

DEPARTMENT OF CHEMICAL ENGINEERING

List of Publications (July 2025- June 2026)

12.12.2025

S. No	Title of the paper	First Author & Affiliation	Remaining Authors & Affiliation as per the order in papers	Name of the Journal / Conference	Volume No, Issue No, Page No Month & Year	Indexing Scopus/ SCI/ SCIE/ WoSetc	Impact factor & Quartiles (Q1 / Q2/ Q3 / Q4	Online Link of the paper (by clicking this link, paper should opened in online)
1	Mechanical and durability assessment of paver blocks incorporating electronic plastic waste and polyethylene fiber	M. Jayadurgalakshmi	A. J. Jeya Arthi, M. Goutham Priya, T. Udhaya Kumar, Alagar Karthick & A. K. Priya	Journal of Building Pathology and Rehabilitation	Volume 11, article number 18, (2026)	Scopus	Q2	https://link.springer.com/article/10.1007/s41024-025-00690-w
2	The promise of graphene-based photocatalytic materials for wastewater remediation: A scoping review	Muhammad A. Abo El-Khair	Ahmed O. Abo El Naga, Khalid Z. Elwakeel, Ahmed M. Elgarahy, A.K. Priya, Krishna Kumar Yadav, Asmaa S. Morshedy	Coordination Chemistry Reviews	Volume 544, 1 December 2025, 216961	SCI	IF 23.5 & Q1	https://www.sciencedirect.com/science/article/pii/S0010854525005314

3	Photocatalytic activity of microwave-assisted synthesized $\text{MoS}_2/\text{g-C}_3\text{N}_4$ composite for efficient decomposition of aniline green dye	Gomathi Ramalingam	Priya Arunkumar, Mashael Daghash Alqabtani & Ahmed M. Elgarahy	Journal of Cluster Science	Volume 36, article number 171, (2025)	SCIE	IF 3.6 & Q2	https://link.springer.com/article/10.1007/s10876-025-02879-y
4	Machine learning-assisted prediction of heavy metal adsorption from tannery effluent wastewater using Delonix-regia with random forest, isotherms, and kinetics modelling	K.M. Manoj	A.K. Priya, M. Senthil Rajan	Desalination and Water Treatment	Volume 324, 101417	Scopus	IF 1.0 & Q3	https://www.sciencedirect.com/science/article/pii/S1944398625004333
5	Smart Water Management for SDG 6: A Review of AI and IoT-Enabled Solutions	Subhrajit Mandal	Anamika Yadav, Rishab Panwar, SM Shravan Kumar, Alagar Karthick, Arunkumar Priya, R. Vijayakumar & Sundaram Sankar Ganesh	Water Conservation Science and Engineering	Volume 10, article number 83, (2025)	Scopus	IF 1.9 & Q2	https://link.springer.com/article/10.1007/s41101-025-00407-7

6	Recent Advances in Integrated Carbon Dioxide Capture: Exploring Carbon Capture Methods and AI Integration	GOKULAN RAVINDIRAN	A K Priya, Brainware University, G. Shyamala, SR University, H. K. Ramaraju	Nature Environment and Pollution Technology		Scopus	IF 0.68 & Q3	https://editorial.netjournal.com/index.php/1/article/view/935
7	Biosorptive Removal of Pharmaceutical Contaminants using Jujuba Seeds for Sustainable Water Pollution Mitigation: Mechanistic and Modeling Insights	Arunkumar Nag appan	Sivarajasekar N, Rambabu Krishnamoorthy, Cheng Chin Ku	Water Air Soil Pollution	10.33125	SCIE	IF 3.0 & Q2	https://link.springer.com/article/10.1007/s11270-025-08346-8
8	Construction of CuS/g-C3N4 heterojunction composite by in-situ synthesis for enhanced photocatalytic degradation of malachite green	Gomathi Ramalingam	Priya Arunkumar	Matéria (Rio de Janeiro)	Volume 30 Pages e20250154	SCI	IF 0.9 & Q3	https://www.scielo.br/j/rmat/a/5Yxj3KXPn3gHCHqJfgJFV9m/?lang=en

