



KPR Institute of Engineering and Technology

(Autonomous)

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DEPARTMENT OF CHEMICAL ENGINEERING

List of Publications (July 2024- June 2025)

10.07.2025

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	Revitalizing the circular economy: An exploration of e-waste recycling approaches in a technological epoch	Ahmed M. Elgarahy Environmental Science Department, Faculty of Science, Port Said University, Port Said, Egypt	M.G. Eloffy, National Institute of Oceanography and Fisheries, NIOF, Cairo, Egypt A.K. Priya, Department of Chemical Engineering, KPR Institute of Engineering and Technology, Tamilnadu, India Ahmed Hammad,	Sustainable Chemistry for the Environment	Volume 7, September 2024, 100124	Scopus	-	https://www.sciencedirect.com/science/article/pii/S2949839224000671?via%3DiHub

			<p>Chemical Engineering Department, Faculty of Engineering, Port Said University, Port Said, Egypt</p> <p>Moustafa Zahran,</p> <p>Department of Chemistry, Faculty of Science, Menoufia University, Shibin El-Kom 32512, Egypt</p> <p>Ali Maged,</p> <p>Geology Department, Faculty of Science, Suez University, 43221, Suez, Egypt</p> <p>Khalid Z. Elwakeel</p> <p>University of Jeddah, College of Science, Department of Environmental Science, Jeddah, Saudi Arabia</p>					
2	<p>A review on the synergistic efficacy of sonication assisted water treatment process with special</p>	<p>Ahmed M. Elgarahy</p> <p>Environmental Science Department, Faculty of Science, Port Said</p>	<p>M.G. Eloffy,</p> <p>National Institute of Oceanography and Fisheries, NIOF, Cairo, Egypt</p> <p>A.K. Priya,</p>	<p>Chemical Engineering Research and Design</p>	<p>Volume 206, June 2024, Pages 524-552</p>	<p>SCI</p>	<p>IF: 3.7 Q2</p>	<p>https://www.sciencedirect.com/science/article/abs/pii/S0263876224003010</p>

	attention given to microplastics	University, Port Said, Egypt	<p>Department of Chemical Engineering, KPR Institute of Engineering and Technology, Tamilnadu, India</p> <p>V. Yogeshwaran,</p> <p>Khalid Z. Elwakeel,</p> <p>University of Jeddah, College of Science, Department of Environmental Science, Jeddah, Saudi Arabia</p> <p>Zhen Yang,</p> <p>School of Chemistry and Materials Science, Nanjing Normal University, Nanjing 210023, China</p> <p>Eduardo Alberto Lopez-Maldonado</p> <p>Faculty of Chemical Sciences and Engineering, Autonomous University of Baja California, Tijuana, BC 22424, Mexico</p>					
3	Bio-derived carbon-based materials for	A.K. Priya	M. Muruganandam,	Chemosphere	Volume 362, Augus	SCI	IF: 8.1 Q1	https://www.sciencedirect.com/science/art

	sustainable environmental remediation and wastewater treatment	Department of Chemical Engineering, KPR Institute of Engineering and Technology, Tamilnadu, India	Project Prioritization, Monitoring & Evaluation, and Knowledge Management Unit, ICAR Indian Institute of Soil & Water Conservation (ICAR-IISWC), Dehradun, India Sagadevan Suresh Nanotechnology & Catalysis Research Centre, Universiti Malaya, Kuala Lumpur, 50603, Malaysia		t 2024, 142731			icle/abs/pii/S0045653524016254
4	Recent advances and synergistic interactions in graphene-based polymer nanocomposites for enhanced gas sensing applications	AK Priya, Department of Chemical Engineering, KPR Institute of Engineering and Technology, Tamilnadu, India Centre for Nanoscience and Technology, KPR Institute of Engineering and Technology,	M Muruganandam, Project Prioritization, Monitoring & Evaluation and Knowledge Management Unit, ICAR-Indian Institute of Soil & Water Conservation (ICAR-IISWC), Monitoring & Evaluation and Knowledge Management Unit, ICAR-Indian Institute of Soil & Water Conservation (ICAR-IISWC), Dehradun, India. Dehradun, India. Yogeshwaran Venkatraman, Department of Civil Engineering	Journal of Alloys and Compounds	Volume 362, 142731	SCI	IF: 5.8 Q1	https://doi.org/10.1016/j.jallcom.2024.176599

