

CONTENTS OF VOLUME 62

Issue 1

Papers

- 1 The use of complexes of algae polysaccharides and Ce^{4+} to degrade compounds containing peptides or phosphate ester bonds
D. WANG, Y. LUO, J. SUN, D. DU, C. WANG, X. ZHOU & C. XUE (QINGDAO, CHINA)
- 6 Enzymatic hydrolysis of delignified bagasse polysaccharides
M. G. ADSUL, J. E. GHULE, H. SHAIKH, R. SINGH, K. B. BASTAWDE, D. V. GOKHALE & A. J. VARMA (PUNE, INDIA)
- 11 Viscoelastic characterization of gum arabic and maize starch mixture using the Maxwell model.
H. A. JIMÉNEZ-AVALOS, E. G. RAMOS-RAMÍREZ & J. A. SALAZAR-MONTOYA (MÉXICO, MÉXICO)
- 19 Studies on the properties of natural fibers-reinforced thermoplastic starch composites
X. MA, J. YU (TIANJIN, CHINA) & J. F. KENNEDY (BIRMINGHAM, UK)
- 25 Starches from different botanical sources II: Contribution of starch structure to swelling and pasting properties
S. SRICHUWONG (TSU, JAPAN), T. C. SUNARTI (BOGOR, INDONESIA), T. MISHIMA, N. ISONO & M. HISAMATSU (TSU, JAPAN)
- 35 Interaction of chitosan with natural or synthetic anionic polyelectrolytes. 1. The chitosan–carboxymethylcellulose complex
C. ROSCA, M. I. POPA, G. LISA & G. C. CHITANU (IASI, ROUMANIA)
- 42 Kinetics of water sorption by chitosan and its blends with poly(vinyl alcohol)
M. MUCHA, S. LUDWICZAK & M. KAWINSKA (LODZ, POLAND)
- 50 Partial characterization of banana starches oxidized by different levels of sodium hypochlorite
M. M. SÁNCHEZ-RIVERA, F. J. L. GARCÍA-SUÁREZ, M. V. DEL VALLE, F. GUTIERREZ-MERAZ & L. A. BELLO-PÉREZ (MORELOS, MEXICO)
- 57 Lignin–carbohydrate complexes from sugarcane bagasse: Preparation, purification, and characterization
R. SINGH, S. SINGH, K. D. TRIMUKHE, K. V. PANDARE, K. B. BASTAWADE, D. V. GOKHALE & A. J. VARMA (PUNE, INDIA)
- 67 Characterization of henequen cellulose microfibers treated with an epoxide and grafted with poly(acrylic acid)
T. TOLEDANO-THOMPSON, M. I. LORÍA-BASTARRACHEA & M. J. AGUILAR-VEGA (YUCATÁN, MÉXICO)
- 74 Rapid synthesis of a superabsorbent from a saponified starch and acrylonitrile/AMPS graft copolymers
T. QUNYI (JIANGSU, CHINA) & Z. GANWEI (HUBEI, CHINA)
- 80 Miscibility studies in poly(methyl vinyl ether)/hydroxypropylcellulose binary system in aqueous solutions and solid state
Z. S. NURKEEVA (ALMATY, KAZAKHSTAN), I. S. TYUKOVA, A. I. SUVOROVA (EKATERINBURG, RUSSIAN FEDERATION), G. A. MUN, A. B. DZHUSUPBEKOVA (ALMATY, KAZAKHSTAN) & V. V. KHUTORYANSKIY (BERKSHIRE, UK)

Book reviews

- 87 Coffee: Growing, Processing, Sustainable Production
- 87 Herbal Drugs and Phytopharmaceuticals
- 88 Simulation Methods for Polymers
- 88 Dictionary of Food Compounds with CD-ROM: Additives, Flavors, and Ingredients