9	Simplified Thermal Modeling of a Lithium-Ion Cell Considering Ambient Temperature Variations in a Closed Environment	Amit Rathoure Kumar	Sivasamy Balasubramanian, Dan Bahadur Pal, Ashish Kapoor	Asia Pacific Journal of Chemical Engineering	-	SCI	IF 1.6	https://onlinelibrary.wiley.com/doi/10.1002/apj.70126
10	Sustainable biopolymer-based materials for oil spill remediation: artificial intelligence integration and technoeconomic insights - A review	Ahmed Elgarahy M.	Manal.G. Eloffy, Priya Arunkumar, Malak Zirari, Mahmoud M. Ali, Laila A. Al-Khatib, Mashael Daghash Alqahtani, Khalid Z. Elwakeel	International Journal of Biological Macromolecules	October 2025, 148310	SCI	IF 8.5 & Q1	https://www.sciencedirect.com/science/article/abs/pii/S0141813025088671
11	Integrated green bioprocessing of agro-waste for enhanced industrial enzyme production kinetics and mixed culture optimization	S. Kavitha	G. Surendran	Global NEST Journal	Vol 27, No 8, 07685	Scopus	IF 1.5 & Q3	https://doi.org/10.1590/1517-7076-RMAT-2024-0936

12	Evaluation on adsorption characterization of Cr ³⁺ , Ni ²⁺ , Pb ²⁺ , Cd ²⁺ , Fe ³⁺ , and Zn ²⁺ materials using delonix regia impacted by tannery effluents	Manoj Kolandayal Munusamy	Sri Krishna College of Technology, Coimbatore, Priya Arunkumar , KPR Institute of Engineering and Technology, Coimbatore	Matéria (Rio de Janeiro)		SCI	IF 0.9 & Q3	https://www.sciencedirect.com/science/article/pii/S2950357425000964
13	A REVIEW OF METHODOLOGY, PERFORMANCE AND KINETICS REVEALED IN SULFUR-BASED NANOPARTICLES IN ADVANCED OXIDATION PROCESSES OF EFFLUENT WASTEWATER	Shannugam Palanisamy	Dhanush Karikala Arashan, Giriharish Arumugam, Deepak Krishna Moorthy, Pranav Shankaran	Sustainable Chemistry One World	100139	Scopus		https://www.tandfonline.com/doi/full/10.1080/17597269.2025.2578575
14	An in-depth comparative analysis of fuel evolution: tracking physico-chemical characteristics in	Chandradhwaj Nayak	Laxmi Deepak Bhatlu, Vaishnava Raghunath Chelluboyana, Smruti Prakash Sahoo, Shubhra Kanta Behera, Tankadhar Bhaissal, Biswajit Samal, Brahmotri Sahoo, Krushnashree Sushree Sangita	Biofuels		SCI	IF 2.2 & Q3	https://journal.gnest.org/publication/gnest_07712

	conventional diesel, e-diesel, biodiesel, and aged biodiesel		Sahoo, Priya Arunkumar , Mohamed El-Qelish, Mashael Daghash Alqahtani & Ahmed M. Elgarahy					
15	Efficient Photocatalytic Elimination of Metformin Using Gadolinium-Doped BiVO ₄ Optimized via Box-Behnken Design	Karuppusamy Murugesan	Natesan Haribabu Arul Sivaramasekar,	Global Nest Journal		SCI	IF 0.9 & Q3	https://www.tandfonline.com/doi/full/10.1080/15275922.2025.2578486
16	Seasonal Dynamics of Surface Water Pollution in Semi-Urban Telangana, India: A Comparative Analysis Using PCA, FA, and UMAP	Shravan Kumar S. M	R. Laxmana Reddy, Bukke Lavanya, A. K. Priya , Lingam Anju & Gannavaram Venkata Praveen	Environmental Forensics		Scopus		https://www.sciencedirect.com/science/article/pii/S2950357425000964

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