, 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 dextrins and their use as substrates in *in vitro* studies of starch branching enzymes

Ozbek B, Yuceer S// Yildiz Tech Univ, Dept Chem Engn, Davit Pasa Campus, TR-34210 Esenler, Istanbul, Turkey

*Process Biochem* 2001 **37** (1) 87

$\alpha$ -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, Koziol A, Noworyta A// Wroclaw Tech Univ, Inst Inorgan Chem, Wybrzeze St Wyspińskiego 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 $\rightarrow$ 3)- $\alpha$ -D-glucan from spores of *Ganoderma lucidum* and investigation of their physicochemical properties and immunological activity

Cansell M, Moussaoui N, Lefrancois 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, Carlone 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, Tamehana 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 Mitahora 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

Preliminary 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, Liako-

- poulou-Kyriakides M// Aristotle Univ, Dept Chem Engr, 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 Engr, Dept Mat Sci Engr, 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  
 $\kappa$ -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  $\alpha$ -L-Araf-(1 $\rightarrow$ 2)- $\beta$ -D-Galp-(1 $\rightarrow$ 6)-( $\beta$ -D-Galp-(1 $\rightarrow$ 6)-[ $\alpha$ -L-Araf-(1 $\rightarrow$ 2)]- $\beta$ -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, Daur 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 Calcium alginate gels  
 Dunstan DE, Chen Y, Liao ML, Slavatore R, Boger DV, Prica M// Univ Melbourne, Sch Bot, Dept Chem Engr, Co-operative Res Ctr Bioprod, Parkville, Vic 3010, Australia  
*Food Hydrocolloid* 2001 **15** (4-6) 475  
 Structure and rheology of the  $\kappa$ -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  $\kappa$ -2 carrageenan extracts. I. Structure analysis  
 Hongshu Z, Jinggan Y, Yan Z// Acad Sinica, Inst Chem, Lab Cellulose & Lignocellulosic Chem, Guanzhou, 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 Macromolec, 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  $\beta$ -glucan in water: Implications for the characterisation of this polymer  
 Yang J, Goto M, Ise H, Cho CS, Akaiki T// \*Tokyo Inst Technol, Dept Biomol Engr, 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, Ohmae M// Kyoto Univ, Grad Sch Engr, 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 Macromolec 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