

# CELLULOSE CHEMISTRY AND TECHNOLOGY

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

50♦2016

5 - 6 ♦ MAY - JUNE

## C O N T E N T S

EDITORIAL.....	505-506
LAMBRINI DIAMANTOPOULOU, SOFIA PAPADAKI, LAZAROS KARAOGLANOGLU, DIMITRIOS KOULLAS and EMMANUEL KOUKIOS, The new era of European biofuels landscape: Comparative assessment of socio-environmental sustainability of lignocellulosic feedstocks .....	507-519
JESÚS RANGEL M., MARINA HORNUS, FERNANDO E. FELISSIA and MARÍA C. AREA, Hydrothermal treatment of Eucalyptus sawdust for a forest biorefinery .....	521-528
CORNELIU TANASE, SILVIA OROIAN, SANDA-LILIANA COȘARCĂ and VALENTIN I. POPA, Wastes from forestry and energy industries as potential bioregulators in soybean ( <i>Glycine max</i> L.) plants .....	529-534
CHUNLIN XU, TOMÁS NUÑEZ, STEFAN WILLFÖR and ANNA SUNDBERG, Feasibility of integrating hot water extraction into a dissolving pulp process to recover hemicelluloses from <i>Pinus radiata</i> .....	535-544
NINA KOTELNIKOVA, ALEKSANDRA MIKHAILIDI, YULIYA MARTAKOVA and SEPPO ANDERSSON, <i>In vitro</i> preparation of self-assembled super-swollen hydrogels from solutions of lignocellulose in N,N-dimethylacetamide/lithium chloride .....	545-555
JANI TRYGG, POONAM TRIVEDI and PEDRO FARDIM, Controlled depolymerisation of cellulose fibres to a given degree of polymerization .....	557-567
LACRAMIOARA OCHIUZ, MANUELA HORTOLOMEI, IULIAN STOLERIU and MARIA BERCEA, Dermatocosmetics based on hydroxypropyl cellulose for acne treatment. Rheological and drug delivery behaviour.....	569-575

IRINA-PAULA MERLUȘCĂ, PETRU PLĂMĂDEALĂ, CĂTĂLINA GÎRBEA and IONEL MARCEL POPA, Xanthan-chitosan complex as a potential protector against injurious effects of neomycin.....	577-583
AURICA FARCAS, Cyclodextrins in rotaxa-conjugated polymers synthesis.....	585-591
SIMONA GHERMAN, DANIELA ZAVASTIN, LACRAMIOARA OCHIUZ, GABRIELA BILIUTA and SERGIU COSERI, Enalapril maleate loaded pullulan film for mucoadhesive buccal drug delivery applications .....	593-600
MARIA BERCEA and PATRICK NAVARD, Comparison of elasticity contributions during the flow of a cellulose derivative solution .....	601-607
C. POHONTU, M. POPA, J. DESBRIERES and L. VERESTIUC, Acrylates and methylcellulose based hydrogels. Synthesis, swelling properties and applications to inclusion and controlled release of bioactive matters.....	609-620
RAZVAN ROTARU, CRISTIAN PEPTU and VALERIA HARABAGIU, Viscose-barium titanate composites for electromagnetic shielding.....	621-628
IULIANA SPIRIDON, RALUCA NICOLETA DARIE NITA, MAREK KOZLOWSKI, ANCUA NECHITA and RAMONA GABRIELA URSU, Influence of accelerated weathering on the performance of polylactic acid based materials .....	629-635
MADALINA ZANOAGA, FULGA TANASA and YEVGEN MAMUNYA, Compatibilized green composites based on wood chips and thermoplastic polymer waste matrices.....	637-648
XIAO-PENG PENG, BING WANG, JIA-LONG WEN, SHAO-ZONG YANG, MENG-ZHU LU and RUN-CANG SUN, Effects of genetic manipulation (HCT and C <sub>3</sub> H down-regulation) on molecular characteristic of lignin and its bioconversion to fermentable sugars.....	649-658
TEREZA TRIBULOVÁ, FRANTIŠEK KAČÍK, DMITRY EVTUGUIN and IVETA ČABALOVÁ, Assessment of chromophores in chemically treated and aged wood by UV-VIS Diffuse Reflectance Spectroscopy .....	659-667
HONGLEI CHEN, YU LIU, FANGONG KONG, LUCIAN A. LUCIA and RUI LOU, Dissolution behavior of pentosan in corn straw from hot-water extraction and purification using ion exchange resins.....	669-674
BRUNO LÖNNBERG, Pre-impregnation of wood chips for alkaline delignification.....	675-680
FRANTIŠEK POTŮČEK and MARTINA ŘÍHOVÁ, Soda pulp cooked from rapeseed straw.....	681-688

ELENA BOBU, RALUCA NICU, PAUL OBROCEA, ELENA ARDELEAN, SIMONA DUNCA and TIBERIUS BALAES, Antimicrobial properties of coatings based on chitosan derivatives for applications in sustainable paper conservation.....	689-699
B. BERRIMA, W. MAATAR, G. MORTHA, S. BOUFI, L. EL ALOUI and M. N. BELGACEM, Adsorption of heavy metals on charcoal from lignin.....	701-709
SÓNIA SOUSA, CARLA GAIOLAS, ANA P. COSTA, CECÍLIA BAPTISTA and MARIA E. AMARAL, Cold plasma treatment of cotton and viscose fabrics impregnated with essential oils of <i>Lavandula angustifolia</i> and <i>Melaleuca alternifolia</i> .....	711-719