



BIBLIOGRAPHY ON CARBOHYDRATE POLYMERS

1 Books, Reviews and Symposia

Painter TJ//Univ Trondheim, Inst Biotechnol, N-7034 Trondheim-NTH, Norway
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Lindow Man, Tollund Man and other peat-bog bodies: The preservative and antimicrobial action of sphagnum, a reactive glycuronoglycan with tanning and sequestering properties (Review)

Stephen AM//Univ Saskatchewan, Coll Pharm, Div Nutr & Dietet, Saskatoon, Saskatchewan, Canada S7N 0W0

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2 Cellulose

Francotte E, Wolf RM//Ciba Geigy AG, Div Pharmaceut, Cent Res Labs, K-122P25, CH-4002 Basel, Switzerland
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Davis RM//Virginia Polytech Inst & State Univ, Dept Chem Engr, Blacksburg, Va 24061, USA
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Analysis of dilute solutions of (carboxymethyl)cellulose with the electrostatic wormlike chain theory

Gupta S, Moulik SP, Das AR**//Indian Assoc Cultivat Sci, Polymer Sci Unit, Calcutta 700032, W Bengal, India

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Altissimi KY, Hensley JL, Hartley A//Eastman

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Degroot WF, Richards GN**//Univ Montana, Wood Chem Lab, Missoula, Mt 59812, USA

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Deus C, Friebolin H*, Siefert E//Univ Heidelberg, Inst Organ Chem, Neuenheimer Feld 270, W-6900 Heidelberg, FRG

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Partially acetylated cellulose - Synthesis and determination of the substituent distribution via

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 ten sections: 1 Books, Reviews and Symposia; 2 Cellulose; 3 Cellulose-degrading Enzymes; 4 Cyclodextrins; 5 Lignin; 6 Polysaccharides - Named; 7 Polysaccharides - Other; 8 Lipopolysaccharides; 9 Starch; 10 Starch-degrading Enzymes. Within each section, articles are listed in alphabetical order with respect to the subject. When there are no publications to appear under one of these headings, that section will be omitted.

¹H NMR spectroscopy (German, English Abstract)

Freer SN//USDA ARS, North Reg Res Ctr, Peoria, IL 61604, USA

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Kai A, Horii F, Hirai A//Tokyo Metropolitan Univ, Fac Technol, Dept Ind Chem, Setagaya ku, Tokyo 158, Japan

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Kumar PKR, Singh A, Schugerl K*//Univ Hannover, Inst Tech Chem, Callinstr 3, W-3000 Hannover 1, FRG

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Lynd LR, Cushman JH, Nichols RJ, Wyman CE//Dartmouth Coll, Thayer Sch Engr, Hanover, NH 03755, USA

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Murphy AP//US Dept Interior, Bur Reclamat, POB 25007, Denver, Co 80225, USA

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Park KM, Shim IW*//Chung Ang Univ, Dept Chem, Seoul, South Korea

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Hengge AC, Cleland WW**//Univ Wisconsin, Inst Enzyme Res, Madison, WI 53705, USA
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Kodaka M//Natl Chem Lab Ind, Yatabe, Ibaraki 305, Japan

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Japan

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Pasti MB, Hagen SR, Korus RA, Crawford DL*/Univ Idaho, Dept Bacteriol & Biochem, Moscow, Id 83843, USA

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Schmidt JA, Berinstein AB, Derege F, Heitner C, Johnston LJ, Scaiano JC//Pulp & Paper Res Inst Canada, 570 Blvd St Jean, Pointe Claire, Quebec, Canada H9R 3J9

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Bird KT//Univ N Carolina, Ctr Marine Sci Res, Wilmington, NC 28403, USA

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Ayyad K, Aboel-Niel E//Univ, Zagazig, Food Sci Dept, Agr Sect, Inst Efficient Prod, Zagazig Egypt

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Bystricky S, Malovikova A, Sticzay T//Inst Chem, Slovak Acad Scis, 842 38 Bratislava, Czechoslovakia

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Gray CJ, Philp K//Univ Birmingham, Sch Chem, Edgbaston PO Box 363, Birmingham B15 2TT, England

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Krishna AG, Sharma Y*/Ctr Cellular & Molec Biol, Uppal Rd, Hyderabad 500007, India