- 89 Calendar
- 91 Bibliography

Issue 2**Papers**

- 97 Thermal Analysis of Chitosan Based Networks
C. G. T. NETO (NATAL, BRAZIL), J. A. GIACOMETTI, A. E. JOB, F. C. FERREIRA (SÃO PAULO, BRAZIL), J. L. C. FONSECA & M. R. PEREIRA (NATAL, BRAZIL)
- 104 Thermoplastic starch–lignosulfonate blends. 1. Factorial planning as a tool for elucidating new data from high performance size-exclusion chromatography and mechanical tests
L. C. MORAIS, A. A. S. CURVELO & M. D. ZAMBON (SÃO CARLOS, BRAZIL)
- 113 Preparation of novel chitosan scaffolds by electrochemical process
Y.-K. TWU, I.-T. CHANG & C.-C. PING (TAIWAN, ROC)
- 120 Polymer–polymer interactions in dextran systems using thermal analysis
D. Z. ICOZ, C. I. MORARU & J. L. KOKINI (NEW BRUNSWICK, NJ, USA)
- 130 Preparation and characterization of α -chitin whisker-reinforced chitosan nanocomposite films with or without heat treatment
J. SRIUPAYO, P. SUPAPHOL (BANGKOK, THAILAND), J. BLACKWELL (CLEVELAND, OH, USA) & R. RUJIRAVANIT (BANGKOK, THAILAND)
- 137 A simple non-aqueous method for carboxymethylation of galactomannans
K. S. PARVATHY, N. S. SUSHEELAMMA, R. N. THARANATHAN (MYSORE, INDIA) & A. K. GAONKAR (NORTHFIELD, USA)
- 142 Graft copolymerized chitosan—present status and applications
R. JAYAKUMAR, M. PRABAHARAN, R. L. REIS & J. F. MANO (BRAGA, GUIMARÃES, PORTUGAL)
- 159 Surface-initiated atom transfer radical polymerization (SI-ATRP) of *n*-butyl acrylate from starch granules
P. LIU & Z. SU (LANZHOU, CHINA)
- 164 Synthesis and characterization of sodium carboxymethylcellulose from cavendish banana pseudo stem (*Musa cavendishii* LAMBERT)
M. P. ADINUGRAHA, D. W. MARSENIO & HARYADI (YOGYAKARTA, INDONESIA)
- 170 Gelatinisation related structural aspects of small and large wheat starch granules
R. VERMEYLEN, B. GODERIS, H. REYNAERS & J. A. DELCOUR (HEVERLEE, BELGIUM)
- 182 Solid-state thermal reactions of starch with semicarbazide hydrochloride. Cationic starches of a new generation
P. SIEMION, J. KAPUŚNIAK (CZESTOCHOWA, POLAND) & J. J. KOZIOŁ (ZIELONA GÓRA, POLAND)

Short communications

- 187 Microwave-assisted alkaline modification of red seaweed galactans
D. A. NAVARRO & C. A. STORTZ (BUENOS AIRES, ARGENTINA)

- 192 Visualizing surface active hydrocolloids by atomic force microscopy
S. IKEDA, T. FUNAMI & G. ZHANG (OSAKA, JAPAN)

197 Calendar

199 Bibliography

Issue 3

Papers

- 205 Maltogenic amylase has a non-typical impact on the molecular and rheological properties of starch
P. LEMAN, H. GOESAERT, G. E. VANDEPUTTE, B. LAGRAIN & J. A. DELCOUR (LEUVEN, BELGIUM)
- 214 Chemically modified chitosan beads as matrices for adsorptive separation of proteins by molecularly imprinted polymer
T.-Y. GUO, Y.-Q. XIA, G.-J. HAO, B.-H. ZHANG, G.-Q. FU, Z. YUAN, B.-L. HE (TIANJIN, CHINA) & J. F. KENNEDY (BIRMINGHAM, UK)
- 222 Effect of carboxymethylcellulose and xanthan gum on the thermal, functional and rheological properties of dried nixtamalised maize masa
A. AGUIRRE-CRUZ, G. MÉNDEZ-MONTEALVO, J. SOLORZA-FERIA & L. A. BELLO-PÉREZ (MORELOS, MEXICO)
- 232 Effects of molecular weight on thermoreversible gelation and gel elasticity of methylcellulose in aqueous solution
Q. WANG & L. LI (SINGAPORE)
- 239 Fractionation and characterization of gum from *Acacia tortuosa*. Effect of enzymatic and alkaline treatments
O. BELTRÁN, G. L. DE PINTO, M. MARTÍNEZ (MARACAIBO, VENEZUELA), L. PICTON, C. COZIC, D. LE CERF & G. MULLER (MONT SAINT AIGNAN, FRANCE)
- 245 Effects of microwave on drug release properties of matrices of pectin
S. NURJAYA & T. W. WONG (SELANGOR, MALAYSIA)
- 258 Preparation and characterisation of methylcelluloses from *Miscanthus sinensis*
D. YE, D. MONTANÉ & X. FARRIOL (TARRAGONA, SPAIN)
- 267 Modification of guar galactomannan with the aid of *Aspergillus niger* pectinase
M. S. SHOBHA, A. B. VISHU KUMAR, R. N. THARANATHAN (MYSORE, INDIA), R. KOKA & A. K. GAONKAR (IL, USA)
- 274 Synthesis and characterization of a novel alginate–poly(ethylene glycol) graft copolymer
P. LAURIENZO, M. MALINCONICO, A. MOTTA & A. VICINANZA (POZZUOLI, ITALY)
- 283 Ultrafiltration and ethanol precipitation for isolation of arabinoxylooligosaccharides with different structures
K. SWENNEN, C. M. COURTIN, B. VAN DER BRUGGEN, C. VANDECASTEELE & J. A. DELCOUR (LEUVEN, BELGIUM)
- 293 Self-assembled nanoparticles based on linoleic-acid modified chitosan: Stability and adsorption of trypsin
C.-G. LIU, X.-G. CHEN (QINGDAO, CHINA) & H.-J. PARK (SEOUL, SOUTH KOREA)

