

# CELLULOSE CHEMISTRY AND TECHNOLOGY

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

52♦2018

9 - 10 ♦ OCTOBER-DECEMBER

## C O N T E N T S

KHALED LABIDI, MONTASSAR ZRIDA, OONA KORHONEN, MARYAM BORGHEI and AHMED HICHEM HAMZAOUI, Alfa fiber: alkaline extraction together with structural and morphological characterization .....701-709

MAGDI GIBRIL, TAMRAT TESFAYE, BRUCE SITHOLE, PRABASHNI LEKHA and DERESH RAMJUGERNATH, Optimisation and enhancement of crystalline nanocellulose production by ultrasonication pretreatment of dissolving wood pulp fibres.....711-727

DEBABRATA DAS, SHAMIMA HUSSAIN, ANUP KUMAR GHOSH and ARUN KUMAR PAL, Studies on cellulose nanocrystals extracted from *Musa sapientum*: structural and bonding aspects.....729-739

LE VAN HAI and YUNG BUM SEO, Properties of nanofibrillated cellulose prepared by mechanical means .....741-747

MOHAMED EL-SAKHAWY, AHMED SALAMA, SAMIR KAMEL and HEBAT-ALLAH S. TOHAMY, Carboxymethyl cellulose esters as stabilizers for hydrophobic drugs in aqueous medium .....749-757

M. M. LÓPEZ-TAPIA, C. C. LÓPEZ-SUERO and R. MARÍN-SÁNCHEZ, New alternative to determine the yield of ethylene oxide substitution in hydroxyethyl cellulose reaction by near-infrared spectroscopy and partial least squares regression .....761-768

TANG HONGBO, PAN KUN, LI YANPING and DONG SIQING, Effect of oxidization and hydroxypropylation on the structure and properties of high-amylose corn starch. Preparation of hydroxypropyl oxidized high amylose corn starch .....769-787

VALENTINA IORDAN (CONSTANTIN), THEODOR MĂLUȚAN and CORINA MĂLUȚAN, Control of lignin epoxydation by reaction calorimetry .....789-793

BIANJING SUN, QIANG ZI, CHUNTAO CHEN, HENG ZHANG, YAN GU, GUANGYUN LIANG and DONGPING SUN, Study of specific metabolic pattern of <i>Acetobacter xylinum</i> NUST4.2 and bacterial cellulose production improvement .....	795-801
DIKSHA SINGLA, MONICA SACHDEVA TAGGAR, GURVINDER SINGH KOCHER and ANU KALIA, Cellulase production by <i>Aspergillus fumigatus</i> using different plant-based agricultural biomass for paddy straw saccharification .....	803-813
MONIKA STANKOVSKÁ, MÁRIA FIŠEROVÁ, JURAJ GIGAC and ANDREJ PAŽITNÝ, Effect of alkaline extrusion pretreatment of wheat straw on filtrate composition and enzymatic hydrolysis .....	815-822
ANA-MARIA CHEȘCĂ, RALUCA NICU, BOGDAN MARIAN TOFĂNICĂ, ADRIAN CĂTĂLIN PUIȚEL and DAN GAVRILESCU, Optimization of soda pulping process of corn stalks by response surface modelling .....	823-831
IRYNA DEYKUN, VITAHALYSH and VALERII BARBASH, Rapeseed straw as an alternative for pulping and papermaking .....	833-839
IBTISSEM MOUSSA, RAMZI KHIARI, ALI MOUSSA, MOHAMED FAROUK MHENNI and MOHAMED NACEUR BELGACEM, Physico-chemical characterization of polysaccharides and extraction of cellulose from annual agricultural wastes.....	841-851
DAISYLYN SENNA Y. TAN, MELANIE GRACE W. IMPAS, DREXEL H. CAMACHO and SHIRLEY T. PALISOC, Paper-based electrode using <i>Cladophora</i> cellulose-polyaniline composite for electrochemical quantification of toxic lead (II) .....	853-861
FLORIN CIOLACU, Paper-based microfluidic devices on fibrous platforms with designed structure.....	863-871
LAURA ANDZE, JURIS ZOLDNERS, LINDA ROZENBERGA, INESE SABLE, MARITE SKUTE, MARIANNA LAKA, LINDA VECBISKENA, MARTINS ANDZS and ANDRIS ACTINS, Effect of molecular chitosan on recovered paper properties described by a mathematic model .....	873-881
VIJENDRA MEENA and JAVED SHEIKH, Multifunctional modification of knitted cotton fabric using pomegranate peel waste.....	883-889
JU-YEONG MIN and HYUNG-MIN CHOI, Preparation and characterization of amphoteric cotton by N-containing reagent through polycarboxylic acid interconnecting linkage .....	891-901
AHMED SALAMA, Chitosan/silk fibroin/zinc oxide nanocomposite as a sustainable and antimicrobial biomaterial .....	903-907
GULZAR MUHAMMAD, AZHAR ABBAS, MUHAMMAD AJAZ HUSSAIN, MUHAMMAD SHER and NAZIA SHAHANA ABBAS, Chemically modified glucuronoxylan: a novel material for heavy metal ion removal from aqueous and spiked high hardness groundwater .....	909-919

QIANG ZHAO, XUEMING ZHANG, DEZHI SUN, XIAOJUAN JIN and ZHAOHONG WANG, Efficiency in electro-Fenton oxidation of CTMP pulping wastewater .....	921-930
Book review.....	931-932
Announcements.....	933-935
Author index.....	937-948
Subject index.....	949-955