		Tamilnadu, India	<p>CETVET, Fiji National University, Samabula, Suva 3722, Fiji.</p> <p>Suresh Sagadevan, Nanotechnology & Catalysis Research Centre, Universiti Malaya, Kuala Lumpur 50603, Malaysia</p> <p>Centre for Herbal Pharmacology and Environmental Sustainability, Chettinad Hospital and Research Institute, Chettinad Academy of Research and Education, Kelambakkam, Tamil Nadu, 603103, India</p>					
5	From biomass waste to bioaerogels - An alternative sustainable approach for wastewater remediation	A.K. Priya, Department of Chemical Engineering, KPR Institute of Engineering and Technology, Tamilnadu, India.	<p>Huda M. Alghamdi, University of Jeddah, College of Science, Department of Chemistry, Jeddah, Saudi Arabia. V. Kavinkumar, Department of Civil Engineering, KPR Institute of Engineering and Technology, India. Khalid Z. Elwakeel, University of Jeddah, College of Science, Department of Chemistry, Jeddah, Saudi</p>	International Journal of Biological Macromolecules	Volume 1008, 176599	SCI	IF: 7.7 Q1	https://doi.org/10.1016/j.ijbiomac.2024.136994

			Arabia. Ahmed M. Elgarahy, Environmental Chemistry Division, Environmental Science Department, Faculty of Science, Port Said University, Port Said, Egypt.					
6	Emerging trends in the development of smart adsorbents.	Karunakaran Saravanan, Department of Chemical Engineering, KPR Institute of Engineering and Technology, Coimbatore,	Muruganantham Bharathi, Centre for Bioinformatics, Department of Biochemistry, Karpagam Academy of Higher Education, Coimbatore, Nouf M. Alyami, Department of Zoology, College of Science, King Saud University, Sulaiman Ali Alharbi, Department of Botany and Microbiology, College of Science, King Saud University, Samer Hasan Hussein-Al-Ali, Department of Chemistry, Faculty of Sciences, Isra University, JORDAN, Palanisamy Arulselvan, Department of Chemistry, Saveetha School of Engineering, Saveetha Institute of Medical	Indian Journal of Pharmaceutical Education and Research	136994	SCI	IF:1.0 Q3	10.5530/ijper.58.4.135

			and Technical Sciences (SIMATS), Saveetha University, Chennai					
7	Fabrication of verrucarin-a- loaded zinc oxide nanocomposite for inducing apoptosis in triple-negative breast cancer cells	Karunakaran Saravanan, Department of Chemical Engineering, KPR Institute of Engineering and Technology, Coimbatore,	Raja Manickam, Department of Chemistry, Sona College of Technology, Salem, Chandramohan Govindasamy, Department of Community Health Sciences, College of Applied Medical Sciences, King Saud University, Ahmed S. El Newehy, Department of Community Health Sciences, College of Applied Medical Sciences, King Saud University, Samer Hasan Hussein-Al-Ali, Department of Chemistry, Faculty of Sciences, Isra University, Jordan, Shamini Senthilkumar, Department of Chemistry, Saveetha School of Engineering, Saveetha Institute of Medical and Technical Sciences (SIMATS), Saveetha University, Chennai	Process Biochemistry	58(4):1225- 1234	SCI	IF: 3.7 Q2	https://doi.org/10.1016/j.procbio.2024.06.006

8	Enhanced lipase production and characterization from Aeromonas media VBC8: Applications in biodegradation of lubricating oil waste	Ramalingam Kowsalya, Department of Biochemistry, Vivekanandha College of Arts and Sciences for Women (Autonomous), India	Karunakaran Saravanan , Department of Chemical Engineering, KPR Institute of Engineering and Technology, Coimbatore, Kandasamy Selvam, PG & Research Department of Biotechnology, Mahendra Arts and Science College (Autonomous), India, Balakrishnan Senthilkumar, Division of Biological Sciences, Tamil Nadu State Council for Science and Technology, India, Duraisamy Senbagam, Department of Biotechnology, Faculty of Science and Humanities, SRM Institute of Science and Technology, Kattankulathur, India	<u>Biocatalysis and Agricultural Biotechnology</u>	<u>Volume 145</u> , Pages 13-21	SCI	IF: 3.4 Q1	https://doi.org/10.1016/j.bca.2024.103423
9	Assessment of surface water quality parameters using multivariate analysis—A case study of Kurichi	Venkatraman Yogeshwaran, School of Building and Civil Engineering, CETVET, Fiji National	Arunkumar Priya , KPR Institute of Engineering and Technology, COimbatore	Water Environment Research	<u>Volume 62</u>	SCI	IF:2.2 Q2	https://doi.org/10.1002/wer.70055

