

CELLULOSE CHEMISTRY AND TECHNOLOGY

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

58♦2024

5 - 6 ♦ MAY -
JUNE

C O N T E N T S

MUHAMMAD ROUF, ZULCAIF AHMAD, ASIF MAHMOOD, YASIR QAVI, SANIYA SHCHINAR and RIFFAT LATIF, Hydrogel-based delivery systems for topical antifungal therapy: a review425-436

DANIEL FERNANDO HINCAPIÉ ROJAS, TAYRON RONNIE ROMERO RODRIGUEZ, DIANA FERNANDA ORTEGA SOLARTE, OSCAR MOSCOSO LONDOÑO, CESAR LEANDRO LONDOÑO CALDERÓN and ASTRID LORENA GIRALDO, Optimization of the extraction and preparation of cellulose microfibrils from rice husk using a full factorial experiment437-454

NOVITRI HASTUTI, HENY HERAWATI, FITRIA RIANY ERIS, FERI KUSNANDAR, ICEU AGUSTINISARI, FETRIYUNA FETRIYUNA, INDAH KURNIASARI, MUCHAMAD BACHTIAR, BUDIONO UJAYA PUTRA and MUHAMMAD ALIF RAZI, Facile synthesis of carboxymethyl cellulose (CMC) from agricultural residues.....455-466

YEE SHUI NG, ZHONG XIAN OOI, YI PENG TEOH, MEI LEE OOI and PENG YONG HOO, Optimization of purified cellulose extraction from corn cob and characterization of the isolated product.....467-479

NADIA A. MOHAMED and NAHED A. ABD EL-GHANY, Evaluation of *in-vitro* antimicrobial, antioxidant and anticancer activity of a new carboxymethylchitosan-based cyanoguanidine copolymer481-493

EKA TRIWAHYUNI, IRMA PUTRI ASRI, SRI SUGIWATI, HUSNI WAHYU WIJAYA, IRIKA D. ANGGRAINI, SEPTIAN MARNO and TRISANTI ANINDYAWATI, Cellulose production by *Trichoderma reesei* and its application in hydrolyzing oil palm empty fruit bunches495-503

MUHAMMAD IRFAN, RAAZIA KIRAN, NOOR FATIMA, MISBAH GHAZANFAR, HAFIZ ABDULLAH SHAKIR, MUHAMMAD KHAN, IRFAN AHMAD and MARCELO FRANCO,

Optimization of dilute sulphuric acid pretreatment of cotton stalk through Box Behnken design of response surface methodology505-515

WORN DONCHAI, ARUNEE K. ALDRED, PANWAD SILLAPAWATTANA, ANULUCK JUNKUM and ARPAPORN CHANSANG, Controlled release of essential oils from microcapsules based on gum arabic and chitosan prepared by complex coacervation as mosquito repellent and antimicrobial material517-528

KEDAR VAIDYA, FAHMIN AHMED and SASISANKER PADMANABHAN, Enhancement of phenolic content and antioxidant properties through chemical and biochemical treatment of lignin-rich rice straw residue.....529-539

TRISNO AFANDI, ELVRI MELLIATY SITINJAK, RYCCE SYLVIANA PRATIKHA and FERNANDO NAINGGOLAN, Characterization of unbleached pulp from empty fruit bunches of oil palm as a raw material for brown paper541-546

SHETTAHALI MANTAI AH VINU KUMAR, JEYAKUMAR RENGARAJ, ERUSAGOUNDER SAKTHIVELMURUGAN, Evaluation of physico-mechanical, water absorption and thermal properties of *Alstonia macrophylla* fiber reinforced polypropylene composites547-560

ABDELHAY AIT-ABDELLAH, OUMAIMA BELCADI, MOHAMED AIT BALLA, HAMID BOUNOUADER, HAMID KADDAMI, NOURREDINE ABIDI and FATIMA-EZZAHRA ARRAKHIZ, Alkaline treatment of sugarcane bagasse fibers for biocomposite applications.....561-575

LUBNA GULNAR, SUMMYIA MASOOD, ALI DAD CHANDIO, NOSHAB QAMAR, MARIA ASHFAQ and ZAINAB KHAN, Physico-chemical characteristics of OSA-starch isolated from basmati rice and its utilization in ethylene glycol plasticized PVA blend films.....577-589

MURTHY ARUL, CHINNASAMY SUBRAMANIYAN, ERUSAGOUNDER SAKTHIVELMURUGAN and MYILSAMY SURESHKUMAR, Optimising mechanical properties of epoxy matrix hybrid composites through SiC filler integration and fiber reinforcement: the Taguchi approach591-602

SHELLY KHANNA, MANISHA YADAV and NAGENDER SINGH, Functionalization of outdoor cotton textiles: combining fragrance and UV protection through β -cyclodextrin derivative inclusion complexes infused with peppermint and clove essential oils603- 615

THO LUU THI, HONG KHANH VU THI, TUAN ANH NGUYEN and THU NGUYEN THI KIM, Influences of crosslinker and molecular weight of chitosan on physico-chemical properties of antibacterial treated cotton fabrics617-625

ASHLY A. ROSALES GÓMES, AXEL M. RAMOS DOBLADO, MARÍA F. CALLEJAS TABORA, SUANY Y. ZELAYA NASSER, FREDY A. RODRÍGUEZ-RIVAS, HENRY

DANIEL PONCE-RODRIGUEZ, ÁLVARO CABALLERO and JUAN DOMÍNGUEZ-ROBLES, Olive pits-based carbon black agglomerate as an adsorbent for pipette-tip solid-phase extraction for the determination of caffeine in energy drinks	627-635
GULZAR MUHAMMAD, KIRAN N. LAILA, MUHAMMAD U. SHARIF, TUBA, MUHAMMAD A. HUSSAIN, AAMNA MAJEED and SUMAIRA SALEEM, Polysaccharide-mediated synthesis of copper oxide nanoparticles for enhanced photodegradation of methyl orange and methylene blue	637-646
SABRI MERADI, CHAHRAZED DJILANI, PIERRE MAGRI, YOUGHOURTA BELHOCINE and FAYÇAL DJAZI, Soft modification and functionalization of lignocellulosic biomass used as a low-cost efficient biosorbent to remove basic fuchsine from aqueous solution.....	647-661
PAUNKA VASSILEVA, IVAN UZUNOV, DIMITRINKA VOYKOVA, ANTONINA KOVACHEVA, IVALINA AVRAMOVA, GEORGI TYULIEV, ROSITSA KUKEVA and DIMITAR MEHANDJIEV, Study of silver adsorption on cellulose-based biosorbents....	663-673