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Kwok KK, Groves MJ, Burgess DJ*/Univ Illinois, Coll Pharm, Dept Pharmaceut, M-C 880, 333 S Wood St, Chicago, Il 60612, USA

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Aman P, Bengtsson S//Swedish Univ Agr Sci, Dept Food Sci, S-750 07 Uppsala, Sweden

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Hoffmann RA, Roza M, Maat J, Kamerling JP, Vliegthart JFG*/Univ Utrecht, Bijvoet Ctr, Dept Bio-Organic Chem, PO Box 80.075, NL-3508 TB Utrecht, The Netherlands

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Stootmaekers D, Mandel M, Reynaers H//

Leiden State Univ, Dept Phys & Macromolec Chem, Gorlaeus Labs, POB 9502, 2312 AV Leiden, The Netherlands

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Stoev G, Velichkov A//Bulgarian Acad Sci, Inst Organ Chem, Ctr Phytochem, Block 9, BU-1113 Sofia, Bulgaria

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Direct determination of acetic acid in strongly acidic hydrolysates of chitin and chitin-containing biological products by capillary gas chromatography

Weng YM, Hotchkiss JH//Cornell Univ, Inst Food Sci, Stocking Hall, Ithaca, NY 14853, USA

J FOOD SCI 1991, 56 (1) 274

Headspace gas composition and chitin content as measures of *Rhizopus stolonifer* growth

Aiba S//Ind Prod Res Inst, Div Biomimet Chem, 1-1-4 Higashi, Tsukuba, Ibaraki 305, Japan

INT J BIOL MACROMOL 1991, 13 (1) 40

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Dealba PLL, Lopez-Martinez L, Garcia MG//Univ Guanajuato, Inst Investigaciones Cient, L de Retana Num 5, Guanajuato Gto, Mexico City 36000, Mexico

AN QUIM 1990, 86 (7) 801

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Loubaki F, Ourevitch M, Sicsic S*//CNRS, CERCOA, 2 rue Henri Dunant, F-94320 Thais, France

EUR POLYM J 1991, 27 (3) 311

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modified chitosan by ^{13}C -NMR and ^1H -NMR spectroscopy

Nanjo F, Katsumi R, Sakai K//Yaizu Suisan Kagaku Ind Co Ltd, Res & Dev Labs, 5-8-13 Kogawashin machi, Yaizu 425, Shizuoka, Japan

ANAL BIOCHEM 1991, 193 (2) 164

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Papineau AM, Hoover DG, Knorr D, Farkas DF//Kellogg Comp, 235 Porter St, Battle Creek, MI 49016, USA

FOOD BIOTECHNOL 1991, 5 (1) 45

Antimicrobial effect of water-soluble chitosans with high hydrostatic pressure

Beuria MK, Das MK*//Reg Med Res Ctr, Dept Immunol, Bhubaneswar 751005, India

INDIAN J EXP BIOL 1991, 29 (3) 284

Dextran sulfate induced suppression of *Plasmodium berghei* parasitaemia

Brusentsov NA, Glazkova TY, Yavorskaya NP, Yurchenko NY//Acad Med Sci USSR, Canc Res Ctr, Moscow 115478, USSR

EKSP ONKOL 1990, 12 (6) 59

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Daval JM, Delestre C, Carre M-C, Hubert P*, Dellacherie E*//Lab Chim-Phys Macromolec, CNRS UA 494, ENSIC, BP 451, F-54001 Nancy Cedex, France

CARBOHYD POLYM 1991, 15 (3) 233

Synthesis and characterization of some covalent dextran-polyoxyethyleneglycol derivatives

Neville GA, Rochon P, Rej RN, Perlin AS//Hlth & Welf Canada, Hlth Protect Branch, Bur Drug Res, Tunneys Pasture, Ottawa, Ontario, Canada K1A 0L2

J PHARM SCI 1991, 80 (3) 239

Characterization and differentiation of some complex dextran sulfate preparations of medicinal interest

Noguchi A, Takahashi T, Yamaguchi T, Kitamura K, Takakura Y, Hashida M, Sezaki H//Kyoto Prefectural Univ Med, Dept Surg, Kamigyo ku, Kyoto 602, Japan

JPN J CANCER RES 1991, 82 (2) 219

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of the immunoconjugate composed of antihuman colon cancer monoclonal antibody and mitomycin C-dextran conjugate