Book reviews

- 299 Handbook of Affinity Chromatography
- 299 Colloidal Biomolecules, Biomaterials, and Biomedical Applications
- 300 Colloidal Polymers Synthesis and Characterization
- 300 Handbook of Industrial Cell Cultures: Mammalian, Microbial and Plant cells
- 301 Polysaccharides, Structural Diversity and Functional Versatility

- 301 Advances in Polymeric Biomaterials Series: Absorbable and Biodegradable Polymers
 302 Introduction to Food Chemistry

I Calendar

- 303 Bibliography

Issue 4

Papers

- 309 The use of gum arabic and modified starch in the microencapsulation of a food flavoring agent
 S. KRISHNAN, A. C. KSHIRSAGAR & R. S. SINGHAL (MUMBAI, INDIA)
- 316 *N*-Deacetylation and depolymerization reactions of chitin/chitosan: Influence of the source of chitin
 G. GALED, B. MIRALLES, I. PAÑOS, A. SANTIAGO & Á. HERAS (MADRID, SPAIN)
- 321 Isolation, purification and characterization of hyaluronan from human umbilical cord residues
 G. LAGO, L. ORUÑA (HAVANA, CUBA), J. A. CREMATA (CUBANACAN, CUBA), C. PÉREZ, G. COTO, E. LAUZAN (HAVANA, CUBA) & J. F. KENNEDY (BIRMINGHAM, UK)
- 327 Preparation and anticoagulant activity of a low-molecular-weight sulfated chitosan
 G. VIKHOREVA, G. BANNIKOVA, P. STOLBUSHKINA, A. PANOV, N. DROZD, V. MAKAROV, V. VARLAMOV & L. GAL'BRAIKH (MOSCOW, RUSSIAN FEDERATION)
- 333 Granule size affects the acetyl substitution on amylopectin populations in potato and sweet potato starches
 Z. CHEN (SHANGHAI, CHINA), J. HUANG, P. SUURS, H. A. SCHOLS & A. G. J. VORAGEN (WAGENINGEN, THE NETHERLANDS)
- 338 Protective effects of mannan in Caco-2/TC7 cells treated with wheat-derived peptides
 O. VINCENTINI, I. DE ANGELIS, R. IANNUCELLI, M. SILANO, A. STAMMATI & M. DE VINCENZI (ROME, ITALY)
- 344 Free radical degradation of hydroxyethyl cellulose
 S. ERKSELIUS & O. J. KARLSSON (LUND, SWEDEN)
- 357 Enzymatic production and biological activities of chitosan oligosaccharides (COS): A review
 S.-K. KIM & N. RAJAPAKSE (BUSAN, SOUTH KOREA)
- 369 Chemical force microscopy of cellulosic fibers
 J. C. BASTIDAS, R. VENDITTI, J. PAWLAK, R. GILBERT (NC, USA), S. ZAUSCHER (DURHAM, NC, USA) & J. F. KADLA (VANCOUVER, BC, CANADA)
- 379 A concavity property of the viscosity growth curve during alkali gelatinization of rice starch
 H. YAMAMOTO, N. ISOZUMI & T. SUGITANI (KYOTO, JAPAN)
- 387 Thermoplastic starch modification during melt processing: Hydrolysis catalyzed by carboxylic acids
 A. J. F. CARVALHO, M. D. ZAMBON, A. A. DA SILVA CURVELO & A. GANDINI (SÃO CARLOS, BRAZIL)

Book reviews

- 391 Asian Functional Foods
- 391 Encyclopedia of Grain Science
- 392 Food Carbohydrates: Chemistry, physical properties, and applications
- 392 Practical guide to ICP-MS
- 393 Green composites: Polymer composites and the environment
- 393 Electrical Properties of Polymers
- 394 Methods of Analysis of Food Contaminants and Additives

395 Additives in Polymers, Industrial Analysis and Applications

395 Herbal Remedies CD-ROM

396 New Food Product Development From Concept to Marketplace

I Calendar

II Contents of Volume 62