

Indian Journal of Chemical Technology

www.niscpr.res.in; http:// nopr.niscpr.res.in

VOLUME 33
CODEN: ICHTEU

NUMBER 3

May 2026
ISSN: 0971-457X (Print); 0975-0991 (Online)

CONTENTS

Review

- Sustainable approaches in textile dyeing sludge management: A review of emerging technologies and future perspective 315
Raju Lavanya & Dhanapal Vasanth Kumar*

Papers

- Synthesis and characterization of pectin & xanthan / zinc oxide biopolymer-based functional films for food packaging 333
Sheetal D. Deshmukh*, Fasaha Ahmad, Vijay B. Pawade & Sushil U. Lokhande
- Kinetic study of biosurfactant production with *Pseudomonas aeruginosa* MTCC 424 using residual rice bran oil as substrate 344
Ashutosh Mishra* & Rakesh Kumar Trivedi
- Development of sustainable cementitious composites using agricultural waste and seashells 351
Yennam Rajesh*, Himani Chaudhari, Shraddha Pansare, Anil Kumar Thandlam, Suyog Jain*, Neha Gautam & Rajasekhar Ravula
- Modelling and optimization of arsenic removal from municipal water using Fe-Al deposited activated carbon derived from neem leaf waste: A response surface methodology approach 358
Ashutosh Mishra* , Neeta Singh, Shashank Jaiswal, Kalpana, Manoj Kumar & Dharmendra Pandey
- Electrocoagulation treatment of oily wastewater using perforated electrodes: Process optimization via response surface methodology 370
Rakesh Kumar* & Chander Prakash
- Utilizing degraded oils for eco-friendly epoxy films 382
Susmita Bajpai, Rita Awasthi & Deepti Shikha*
- Comparative analysis of humic acid, lignin and lignite-based hydrogels for methylene blue dye removal 391
Manu Nandal, Devendra Kumar & Rajinder K. Gupta*
- Formulation and evaluation of self nano-emulsifying mouth dissolving film of azathioprine 401
Samiullah Bagwan*, Kavitha, Amolkumar Kempwade , Anand Ammange, Dhanaraj Shetty & Rohit Bhushinge

- Effect of vinyl resin addition on the adhesion strength of anti-corrosion zinc-rich epoxy coating on A283 steel 413
Amal Meghalet, Amel Halimi, Sofia Benamirouche, Larbi Hemmouche*, Yazid Touazi & Mohamed Daia Dine Boudiaf
- Influence of injection strategy and combustion chamber geometry on the performance and emissions of a bio-ethanol fuelled CRDI diesel engine 427
Tamilarasan Velliyampalayam Devaraj*, Ramesh Kumar Thiruppathi & Arivazhagan Sampathkumar
- Influence of EMHD flow of a non-Newtonian ternary hybrid nanofluid over a variable thickness surface with thermal effects and Cattaneo-Christov heat flux: Applications in biomedical engineering 444
Kaleeswari M, Kotte Amaranadha Reddy*, Maduru Lakshmi Rupa, Seethi Reddy Reddissekhar Reddy & Shaik Jakeer
- Experimental investigation on performance and emission analysis of the higher alcohol-blended water-emulsified waste cooking oil biodiesel in an IC engine 456
B. Maharajan, P. Madhu*, C. Sowmya Dhanalakshmi & R. Vijayakumar
- Numerical attribution of bioconvection magnetised electrical flow of thermal radiation in a nanoliquid with thermal/solutal convective curve surface 473
Agha Yasir Ali, Syed Sohaib Zafar, Farhan Ali, M. Faizan Ahmed, Dana Mohammad Khidhir & Hamed Ould Sidi
- Application of native *Parthenium hysterophorus* for dye sequestration: Kinetic, isotherm, and thermodynamic analysis 485
Suyog N. Jain*, T. H. Upasani, A. N. Kavhar, Ravula Rajasekhar, Yennam Rajesh*, Gaurav Daware, S. N. Derle, Neha Gautam & Piyush Joshi

Authors for correspondence are indicated by (*)