Razavian SM, Guillemin MT, Guillet R, Beuzard Y, Boynard M//Univ Paris 05, Biophys Appliquee Lab, UFR Biomed, 45 rue St Peres, F-75006 Paris, France

BIORHEOLOGY 1991, 28 (1-2) 89

Assessment of red blood cell aggregation with dextran by ultrasonic interferometry

Rene F, Lalande M//LGIA, INRA, 369 rue Jules Guesde, BP 39, F-59651 Villeneuve d'Ascq, France

J MEMBRANE SCI 1991, 56 (1) 29

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Schlumpf R, Morel P, Loveras JJ, Condie RM, Matas A, Kurle J, Fasola CG, Najarian JS, Sutherland DER*//Univ Minnesota Hosp, Dept Surg, Box 280, Minneapolis, Mn 55345, USA

TRANSPLANT PROC 1991, 23 (1) PT 1, 657

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Zhao H, Heindel ND*//Lehigh Univ, Dept Chem, Bethlehem, Pa 18015, USA

PHARMACEUT RES 1991, 8 (3) 400

Determination of degree of substitution of formyl groups in polyaldehyde dextran by the hydroxylamine hydrochloride method

Lahaye M, Vigouroux J, Thibault J-F//Lab Biochim & Technol Glucides, INRA, BP 527, F-44026 Nantes Cedex 03, France

CARBOHYD POLYM 1991, 15 (4) 431

Endo-beta-1,4-D-galactanase from *Aspergillus niger* var *aculeatus*: Purification and some properties

Olsen O, Thomsen KK//Carlsberg Lab, Dept Physiol, Gamle Carlsbergvej 10, DK-2500 Copenhagen, Denmark

J GEN MICROBIOL 1991, 137 (MAR) 579

Improvement of bacterial beta-glucanase thermostability by glycosylation

Ruel K, Joseleau JP*//Univ Joseph Fourier, CNRS, Ctr Rech Macromolec Vegetales, BP 53X, F-38041 Grenoble, France

APPL ENVIRON MICROBIOL 1991, 57 (2) 374

Involvement of an extracellular glucan sheath during degradation of populus wood by *Phanerochaete chrysosporium*

Zurbriggen BD, Penttila ME, Viikari L, Bailey MJ*//Valt Teknillinen Tutkimuskeskus, Biotech Lab, POB 202, SF-02151 Espoo, Finland

J BIOTECHNOL 1991, 17 (2) 133

Pilot scale production of a *Trichoderma reesei* endo-beta-glucanase by brewers yeast

Kiso M, Kitagawa M, Ishida H, Hasegawa A//Gifu Univ, Dept Appl Bioorgan Chem, Gifu 5011, Japan

J CARBOHYD CHEM 1991, 10 (1) 25

Studies on glycan processing inhibitors - Synthesis of N-acetylhexosamine analogs and cyclic carbamate derivatives of 1-deoxynojirimycin

Sheeley DM, Reinhold VN//Harvard Univ, Sch Publ Hlth, Dept Nutr, 665 Huntington Ave, Boston, Ma 02115, USA

ANAL BIOCHEM 1991, 193 (2) 240

Characterization of N-linked glycans by supercritical fluid chromatography-mass spectrometry

Dean DD, Muniz OE, Rodriguez I, Carreno MR, Morales S, Agundez A, Madan ME, Altman RD, Annefeld M, Howell DS//Vet Adm Med Ctr, Res Serv, 1201 NW 16th St, Miami, Fl 33125, USA

ARTHRITIS RHEUM 1991, 34 (3) 304

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Moskowitz RW, Reese JH, Young RG, Feinkrantz D, Malemud CJ, Caplan AL//Case Western Reserve Univ Hosp, 2074 Abington Rd, Cleveland, Oh 44106, USA

J RHEUMATOL 1991, 18 (2) 205

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Nono I, Ohno N, Masuda A, Oikawa S, Yodamae T//Tokyo Coll Pharm, 1432-1 Horinouchi, Hachioji, Tokyo 19203, Japan

J PHARMACOBIO-DYNAM 1991, 14 (1) 9

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Ide T, Moriuchi H, Nihimoto K//MAFF, Natl

