

CELLULOSE CHEMISTRY AND TECHNOLOGY

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

59♦2025

1 - 2 ♦ JANUARY -
FEBRUARY

C O N T E N T S

ABRAR HUSSAIN and ZULCAIF AHMAD, A review of orodispersible films for enhanced drug delivery.....	1-10
ALEKSANDR S. KAZACHENKO, FERIDE AKMAN, UTKIRJON HOLIKULOV, YAROSLAVA BEREZHNAIA, NOUREDDINE ISSAOUI, ANNA S. KAZACHENKO, OMAR M. AL-DOSSARY, OLGA FETISOVA, SVETLANA NOVIKOVA and TIMUR IVANENKO, Synthesis and physicochemical study of gum arabic sulfates.....	11-28
HANANE ABURIDEH, DJAMILA ZIOUI, SARRA HOUT, ZOUBIR BELGROUN, FATMA ZOHRA YAHIAOUI and MOHAMED ABBAS, Investigation of carboxymethyl cellulose incorporation effects on TFC membrane active layers using various supports	29-41
LORELI FAYE T. MANZANO, CHRISTINE JOY D. MAPATAC, JOHN MARK G. BEGSAENG, HAZEL ANN S. NIPALES and DAPHNE C. LEAL, Evaluation of chemo-mechanical methods for extracting cellulose from waste cabbage (<i>Brassica oleracea</i> var. <i>capitata</i> L.) trimmings	43- 48
MOROUG ZYADEH, MAHMOUD ABDEL-RAHMAN KASRAWI, IMAD MOH'DKHAIR HAMADNEH, SARAH JAMAL JARADAT and AKRAM ISMAIL ABUSHAWER, Synthesis of a novel cellulose-based hydrogel/nano-hydroxyapatite composite and potential regulation of nitrogen fertilizer release.....	49-55
AQSA TAHIR, ATIA AFZAL, IRFAN AHMAD, DALIA SUKMAWATI, MARCELO FRANCO, TRISANTI ANINDYAWATI and MUHAMMAD IRFAN, Potential of melon peels for the production of cellulose degrading enzymes from <i>Bacillus subtilis</i> strain 2I in submerged fermentation.....	57-70
TRANG THI CAM TRUONG, DUONG NGUYEN THUY TRAN, ANH PHUONG LE THI, NGAN THI THU PHAN, TAKAOMI KOBAYASHI and KHOA DANG NGUYEN, Fruit waste-sourced pectin as natural co-coagulant for organic matter and turbidity treatment in wastewater.....	71-83

MERVE ECE TEMELKURAN, ZEYNEP KALAYCIOĞLU and FATMA BEDIA ERIM, Chitosan/zinc-iron oxide nanocomposite for controlled release of anticancer drug imatinib.....	85-93
GEORGIANA MARDARE (BALUSESCU), LILIANA LAZAR and TEODOR MALUTAN, Ultrasound extraction and characterization of bioactive compounds obtained from different organs of <i>Datura innoxia</i>	95-109
PREETI R. PARMAR, B. K. RAJKUMAR, NAVED MALEK and HIRAL UKANI, Comprehensive elucidation of structural and compositional changes in cotton stalks undergoing biodegradation by potent cellulolytic bacteria	111-119
ANNA MECHSHANOVA, VLADILEN POLYAKOV, NATALYA BAZARNOVA, TEMENUZHKA RADOYKOVA, Study of balsamic poplar extract obtained from different parts of the plant used as biostimulant	121-132
MERYEM ONDARAL and EVREN ERSOY KALYONCU, Utilization of bio-based polymers and dimethylol dihydroxyethylene urea in coating kraft packaging papers.....	133-142
MURUGAN VIGNESH and MUTHU PARANTHAMAN VENKATESH, Synergistic effect of hybrid reinforcements on mechanical and thermal properties of epoxy composites for insulation materials – a comparative study	143-149
KAMEL MOKHNACHE, KHAYERDDINE KHROUFI and SALIM MADANI, Preparation of a hydrogel composite from recycled cellulose and its use urea release.....	151-160
A. N. BALAJI, M. K. V. KARTHIKEYAN, V. VIGNESH, K. J. NAGARAJAN and A. B. MADHAVAN, Investigation of mechanical and thermal characteristics of banana fiber-reinforced polyester composites for automotive applications	161-173
RASHI KUSHWAHA, PRIYANKA KESARWANI and ANJU KUSHWAHA, A comparative study on physico-chemical characteristics of scoured and bleached hemp fabric through SEM, FTIR and XRD.....	175-181
SENA DEMIRBAĞ GENÇ, MÜYESSEN SELDA TÖZÜM and SENNUR ALAY AKSOY, Designing bioshelled microcapsules to produce fabric with reversible color-changing, thermoregulation and antibacterial properties	183-195
AFAF AMARA-REKKAB and SARAH BOUHASSOUN, Doehlert experimental design and density functional theory for the removal of Bezathren blue dye from aqueous solution.....	197-206
KAH-TONG CHAN, SIEW-TENG ONG and SIE-TIONG HA, Application of experimental design for optimization of Malachite green removal by tetraethylenepentamine modified peanut husk composite beads	207-221
CAO MINH TRUNG, PHAM QUOC PHU, HA THANH TOAN, VAN PHAM DAN THUY, TRAN THI BICH QUYEN, NGUYEN VIET NHAN HOA, YOSHIYUKI MURATA and DOAN VAN HONG THIEN, Synthesis of cellulose-based aerogels from bagasse combined with activated carbon for enhanced oil spill remediation.....	223-232

Project announcements.....	233-235
----------------------------	---------