

# **CELLULOSE CHEMISTRY AND TECHNOLOGY**

**ADVANCES IN THE CHEMISTRY, PHYSICS AND TECHNOLOGY OF  
POLYSACCHARIDES AND LIGNIN**

45♦2011

3-4   ♦ MARCH-  
APRIL

## **C O N T E N T S**

V. I. POPA, Editorial .....	141-148
A. FIFERE, M. SPULBER, N. MARANGOCI, N. FIFERE, M. PINTEALA, V. HARABAGIU and B. C. SIMIONESCU, Semi-empirical PM3 study on complexation of $\beta$ -cyclodextrin with 5-flucytosine .....	149-156
G. STIUBIANU, CARMEN RACLES, ALEXANDRA NISTOR, MARIA CAZACU and B. C. SIMIONESCU, Cellulose modification by crosslinking with siloxane diacids.....	157-162
DIANA CIOLACU and MARIA CAZACU, Synthesis of new hydrogels based on xanthan and cellulose allomorphs.....	163-169
G. DODI, D. HRITCU and M. I. POPA, Carboxymethylation of guar gum: synthesis and characterization.....	171-176
ANA-MARIA GRIGORIU, CONSTANTIN LUCA, NARCISA VRÎNCEANU and FLORIN CIOLACU, Inclusion compounds of monochlorotriazinyl- $\beta$ -cyclodextrin grafted on a paper support.....	177-183
CARMEN ROSCA, OVIDIU NOVAC, GABRIELA LISA and MARCEL IONEL POPA, Polyelectrolyte complexes of chitosan with dextran sulphate. Synthesis and characterization .....	185-189
MIHAELA HOLBAN, VALERIU SUNEL, MARCEL POPA and CATALINA LIONTE, Synthesis and characterization of a new starch ester with <i>N</i> -[( <i>N'</i> -tiazolyl)- <i>p</i> '-(benzenesulphone)] amide of <i>N</i> -( <i>o</i> -nitrobenzoyl)- <i>D,L</i> -asparagic acid.....	191-196
MARIA VALENTINA DINU, MARIA MARINELA PERJU, MARIA CAZACU and ECATERINA STELA DRĂGAN, Polyacrylamide-dextran polymeric networks: Effect of gel preparation temperature on their morphology and swelling properties.....	197-203

IOANA IGNAT, ALINA STINGU, IRINA VOLF and VALENTIN I. POPA, Characterization of grape seed aqueous extract and possible applications in biological systems .....	205-209
ANCA-ROXANA HINAL, IOANA IGNAT, IRINA VOLF and VALENTIN I. POPA, Transformation of polyphenols from biomass by some yeast species.....	211-219
VALENTIN I. POPA, ADINA-MIRELA CĂPRARU, SILVIA GRAMA and TEODOR MĂLUȚAN, Nanoparticles based on modified lignins with biocide properties.....	221-226
IULIAN-ANDREI GÎLCĂ, ADINA-MIRELA CĂPRARU, SILVIA GRAMA and VALENTIN I. POPA, Agents for wood bioprotection based on natural aromatic compounds and their complexes with copper and zinc.....	227-231
L. IGNAT, M. IGNAT, E. STOICA, C. CIOBANU and V. I. POPA, Lignin blends with polyurethane-containing lactate segments. Properties and enzymatic degradation effects.....	233-243
GIGI COMAN and GABRIELA BAHRIM, Minimizing cellulase biosynthesis from cellulase-free xylanase production with <i>Streptomyces</i> Spp. P12-137 using optimization by response surface methodology.....	245-250
IOANA IGNAT, VIOLETA NEAGU, ION BUNIA, CARMEN PADURARU, IRINA VOLF and VALENTIN I. POPA, A comparative study on adsorption of gallic acid onto polymeric adsorbents with amine functional groups.....	251-256
C. H. TYAGI, SHALINI SINGH and DHARM DUTT, Effect of two fungal strains of <i>Coprinellus Disseminatus</i> SH-1 NTCC-1163 and SH-2 NTCC-1164 on pulp refining and mechanical strength properties of wheat straw-AQ pulp.....	257-263
ADRIAN CATALIN PUJTEL, BOGDAN MARIAN TOFANICA, DAN GAVRILESCU and PUIU VALERICA PETREA, Environmentally sound vegetal fiber-polymer matrix composites .....	265-274
LAVINIA TOFAN, CARMEN PADURARU and IRINA VOLF, Maize bran as a low-cost resource for Cu(II) ions removal.....	275-280
ALINA STINGU, IRINA VOLF and VALENTIN I. POPA, Spruce bark extract as modulator in rape plant copper bioaccumulation .....	281-286
ALINA STINGU, IRINA STANESCU, IRINA VOLF and VALENTIN I. POPA, Hyperaccumulation of cadmium in maize plant ( <i>Zea Mays</i> ) .....	287-290
A. K. VIDYARTHI, DHARM DUTT and J. S. UPADHYAYA, Reduction of pollutants in paper mill effluents by aquatic plants .....	291-296