JAYPEE UNIVERSITY OF ENGINEERING AND TECHNOLOGY, GUNA

Publications - Department of Chemical Engineering

<u>2021</u>

- T. K. Bharadwaj and K. N. Gupta, "Foam drainage enhancement in foam fractionation for dye removal: process optimization by taguchi methodology and grey relational analysis", International Journal of Chemical Reactor Engineering, vol. 19, no. 7, pp. 749-765, 2021.
- T. K. Bharadwaj and K.N. Gupta, "Dye separation using a semi-batch foaming process: Process optimization using Taguchi methodology and Grey relational analysis", Environmental Engineering Research, vol. 26, pp. 20-31, 2021.
- T. K. Bharadwaj and K.N. Gupta, "Separation of dye using surfactant as a collector in foam fractionation; modeling and optimization by response surface methodology and grey relational analysis", Desalination and Water Treatment, vol. 212, pp. 297-310, 2021.
- K. N. Gupta and Rahul Kumar, "Fixed bed utilization for the isolation of xylene vapor: Kinetics and optimization using response surface methodology and artificial neural network", Environmental Engineering Research, vol. 26, pp. 200105, 2021.
- R. Shrivastava, "Comparative study of boosting and bagging based methods for fault detection in a chemical process," 2021 International Conference on Artificial Intelligence and Smart Systems (ICAIS), Coimbatore, India, 2021, pp. 674-679.
- R.K. Arya, J.Sharma, R. Shrivastava, D. Thapliyal, G.D. Verros, "Modeling of surfactant-enhanced drying of poly(styrene)-*p*-xylene polymeric coatings using machine learning technique" *Coatings*, *vol.* 11(12), pp. 1529, Dec 2021.

<u>2022</u>

Tarun Kumar Bharadwaj and Kaushal Naresh Gupta, "Dye isolation in a foam fractionation column: Optimization of process parameters", Materials Today: Proceedings, vol. 57, part 4, pp. 1442-1447, 2022.

Amit.K. Thakur, Rahul Kumar, V.K. Vipin Kumar, Amit Kumar, Gajendra Kumar Gaurav and Kaushal Naresh Gupta, "A critical review on thermodynamic and hydrodynamic modeling and simulation of liquid antisolvent crystallization of pharmaceutical compounds", Journal of Molecular Liquids, vol. 362, pp. 119663, 2022.

2023

Kaushal Naresh Gupta, Rahul Kumar, Amit Kumar Thakur, and Nadeem A. Khan, "Treatment of dyeing wastewater using foam separation: Optimization studies", Water, vol. 15, no. 12, pp. 2236, 2023.

Amit K. Thakur, Rahul Kumar, Ashutosh Kumar, Ravi Shankar, Nadeem A. Khan, Kaushal Naresh Gupta, Mahendra Ram, and Raj Kumar Arya, "Pharmaceutical waste-water treatment via advanced oxidation based integrated processes: An engineering and economic perspective", Journal of Water Process Engineering, Vol. 54, pp. 103977, 2023.

<u>2024</u>

Rahul Kumar, Amit K. Thakur, Pranava Chaudhari, Raj Kumar Arya, Kaushal Naresh Gupta, Devyani Thapliyal, Amita Bedar, R. Shruti Krishna, and KancharlapalliChinaragaPitchaiah, "Nanoparticle preparation of pharmaceutical compounds via wet milling: Current status and future aspects", Powder Technology, vol. 435, pp. 119430, 2024.

D. Thapliyal, R. Shrivastava, G.D. Verros, S. Verma, R.K. Arya, P. Sen, S.C. Prajapati, Chahat, A. Gupta, "Modeling of triphenyl phosphate surfactant enhanced drying of polystyrene/*p*-xylene coatings using artificial neural network." *Processes*, vol. 12(2), pp. 260, Jan 2024.

<u>2025</u>

K.N Gupta, R. Kumar, and A. K. Thakur, "Removal of volatile organic compounds using fixed bed adsorption: optimization using Taguchi methodology and grey relational analysis", International Journal of Environmental Science and Technology, vol. 22, pp. 4707-4730, 2025.

S. K. Srivastava, R. Shrivastava, "Modeling for copper recovery from e-waste by using machine learning technique: an approach for the circular economy" Current Analytical Chemistry, vol. 21, Jan 2025. (at present available in online mode).