Food Res Inst, Nutr Chem Lab, 2-1-1 Kannon-dai, Tsukuba 305, Japan

ANN NUTR METAB 1991, 35 (1) 34

Hypolipidemic effects of guar gum and its enzyme hydrolysate in rats fed highly saturated fat diets

Kirsten R, Nelson K, Storck J, Hubnersteiner U, Speck U//Univ Frankfurt, Dept Clin Pharmacol, Theodor Stern Kai 7, W-6000 Frankfurt, FRG
INT J CLIN PHARM THER TOXICOL 1991, 29 (1) 19

Influence of two guar preparations on glucose and insulin levels during a glucose tolerance test in healthy volunteers

Ansell J, Tiarks C, Hirsh J, McGehee W, Adler D, Weibert R//Univ Massachusetts, Med Ctr, Dept Med, Worcester, Ma 01655, USA

AMER J CLIN PATHOL 1991, 95 (2) 222

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Broyer M, Gagnadoux MF, Sierro A, Fischer AM, Niaudet P//Hop Necker Enfants Malad, Dept Pediat Nephrol, 146 rue Sevres, F-75743 Paris 15, France

TRANSPLANT PROC 1991, 23 (1) PT 2, 1384

Preventive treatment of vascular thrombosis after kidney transplantation in children with low molecular weight heparin

Caranobe C, Gabaig AM, Sie P, Boneu B**//Ctr Transfus Sanguine, Hemostase Lab, F-31052 Toulouse, France

THROMB HAEMOST 1991, 65 (1) 107

Antithrombotic effects of the association standard heparin-dermatan sulfate (Letter)

Ho CH, Hlady V, Nyquist G, Andrade JD*, Caldwell KD//Univ Utah, Ctr Biopolymers Interfaces, Dept Mat Sci & Engn, 2480 MEB, Salt Lake City, Ut 84112, USA

J BIOMED MAT RES 1991, 25 (4) 423

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Lassen MR, Borris LC, Christiansen HM, Boll KL, Eiskjaer SP, Nielsen BW, Schott P, Olsen AD, Rodenberg JC, Lucht U//Aalborg Hosp, Dept Orthoped, Venous Thrombosis Grp, POB 365, DK9100 Aalborg, Denmark

ACTA ORTHOP SCAND 1991, 62 (1) 33

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Pedersen PC, Ostergaard PB, Hedner U, Bergqvist D, Matzsch T//Novo Nordisk AS, Copenhagen, Denmark

THROMB RES 1991, 61 (5-6) 477

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Ryzewicz T, Saupe J, Fuchs G, Eichhorn HM//Krankenhaus St Joseph Regensburg, Dept Nephrol, Regensburg, FRG

DIALYSIS TRANSPLANT 1991, 20 (3) 124

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Wong L, Im MJ, Hoopes JE//Johns Hopkins Univ Hosp, Dept Surg, 600 N Wolfe St, Baltimore, Md 21205, USA

ANN PLASTIC SURG 1991, 26 (3) 221

Increased survival of island skin flaps by systemic heparin in rats

Carniti P, Beltrame PL, Guardione D, Focher B, Marzetti A//Univ Milan, Dipartimento Chim Fis & Elettrochim, I-20133 Milan, Italy

BIOTECHNOL BIOENG 1991, 37 (6) 575

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Drent WJ, Lahpor GA, Wiegant WM, Gottschal JC//State Univ Groningen, Dept Microbiol, Kerklaan 30, 9751 NN Haren, The Netherlands

APPL ENVIRON MICROBIOL 1991, 57 (2) 455

Fermentation of inulin by *Clostridium thermo-succinogenes* sp-nov, a thermophilic anaerobic bacterium isolated from various habitats

Shalmi M, Lunau HE, Petersen JS, Bak M, Christensen S//Univ Copenhagen, Dept Pharmacol, 20 Juliane Maries Vej, DK-2100 Copenhagen, Denmark

AMER J PHYSIOL 1991, 260 (2) PT 2, f283

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Wustenberg PW, Hortian B, Weirich S, Kerber A, Kuhnle HF//Univ Rostock, Innere Med Klin, Pathophysiol Abt, Ernst Heydemann Str 6, O-

2500 Rostock, FRG

J EXP ANIM SCI 1991, 34 (1) 13

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Bergemann U, Aust C, Kunzek H//Humboldt Univ, Fak Nahrungsguterwirtsch & Lebensmitteltechnol, O-1086 Berlin, FRG

