

# CELLULOSE CHEMISTRY AND TECHNOLOGY

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

46 ♦ 2012

3-4 ♦ MARCH -  
APRIL

## C O N T E N T S

### Guest Editorial

H.T. WANG, I.H. LIU and T.F. YEH, Immunohistology of poplar stems reveals that mannan polysaccharides are accumulated during xylem development .....149-155

Z. H. ZHANG, Z. JI, J. F. MA and F. XU, Anatomy, cell wall ultrastructure and inhomogeneity in lignin distribution of *Broussonetia papyrifera* .....157-164

S.N. SUN, T.Q. YUAN, M.F. LI, X.F. CAO, F. XU and Q.Y. LIU, Structural characterization of hemicelluloses from bamboo culms (*Neosinocalamus Affinis*).....165-176

F. PENG, N. JIA, J. BIAN, P. PENG, R. C. SUN and S. J. LIU, Isolation and fractionation of hemicelluloses from *Salix Psammophila* .....177-184

K. WANG, H.Y. YANG, X. YAO, R.C. SUN and G.L. JONES, Structural characterization of isolated lignins from *Caragana korshinskii* Kom .....185-191

J. Z. MAO, L. M. ZHANG and F. XU, Fractional and structural characterization of alkaline lignins from *Carex Meyeriana* Kunth .....193-205

D. SHE, X. N. NIE, F. XU, Z. C. GENG, H. T. JIA, G. L. JONES and M. S. BAIRD, Physico-chemical characterization of different alcohol-soluble lignins from rice straw.....207-219

R. PRADO, X. ERDOCIA, L. SERRANO and J. LABIDI, Lignin purification with green solvents .....221-225

R. BI, O. SPADIUT, M. LAWOKO, H. BRUMER III and G. HENRIKSSON, Isolation and identification of microorganisms from soil able to live on lignin as a carbon source

and to produce enzymes which cleave the $\beta$ -O-4 bond in a lignin model compound.....	227-242
G. YANG and H. M. ZHAI, Synthesis and properties of glycidyl methacrylate grafted Eucalyptus fiber .....	243-248
Y. XING, L.X. BU, K. WANG, and J.X. JIANG, Pretreatment of furfural residues with alkaline peroxide to improve cellulose hydrolysis and characterization of isolated lignin.....	249-260
M. SARWAR JAHAN, Z. LIU, H. WANG, A. SAEED and Y NI, Isolation and characterization of lignin from the pre-hydrolysis of Kraft-based dissolving pulp production.....	261-267
V. CHUNILALL, T. BUSH and R. M. ERASMUS, Investigating the lignocellulosic composition during delignification using Confocal Raman spectroscopy, Cross-Polarization Magic Angle Spinning Carbon 13 – Nuclear Magnetic Resonance (CP/MAS <sup>13</sup> C-NMR) spectroscopy and atomic force microscopy.....	269-276
W. H. GAO, K. F. CHEN, R. D. YANG, J. LI, F. YANG, G. H. RAO and H. TAO, Effects of beating on tobacco stalk mechanical pulp.....	277-282
J. C. CHEN, G. H. YANG, F. G. KONG, L. A. LUCIA and Y. LIU, Influence of xylanase pretreatment on refining energy and brightness of P-RC APMP pulp of Italian black poplar branches .....	283-290
Book reviews.....	291-292