	and big lakes in Coimbatore	University, Suva, Fiji						
10	Review on process intensification for adsorptive wastewater treatment: focus on bed geometries	S. Balasubramanian, KPR Institute of Engineering and Technology	Ashish Kapoor, Harcourt Butler Technical University, Kanpur, E. Nakkeran, KPR Institute of Engineering and Technology, K. Murugasen, KPR Institute of Engineering and Technology, R. NaveenKumar, KPR Institute of Engineering and Technology, S. B. Harini, KPR Institute of Engineering and Technology, D. Venkatesan, Sathyabama Institute of Science and Technology, Chennai & M. Laxmi Deepak Bhatlu, KPR Institute of Engineering and Technology	<u>Adsorption</u>	<u>Volume97, Issue3</u>	SCI	IF: 3 Q1	https://doi.org/10.1007/s10450-025-00622-7
11	Valorisation of PKM-2 Moringa oleifera leaves waste for adsorption of Titan Yellow dye from aqueous solution,	Chandradhwaj Nayak	Dharani Loganathan, Karunakaran Saravanan & Laxmi Deepak Bhatlu M, KPR Institute of Engineering and Technology	Biomass Conversion and Biorefinery		SCI	IF 3.5 Q2	https://link.springer.com/article/10.1007/s13399-025-06767-3?utm_source=rct_congrate_mail&utm_m

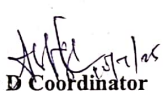
	modelling with RSM and ANN							edium=email&utm_campaign=nonoa_20250322&utm_content=10.1007%2Fs13399-025-06767-3
12	Eco-Friendly Ammonia Adsorption from Aqueous Solutions Using Activated Madhuca indica Leaves Charcoal and Optimization of Parameters by RSM-BBD: A Sustainable Zero-Waste Approach	Laxmi Deepak Bhatlu M , KPR Institute of Engineering and Technology	Preeti RayParshuram, BiswalBrahmotri, SahooChandradhwaj Nayak	langmuir		SCI	If:3.8 Q1	https://pubs.acs.org/doi/epdf/10.1021/acs.langmuir.4c03893?ref=article_openPDF
13	Enhancing Skin Cancer Classification with Mixup Data Augmentation and Efficientnet	D. Shamia, VSB College of Engineering Technical Campus	R. Umapriya , KPR Institute of Engineering and Technology, M.L.M. Prasad, Rini Chowdhury, Prashant Kumar and K. Vishnupriya	Journal of Electronics, Electromedical Engineering, and Medical Informatics	Vol. 7, No. 2, pp: 557-566	Scopus		https://jeceemi.org/index.php/jeceemi/article/view/703