LEBENSMITTELINDUSTRIE 1991, 38 (2) 43

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Kratchanova M, Benemou C, Kratchanov C//Inst Organ Chem, Bulgarian Acad Sci, Sofia, Bulgaria

CARBOHYD POLYM 1991, 15 (3) 271

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Miyazaki Y//Saga Univ, Fac Agr, Dept Appl Biol Sci, Saga 840, Japan

AGR BIOL CHEM TOKYO 1991, 55 (1) 25

Purification and characterization of endo-pectate lyase from *Bacillus macerans*

Okai AAE, Gierschner K*//Univ Hohenheim, Inst Lebensmitteltechnol, Garbenstr 25, W-7000 Stuttgart 70, FRG

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Size and charge properties of the pectic and cellulolytic enzymes in a commercial enzyme preparation

Popov AM, Lyamkin GP, Artyukov AA, Lovenko YN, Yelyakov GB//Acad Sci USSR, Far E Sci Ctr, Pacific Oceanol Inst, Inst Bioorgan Chem, Vladivostok, USSR

DOKL AKAD NAUK SSSR 1990, 315 (1) 232

Study pharmacokinetics of zosterin - Pectin isolated from sea grass *Zostera asiatica* (Russian)

Renard CMGC, Voragen AGJ, Thibault J-F, Pilnik W//INRA, Lab Biochim Technol Glucides, rue Geraudiere, BP 527, 44026 Nantes Cedex 03, France

CARBOHYD POLYM 1991, 15 (4) 387

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Semenova MG, Bolotina VS, Dmitrochenko AP, Leontiev AL, Polyakov VI, Braudo EE, Tolsto-

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CARBOHYD POLYM 1991, 15 (4) 367

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Yoshida A, Ito K, Kamio Y, Izaki K//Tohoku Univ, Fac Agr, Dept Agr Chem, Sendai 981, Japan

AGR BIOL CHEM TOKYO 1991, 55 (2) 601

Purification and properties of pectate lyase-III of *Erwinia carotovora* ER

Labbe RG, Lu HP, Tang S//Univ Massachusetts, Dept Food Sci, Food Microbiol Lab, Amherst, Ma 01003, USA

J GEN APPL MICROBIOL TOKYO 1990, 36 (5) 333

Extraction, purification and characterization of a peptidoglycan hydrolase from vegetative cell of *Clostridium perfringens* type-A

McKay AM//Dept Agr, Div Food & Agr Microbiol Res, Belfast BT4 3SB, Northern Ireland

LETT APPL MICROBIOL 1991, 12 (3) 75

Extracellular beta-galactosidase production during growth of filamentous fungi on polygalacturonic acid

Yang J, Takeyasu K, Somlyo AP, Shao Z*//Univ Virginia, Bio-SPM Facil, Box 449, Charlottesville, Va 22908, USA

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Rogers DJ, Jurd KM, Blunden G, Paoletti S, Zannetti F//Portsmouth Polytech, Sch Pharm & Biomed Sci, King Henry I St, Portsmouth PO1 2DZ, England

J APPL PHYCOL 1990, 2 (4) 357

Anticoagulant activity of a proteoglycan in extracts of *Codium fragile* ssp atlanticum

Glushchenko EV, Kozlov DG, Podkovyrov SM, Mogutov MA//All Union Genet & Select Ind Microorgan Inst, Moscow 11325, USSR

MOL BIOL-ENGL TR 1990, 24 (3) PT 2, 614

Purification and characterization of thermostable *Clostridium thermohydrosulfuricum* pullulanase synthesized in *Escherichia coli*

Gonda R, Tomoda M*//Kyoritsu Coll Pharmaceut Sci, Minato ku, Tokyo 105, Japan

CHEM PHARM BULL TOKYO 1991, 39 (2) 441

Structural features of ukonan-C, a reticuloendothelial system-activating polysaccharide from the rhizome of *Curcuma longa*

Cheetham NWH, Mashimba ENM//Univ NSW, Sch Chem, PO Box 1, Kensington, Sydney 2033, Australia

