



CONTENTS OF VOLUME 19

Number 1

Methodical aspects of characterization of alginate and pectate by light scattering and viscometry coupled with GPC . GISELA BERTH (Germany)	1
Kinetic studies on enzymatic hydrolysis of celluloses for evaluation of amorphous structures Y. AKISHIMA, A. ISOGAI, S. KUGA, F. ONABE & M. USADA (Japan)	11
Chelating ability and enzymatic hydrolysis of water-soluble chitosans F. DELBEN, S. STEFANCICH & R. A. A. MUZZARELLI (Italy)	17
Preparation of cellulose-chitosan polymer blends A. ISOGAI (Japan) & R. H. ATALLA (USA)	25
Depolymerization of methyl pyrrolidinone chitosan by lysozyme RICCARDO MUZZARELLI (Italy)	29
Syntheses of some sulfur- and phosphorus-containing carbohydrate polymer derivatives MANSSUR YALPANI (Canada)	35
Contribution of the side branches to rheological properties of pectins JAEKWAN HWANG & JOZEF L. KOKINI (USA)	41
Enzymatic microassay for the determination and characterization of alginates KJETILL ØSTGAARD (Norway)	51
Summaries of UK Patent Applications	61
Bibliography	63
Book Reviews	73

Number 2

Post-fermentation processing conditions and solution properties of an extracellular fungal polysaccharide isolated from the culture filtrate of <i>Schizophyllum commune</i> FRÉDÉRIC ZENTZ & GUY MULLER (France)	75
Effect of moisture content on the melting and subsequent physical aging of cornstarch R. L. SHOGREN (USA)	83
Xanthan/locust bean gum interactions at room temperature RICHARD O. MANNION, COLIN D. MELIA (UK), BERNARD LAUNAY, GERARD CUVELIER (France), SANDRA E. HILL, STEVEN E. HARDING & JOHN R. MITCHELL (UK)	91
Structural and solution properties of corn cob heteroxylans A. EBRINGEROVÁ, Z. HROMÁDKOVÁ, J. ALFÖLDI (Czechoslovakia) & G. BERTH (Germany)	99
Swelling of the thermoplastically extruded potato starch–soybean protein mixtures—relation to extrudate structure DMITRY V. ZASYPKIN (Russia)	107
Studies on the intermolecular distribution of industrial pectins by means of preparative ion-exchange chromatography T. P. KRAVTCHEKNO, A. G. J. VORAGEN & W. PILNIK (The Netherlands)	115
Structure of galactoglucomannan from <i>Populus monilifera</i> H. M. KUBAČKOVÁ, Š. KARÁCSONYI & L. BILISICS (Czechoslovakia)	125

Research Notes

Structural determination by means of gas chromatography-mass spectrometry of 3-O-(α -D-glucopyranosyluronic acid)-galactopyranose, an aldobiuronic acid derived from <i>Porphyridium</i> sp. polysaccharide	131
NICULINA LUPESCU (Israel), JULIEN SOLO-KWAN, DANIEL CHRISTIAEN, HENRI MORVAN (France) & SHOSHANA (MALIS) ARAD (Israel)	
<i>N</i> -Alanyl and some <i>N</i> -(<i>N'</i> -aryl)glycyl derivatives of chitosan	135
SHIGEHIRO HIRANO, TAKASHI SAKAGUCHI & KOJI KURAMITSU (Japan)	
Bibliography	139
Book Reviews	149

Number 3

Analysis of wheat arabinoxylans from a large-scale isolation	151
G. ANNISON, M. CHOCT & N. W. CHEETHAM (Australia)	
Studies on fractionation and molecular weights of Chinese lacquer polysaccharide	161
LINA ZHANG, XINGPING QIU, JINGJUAN XU, YUMIN DU, BAOGONG QIAN (China) & JOHN F. KENNEDY (UK)	
Preparation of microcrystalline cellulose aminoderivatives	167
MIROSLAV ANTAL (Czechoslovakia) & M. MICKO (Canada)	
Preparation of bacterial cellulose containing N-Acetylglucosamine residues	171
RYU OGAWA & SEIICHI TOKURA (Japan)	
Transitions in frozen gelatinized-starch systems studied by differential scanning calorimetry	179
HUA LIU & JOHN LELIÈVRE (Canada)	
Two-step hydrolyses of a polymeric drug under a model system	185
S. TOKURA, Y. KANEDA, Y. MIURA & Y. URAKI (Japan)	
Electron microscopical examinations of grafted nitrocellulose	191
LIE-GUI TANG, YU-QIN ZHU (China) & J. F. KENNEDY (UK)	
Analysis of carrageenans by enzymic degradation, gel filtration and ¹ H NMR spectroscopy	199
SVEIN H. KNUTSEN & HANS GRASDALEN (Norway)	
Dynamic rheological studies on an interaction between lipid and various native hydroxypropyl potato starches	211
HAK RYANG KIM, ANN-CHARLOTTE ELIASSON & KÅRE LARSSON (Sweden)	
Bibliography	219
Book Reviews	229

Number 4

Modified chitosans carrying sulfonic acid groups	231
RICCARDO A. A. MUZZARELLI (Italy)	
Improvement of the selective depolymerization of pectic substances by chemical β -elimination in aqueous solution	237
T. P. KRAVTCHENKO, I. ARNOULD, A. G. J. VORAGEN & W. PILNIK (The Netherlands)	
Hydrodynamic properties of the fractions of mannan formed by <i>Rhodotorula rubra</i> yeast	243
G. M. PAVLOV, E. V. KORNEEVA, N. A. MICHAILOVA & E. P. ANANYEVA (Russia)	

Low-viscosity α -D-glucan fractions derived from sucrose which are resistant to enzymatic digestion	249
GREGORY L. COTE (USA)	
The influence of pH on the viscous behaviour of starch-poly(ethylene-co-acrylic acid) complexes.	253
G. F. FANTA, F. R. DINTZIS, E. B. BAGLEY & D. D. CHRISTIANSON (USA)	
Effect of galactomannan addition on the thermal behaviour of κ -carrageenan gels	261
P. B. FERNANDES, M. P. GONÇALVES (Portugal) & J. L. DOUBLIER (France)	
A study of the effect of water on the glass transition of 1:1 mixtures of amylopectin, casein and gluten using DSC and DMTA	271
M. T. KALICHEVSKY & J. M. V. BLANSHARD (UK)	
Temperature dependence of the elastic modulus of alginate gels	279
STØRKER T. MOE, KURT I. DRAGET, GUDMUND SKJÅK-BRÆK & OLAV SMIDSRØD (Norway)	
Studies on isolation and characterization of starch from oat (<i>Avena nuda</i>) grains	285
R. HOOVER & T. VASANTHAN (Canada)	
Bibliography	299
Book Reviews	307