14	Enhancing desalination efficiency with a multi-stage solar freshwater system: Integration of paraffin wax and photovoltaic heating	M. Arul Prakash, Sri Sairam Engineering College, Chennai,	A. N. Mohan Das; Dayananda Sagar College of Engineering , Bengaluru, Karnataka M. Ravikumar; R.M.K Engineering College, Tamil Nadu, R. Umapiya ; KPR Institute of Engineering and Technology, A. Kistan; Ramesh Velumayil; D. Magesh Babu; R. Yokeswaran K.Ramakrishnan College of Technology , Samayapuram, Trichy	INTERNATIONAL CONFERENCE ON NEWER ENGINEERING CONCEPTS AND TECHNOLOGY: ICONNECT-2024	3270, 020214	Scopus	https://pubs.aip.org/aip/acp/article-abstract/3270/1/020214/3343971/Enhancing-desalination-efficiency-with-a-multi?redirectedFrom=fulltext	
15	Leveraging sodium alginate - nickel oxide - berbamine hybrid nanomaterials (HNMs) by assessing the cytotoxicity-mediated oxidative stress in Hep3B cell lines	Karunakaran Saravanan , KPR Institute of Engineering and Technology	Kalpana sukumar, Saveetha Engineering College, Chennai Muruganantham Bharathi, Karpagam Academy of Higher Education, Coimbatore Nouf M. Alyami, King Saud University, Saudi, Sulaiman Ali Alharbi, Samer Hasan Hussein-Al-Ali, Isra University, Amman Palanisamy Arulselvan, Nagaiya Ravichandran, Pusan National University, Busan	<u>Process Biochemistry</u>	<u>Volume 153</u> , Pages 284-293	SCI	IF:3.2 Q2	https://www.sciencedirect.com/science/article/abs/pii/S1359511325000911

16	Removal and inactivation of coronavirus in water and wastewater treatments plants: a critical review—global perspective	A. K. Priya, KPR Institute of Engineering and Technology	V. Yogeshwaran, Sri Krishna College of Engineering and Technology, Coimbatore, J. S. Sudarsan, NICMAR University, Pune & S. Nithiyantham, Thiru.Vi.Kalyanasundaram Govt Arts & Science College (Affiliated to Bharathidasan University, Thiruchirapalli), Thiruvavur	Journal of Umm Al-Qura University for Engineering and Architecture		SCI	IF:1.0 Q1	https://link.springer.com/journal/43995
17	Study of green-synthesized Ag-Ca-kaolin composite for hemostatic and antibacterial effect	Karthikeyan Kumarasamy,	Manisha Vidyavathy Sundaradoss, Rama Ramachandran, Umapriya Rohan, KPR Institute of Engineering and Technology	Green Materials		SCI	IF:1.8 Q3	https://www.icvirluallibrary.com/doi/10.1680/jgrma.24.00125
18	Microwave-assisted in-Situ Synthesis of ZnS/g-C ₃ N ₄ Heterojunction Composite for Efficient Photocatalytic Degradation of	Gomathi Ramalingam, KPR Institute of Engineering and Technology, Coimbatore	Priya Arunkumar, Department of Chemical Engineering, KPR Institute of Engineering and Technology, Coimbatore, 641407, India Mashaal Daghash Alqahtani, Department of Biology, College of Science, Princess Nourah Bint Abdulrahman University, P.O.	Water, Air, & Soil Pollution	Volume 236, article number 481,	SCI	IF: 3.8 Q2	https://doi.org/10.1007/s11270-025-08082-z

	Malachite Green Dye		Box 84428, 11671, Riyadh, Saudi Arabia & Ahmed M. Elgarahy, Environmental Chemistry Division, Environmental Science Department, Faculty of Science, Port Said University, Port Said, Egypt					
19	Review on utilization of electronic waste in construction industry as binder, mortar and concrete	Alagar Karthick, Department of Electrical and Electronics Engineering, Saveetha School of Engineering, Saveetha Institute of Medical and Technical Sciences, SIMATS, Chennai, 602105, Tamilnadu, India	Arunkumar Priya Department of Chemical Engineering, KPR Institute of Engineering and Technology, Coimbatore, 641407, Tamilnadu, India	<u>Asian Journal of Civil Engineering</u>	45671	SCI	IF: 1.6 Q2	https://doi.org/10.1007/s42107-025-01373-0
20	Novel sun flower-like ZnO nanoflower synthesized by spin coating	Laxmi Deepak Bhatlu Metta, KPR Institute of Engineering and	Chandradhwaj Nayak; Indira Gandhi Institute of Technology, Sarang, Odisha, Ramalingam Ramamoorthy; Karpagam	AIP Conference Proceedings		Scopus		https://pubs.aip.org/aip/acp/article-abstract/3122/1/060007/329890

	technique and application in Perovskite Solar Cell	Technology, Coimbatore,	Academy of Higher Education, Coimbatore, Nitu Kumari, KPR Institute of Technology, Coimbatore					<u>1/Novel-sun-flower-like-ZnO-nanoflower-synthesized</u>
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R & D Coordinator


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