CARBOHYD POLYM 1991, 15 (2) 195

Characterisation of some enzymic hydrolysis products of xanthan

Stokke BT, Knudsen KD, Smidsrod O, Elgsaeter A//Univ Trondheim, Norwegian Inst Technol, Dept Phys & Math, Norwegian Biopolymer Lab, N-7034 Trondheim, Norway

J APPL POLYM SCI 1991, 42 (7) 2063

Optical rotation of dilute aqueous xanthan solutions at elevated hydrostatic pressure

Shu CH, Yang ST//140 W 19th Ave, Columbus, Oh 43210, USA

BIOTECHNOL BIOENG 1991, 37 (6) 567

Kinetics and modeling of temperature effects of batch xanthan gum fermentation

Ebringerova A, Ereemeeva TE, Khinoverova OE, Ershov BG//Inst Chem, Slovak Acad Sci, Bratislava, Czechoslovakia

CARBOHYD POLYM 1991, 15 (3) 255

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Sakka K, Maeda Y, Hakamada Y, Takahashi N, Shimada K//Mie Univ, Fac Bioresources, Dept Biosci, Tsu, Mie 514, Japan

AGR BIOL CHEM TOKYO 1991, 55 (1) 247

Purification and some properties of xylanase from *Clostridium stercorarium* strain Hx-1

Viet DN, Kamio Y, Abe N, Kaneko J, Izaki K//Hanoi Polytech Univ, Dept Microbiol, Hanoi, Vietnam

APPL ENVIRON MICROBIOL 1991, 57 (2) 445

Purification and properties of beta-1,4-xylanase from *Aeromonas caviae* W-61

7 Polysaccharides - Other

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Black SB, Shinefield HR, Lampert D, Fireman B, Hiatt RA, Polen M, Vittinghoff E//Kaiser Permanente Med Ctr, 280 W MacArthur Blvd, Oakland, Ca 94611, USA

PEDIAT INF DIS J 1991, 10 (2) 92

Safety and immunogenicity of oligosaccharide conjugate *Haemophilus influenzae* type-B (HbOC) vaccine in infancy

Black SB, Shinefield HR, Fireman B, Hiatt RA, Polen M, Vittinghoff E//Kaiser Permanente Med Ctr, 280 W MacArthur Blvd, Oakland, Ca 94611, USA

PEDIAT INF DIS J 1991, 10 (2) 97

Efficacy in infancy of oligosaccharide conjugate *Haemophilus influenzae* type-B (HbOC) vaccine in United States population of 61080 children

Bligh SWA, Harding CT, Sadler PJ*, Bulman RA, Bydder GM, Pennock JM, Kelly JD, Latham IA, Marriott JA//Univ London, Birkbeck Coll, Dept Chem, Gordon House, 29 Gordon Sq, London WC1H 0PP, England

MAGN RESON MED 1991, 17 (2) 516

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Fontaine T, Wieruszkeski JM, Talmont F, Saniez MH, Duflot P, Leleu JB, Fournet B//Univ Lille 1, Chim Biol Lab 111, CNRS, F-59655 Villeneuve Dascq, France

EUR J BIOCHEM 1991, 196 (1) 105

Exopolysaccharide structure from *Bacillus circulans*

Guo MN, Narsimhan G//Purdue Univ, Dept Agr Engr, W Lafayette, In 47907, USA

BIOTECHNOL PROGR 1991, 7 (1) 54

Solubility of globular proteins in polysaccharide solutions

Ha YW, Thomas RL//Clemson Univ, Dept Food Sci, Clemson, SC 29634, USA

FEMS MICROBIOL LETT 1991, 78 (1) 49

Identification of 4,6-O-(1-carboxyethylidene)-D-galactose in extracellular polysaccharide from *Palmella texensis* UTEX-1708

Heims H, Steinhart H//Univ Hamburg, Inst Biochem & Lebensmittelchem, Grindelallee 117, W-2000 Hamburg 13, FRG

CARBOHYD POLYM 1991, 15 (2) 207

Determination of structural features of the water-insoluble dietary fiber from oats by the reductive-cleavage method

Iwamoto K, Kato T, Kawahara M, Koyama N, Watanabe S, Miyake Y, Sunamoto J**//Kyoto Univ, Fac Engr, Dept Polymer Chem, Yoshida Hommachi, Sakyo ku, Kyoto 606, Japan

J PHARM SCI 1991, 80 (3) 219

Polysaccharide-coated oil droplets in oil-in-water emulsions as targetable carriers for lipophilic drugs

