

# CELLULOSE CHEMISTRY AND TECHNOLOGY

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

55 ♦ 2021

3 - 4 ♦ MARCH -  
APRIL

## C O N T E N T S

RAMANDEEP KAUR and PUNEET KAUR, Chemical valorization of cellulose from lignocellulosic biomass: a step towards sustainable development .....207-222

URIJ ZABASHTA, MAXIM LAZARENKO, ALEXANDER ALEKSEEV, SERGEY TKACHEV, SVETLANA VASYLYUK, VALERIJ KOVALCHUK and LEONID BULAVIN, Mechanism of disorder genesis in cellulose microfibrils .....223-230

HEITOR L. ORNAGHI JR., FELIPE GUSTAVO ORNAGHI, ROBERTA MOTTA NEVES, DANIEL MAGALHÃES DE OLIVEIRA and MATHEUS POLETTO, Thermal decomposition of wood fibers: thermal simulation using the F-test statistical tool .....231-241

BURAK TOP, ERDAL UGUZDOGAN, NAZIME MERCAN DOGAN, SEVKI ARSLAN, NAIME NUR BOZBEYOGLU and BUKET KABALAY, Production and characterization of bacterial cellulose from *Komagataeibacter xylinus* isolated from home-made Turkish wine vinegar .....243-254

ARVIND SHARMA, GUNJAN DHIMAN, PRITI S. LAL, RAVI D. GODIYAL and BIPIN P. THAPLIYAL, Characterisation of *Moringa oleifera* (drumstick) wood for pulp and paper making .....255-262

JUHA FISKARI, OLGA DERKACHEVA and TUOMAS KULOMAA, Quick non-destructive analysis of condensed lignin by FTIR. Part 2. Pulp samples from acid sulfite cooking .....263-270

VALENTINA PIDLISNYUK, TATIANA STEFANOVSKA, VALERII BARBASH and TATIANA ZELENCHUK, Characteristics of pulp obtained from *Miscanthus x giganteus* biomass produced at lead-contaminated soil .....271-280

TASLIMA FERDOUS, MD. IMRAN HOSSAIN, MOUMITA NANJIBA, M. A. QUAIYYUM and M. SARWAR JAHAN, Chlorine dioxide bleaching of pulp from crop residues: bagasse, kash and corn stalks.....281-287

KAJA BRESKVAR, JURE AHTIK and KLEMEN MOŽINA, Cracking phenomena of coatings on label papers .....	289-297
NDUDUZO L. KHUMALO, SAMSON MOHOMANE, SETUMO MOTLOUNG, LEHLOHONOLO KOAO, THEMBINKOSI D. MALEVU and TSHWAFO E. MOTAUNG, Preparation and analysis of cellulose PFA composites: a critical review .....	299-309
VANESSA NG WEN YI, NG CHOO HUEY, TEOH YI PENG, OOI ZHONG XIAN and SHUIT SIEW HOONG, Isolation of cellulose derived from orange peel and its application in biodegradable films .....	311-324
HÜSEYİN BENLİ, Ultrasound assisted bio-dyeing of some textile materials with black carrot ( <i>Daucus carota L.</i> ) extract .....	325-342
MONA VERMA, NEHA GAHLOT, SAROJ S. J. SINGH and NEELAM M. ROSE, Enhancement of dye absorption of cotton fabric through optimization of biopolymer treatment.....	343-354
ROBERTA MOTTA NEVES, LUCAS DALL AGNOL and HEITOR LUIZ ORNAGHI JR., A survey of thermal degradation behavior based on chemical composition of post-consumed coffee and yerba mate .....	355-363
MOHAMED EL-SAKHAWY, AHMED SALAMA, AHMED K. EL-ZIATY and HAZEM HASSAN, Preparation of TEMPO-cellulose nanofiber/zinc oxide as antimicrobial and methylene blue photo-degrading nanocomposite .....	365-373
NEDA PAVANDI, ELHAM TAGHAVI and NAVIDEH ANARJAN, Preparation of carboxymethyl cellulose and polyvinyl alcohol (CMC/PVA) hydrogels using freeze-thaw processes for adsorption of Zn <sup>2+</sup> and Cu <sup>2+</sup> .....	375-383
YAŞAR KEMAL RECEPOĞLU and ASLI YÜKSEL, Synthesis, characterization and adsorption studies of phosphorylated cellulose for the recovery of lithium from aqueous solutions .....	385-401
JARED VINCENT T. LACARAN, RONALD JEFFERSON NARCEDA, JOSANELLE ANGELA V. BILO and JULIUS L. LEAÑO JR., Citric acid crosslinked nanofibrillated cellulose from banana ( <i>Musa acuminata x balbisiana</i> ) pseudostem for adsorption of Pb <sup>2+</sup> and Cu <sup>2+</sup> in aqueous solutions .....	403-415
HEBAT-ALLAH S. TOHAMY, SAMIR KAMEL and MOHAMED EL-SAKHAWY, Graphene oxide functionalized by ethylene diamine tetra-acetic acid (EDTA) by a hydrothermal process as an adsorbent for nickel ions .....	417-432
PRIYA KATYAL, AVNEET KAUR and SUMITA CHANDEL, Lignocellulose-rich spent mushroom compost for biosorption of heavy metals from effluent samples .....	433-442