Liu XW, Rochas C, Kloareg B**//Ctr Etud Oceanol & Biol Marine, CNRS, UPR 4601, BP 74, F-29680 Roscoff, France

J APPL PHYCOL 1990, 2 (4) 297

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Marcinak JF, Frank AL, Labotka RL, Rao S, Frisone LR, Yogeve R, McVerry P//Univ Illinois, Dept Pediat, 840 S Wood St, Chicago, IL 60612, USA

PEDIAT INF DIS J 1991, 10 (2) 157

Haemophilus influenzae type-b vaccine in children with sickle cell disease - Antibody persistence after vaccination at age 1-1/2 to six years

Matsumura S, Nishioka M, Yoshikawa S//Keio Univ, Fac Sci & Technol, 3-14-1 Hiyoshi, Kohoku ku, Yokohama, Kanagawa 223, Japan

MAKROMOL CHEM-RAP COMM 1991, 12 (2) 89

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Reeslev M, Nielsen JC, Olsen J, Jensen B, Jacobsen T//Tech Univ Denmark, Dept Biotechnol, DK-2800 Lyngby, Denmark

MYCOL RES 1991, 95 (FEB) PT 2, 220

Effect of pH and the initial concentration of yeast extract on regulation of dimorphism and exopolysaccharide formation of *Aureobasidium pullulans* in batch culture

Roesler J, Steinmuller C, Kiderlen A, Emmendorffer A, Wagner H, Lohmannmatthes ML//Fraunhofer Inst Toxicol & Aerosol Res, Dept Immunobiol, Nikolai Fuchs Str 1, W-3000 Hannover 61, FRG

INT J IMMUNOPHARMACOL 1991, 13 (1) 27

Application of purified polysaccharides from cell cultures of the plant *Eschinacea purpurea* to mice mediates protection against systemic infections with *Listeria monocytogenes* and *Candida albicans*

Roos Y, Karel M//Rutgers State Univ, Dept Food Sci, POB 231, New Brunswick, NJ 08903, USA

BIOTECHNOL PROGR 1991, 7 (1) 49

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Santosham M, Hill J, Wolff M, Reid R, Lukacs L, Ahonkhai V//Johns Hopkins Univ, Sch Hyg & Publ Hlth, Dept Int Hlth, Div Dis Control, 615 N Wolfe St, Room 5505, Baltimore, Md 21205, USA

PEDIAT INF DIS J 1991, 10 (2) 113

Safety and immunogenicity of a *Haemophilus influenzae* type-b conjugate vaccine in a high risk American Indian population

Stokke BT, Brant DA//Univ Trondheim, Dept Biophys, N-7034 Trondheim, Norway

BIOPOLYMERS 1990, 30 (13-14) 1161

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Turner RB, Cimino CO, Sullivan BJ//Med Univ S Carolina, Dept Pediat, 171 Ashley Ave, Charleston, SC 29425, USA

PEDIAT INF DIS J 1991, 10 (2) 108

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8 Lipopolysaccharides

Akamatsu S, Ikeda K, Achiwa K**//Shizuoka Univ, Sch Pharmaceut Sci, Yada 395, Oya, Shizuoka 422, Japan

CHEM PHARM BULL TOKYO 1991, 39 (2) 518

Synthesis of the sequence of hept-(alpha1-5)-KDO-(alpha2-6)-D-glucosamine-4-phosphate of lipopolysaccharide

Beynon LM, Perry MB*, Richards JC//Natl Res Council Canada, Div Biol Sci, Ottawa, Ontario, Canada K1A 0R6

CAN J CHEM 1991, 69 (2) 218

Structure of the O-antigen of *Actinobacillus pleuropneumoniae* serotype-12

Brandenburg K, Koch MHJ, Seydel U//Forschungsinstitut Borstel, W-2061 Borstel, FRG

J STRUCT BIOL 1990, 105 (1-3) 11

Phase diagram of lipid-A from *Salmonella minnesota* and *Escherichia coli* rough mutant lipopolysaccharide

Eisenberg BL, Taylor DD, Weese JL//Fox Chase Canc Inst, Dept Surg Oncol, 7701 Burholme Ave, Philadelphia, Pa 19111, USA

J IMMUNOTHER 1991, 10 (1) 51

Aerosolized gamma-interferon and lipopolysaccharide enhances cytotoxicity of murine pulmonary alveolar macrophages

Katzenellenbogen E, Gamian A, Romanowska E*, Dabrowski U, Dabrowski J//Polish Acad Sci, Inst Immunol & Exptl Therapy Ludwika Hirszfelda, UL Czerna 12, PL-53114 Wrocław, Poland

EUR J BIOCHEM 1991, 196 (1) 197

Core region of *Citrobacter*-O23 lipopolysaccharide - Structure elucidation by chemical methods, gas chromatography/mass spectrometry and NMR spectroscopy at 500 MHz

Liu ZC, Classon B, Garegg PJ, Samuelsson B//Univ Stockholm, Arrhenius Lab, Dept Organ Chem, S-10691 Stockholm, Sweden

J CARBOHYD CHEM 1991, 10 (1) 65

Synthesis of 2,6-dideoxy-6-thio derivatives of KDO

9 Starch

Brisson J, Chanzy H*, Winter WT//Joseph Fourier Univ Grenoble, CNRS, Ctr Rech Macromol Vegetales, 53X, F-38041 Grenoble, France

INT J BIOL MACROMOL 1991, 13 (1) 31

The crystal and molecular structure of V(H) amylose by electron diffraction analysis

Goodfellow BJ, Wilson RH//Inst Food Res, Norwich Lab, Colney Lane, Norwich NR4 7UA, England

BIOPOLYMERS 1990, 30 (13-14) 1183

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Schoondorp MA, Vorenkamp EJ, Schouten AJ//State Univ Groningen, Dept Polymer Chem, Nijenborgh 16, 9747 AG Groningen, The Netherlands

THIN SOLID FILMS 1991, 196 (1) 121

Structural study of Langmuir-Blodgett monolayers and multilayers of amylose-esters with various alkyl chains

Heilmann L, Heitz R, Koch FU, Ose C//Stadtkrankenhaus Russelsheim, Gynakol & Geburtshilfe Abt, August Bebel Str 59, W-6090 Russelsheim, FRG

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Sakaki T, Mokry M, Kleinert R, Van Velthoven V, Auer LM*//Univ Saarland, Neurosurg Clin, W-6650 Homburg, FRG

ACTA NEUROCHIR 1991, 108 (3-4) 134

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Webb AR, Tighe D, Moss RF, Alsaady N, Hynd JW, Bennett ED//Middlesex Hosp, Bloomsbury Dept Intens Care, Mortimer St, London W1N 8AA, England

CRIT CARE MED 1991, 19 (3) 409

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Yuryev VP, Zasytkin DV, Ghenin YV, Zhukov VA, Alexeyev VV, Tolstoguzov VB//AN Nesmeyanov Inst Organoelement Cpd, Acad Sci USSR, Vavilova Str 28, Moscow 117813, USSR

CARBOHYD POLYM 1991, 15 (3) 243

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Boki K, Imai T, Ohno S//Kinki Univ, Fac Pharmaceut Sci, Kowakae 3-4-1, Higashiosaka, Osaka 577, Japan

J FOOD SCI 1991, 56 (1) 90

Adsorption of methyl orange on starches

Boki K, Ohno S//Kinki Univ, Fac Pharmaceut Sci, Kowakae 3-4-1, Higashiosaka, Osaka 577, Japan

J FOOD SCI 1991, 56 (1) 125

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Carre B, Beaufils E, Melcion JP//INRA, Stn Rech Avicoles, F-37380 Nouzilly, France
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Olett AL, Parker R, Smith AC//AFRC, Inst Food Res, Norwich Lab, Colney Lane, Norwich NR4 7UA, England

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Peanasky JS, Long JM, Wool RP**//Univ Illinois, Dept Mat Sci & Engr, 1304 W Green St, Urbana, Il 61801, USA

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Shogren RL, Greene RV, Wu YV//USDA ARS, North Reg Res Ctr, 1815 N Univ St, Peoria, Il 61604, USA

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Visavarungroj N, Remon JP**//State Univ Ghent, Pharmaceut Technol Lab, Harelbekestr 72, B-9000 Ghent, Belgium

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Adeleye AI//Yaba Coll Technol, Dept Sci Technol, Microbiol Unit, Yaba, Nigeria

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