

CURRICULUM VITAE

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Academic Profile

Degree	Specialization	Institution	University/Board	Year of passing
Ph.D., Chemistry	Polymer Nanocomposites	C. Abdul Hakeem College (Autonomous)	Thiruvalluvar University	2023
M.Sc., Chemistry	General Chemistry	C. Abdul Hakeem College (Autonomous)	Thiruvalluvar University	2018
B.Sc., Chemistry	General Chemistry	C. Abdul Hakeem College (Autonomous)	Thiruvalluvar University	2016
HSC	Mathematics, Physics, Chemistry and Computer Science	Islamiah Boys Higher Secondary School, Melvisharam	Tamil Nadu State Board	2013
SSLC	Science & Mathematics	Islamiah Boys Higher Secondary School, Melvisharam	Tamil Nadu State Board	2011

Teaching Experience

S. No	College	Department	Position	Period	
1.	C. Abdul Hakeem College (Autonomous)	P.G. & Research Department of Chemistry	Assistant Professor	04-12-2025	Till Date
2.	C. Abdul Hakeem College (Autonomous)	Department of Chemistry (evening)	Assistant Professor	19-06-2023	03-12-2025

Awards

- Awarded best paper for the academic year 2025-2026 at college day, C. Abdul Hakeem College (Autonomous)
- Awarded Meritorious Scholarship for Ph.D., in Chemistry from Directorate of Collegiate Education, Tamil Nadu (TNDCE) for the period of 3 years (2019-2022) (State Government Award)
- Awarded Gold Medal for topper and overall proficiency in M.Sc., Chemistry

Research Interest

My broad research area specially focused on the Development and Fabrication of Polymer Nanocomposites, to use in the environmental remediation. Specially in wastewater treatment, biomedical and anti-corrosion applications.

Research and Analytical Skills

- Familiar in literature survey, identification of problem and proposing a solution to it.
- Execution of research work with specified and simple methods.
- Familiar with various characterization techniques for the study of the materials.

Research Publications

1. **Katiyan Mohammed Rehan**, Valiyathur MD Furqaan, A. Ahmed Raza, Z. Ansar Ali, Kottur Anver Basha, S. Zaheer Ahmed, Sakvai Mohammed Safiullah. (2025). Alginate-assisted self-optimizing heterojunction photocatalyst for sustainable wastewater remediation. *Carbohydrate Polymers*. p.124186 (Elsevier).
2. **Katiyan Mohammed Rehan**, Kottur Anver Basha, Sakvai Mohammed Safiullah (2024), "A Review on Engineering of Poly(Glycidyl Methacrylate) Microspheres" *Polym. Sci. Ser. A*. 65(6), pp.593-615 (SPRINGER).
3. **Katiyan Mohammed Rehan**, Kottur Anver Basha and Sakvai Mohammed Safiullah. (2023). Synthesis of Poly (Glycidyl Methacrylate) Based Hybrid Materials and Evaluation of Methylene Blue Adsorption: Structural Characterization and Adsorption Behaviour. *Journal of Inorganic and Organometallic Polymers and Materials*, 1-16. (SPRINGER).
4. **Katiyan Mohammed Rehan**, Gani Taju, Sivaraj Mithra, Seepoo Abdul Majeed, Kottur Anver Basha, Azeez Sait Sahul Hameed and Sakvai Mohammed Safiullah, (2023). Reusable Polymer Ternary Nanocomposite for the Removal of Cationic Dyes—Adsorption

Isotherms, Kinetics, Thermodynamic and Toxicity Studies. *Water, Air, & Soil Pollution*, 234(5), 314. (SPRINGER).

5. **Katiyan Mohammed Rehan**, B. Anbarasu, P. Mohamed Ashfaque, S. Mohammed Safiullah, K. Anver Basha. (2022). Synthesis and characterization of poly (vinyl carbazole-co-ethoxy ethyl methacrylate) and its nanocomposites. *Materials Today: Proceedings*, 50, 325-330. (ELSEVIER).
6. Palani, P., **Katiyan, M.R.**, Sakvai, M.S. and Subramanian, K., 2026. Poly (SMA-co-EGDMA) Th-2-NiC Monolith Sensor for Visual Detection and Removal of Metal Ions. *ACS Applied Polymer Materials*. (ACS)
7. Palani Purushothaman, Karpagam Subramanian, **Katiyan Mohammed Rehan**. Sakvai Mohammed Safiullah (2024). Anticorrosive performance of thiophene-based inhibitor-reinforced PVB coating on mild steel: an inclusive approach to the structural advantage of corrosion inhibitors. *New Journal of Chemistry* 48, no. 47 (2024): 19900-19911. (Royal Society of Chemistry RSC).
8. Maroof, G.S., Valiyathur, M.D., **Katiyan, M.R.**, Kottur, A.B., Ali, Z.A. and Sakvai, M.S., 2026. Eco-friendly fabrication of a floatable alginate-supported bentonite-gC3N4 photocatalyst for environmental remediation. *Chemical Papers*, pp.1-17.(Springer).
9. Valarmathi, B., Mithra, S., Abdul Majeed, S., Lathika Dharshini, K., Mohammed Furqaan, V., **Mohammed Rehan, K.**, Taju, G., Mohammed Safiullah, S., Anwar Basha, K., Zaheer Ahmed, S. and Zehra, A., 2026. Integrated assessment of graphene oxide and graphitic carbon nitride nanoparticles: from synthesis to in vitro biological impact on zebrafish (*Danio rerio*) cell models: Valarmathi et al. *In Vitro Cellular & Developmental Biology-Animal*, pp.1-16.(Springer).
10. Basha, O.A., Pugazhenthii, I., **Rehan, K.M.** and Safiullah, S.M., 2026. Electrochemical and structural evaluation of Poly (VTZ-co-GMA)/ZrO₂ nanocomposite coatings for corrosion protection of mild steel. *Chemical Papers*, 80(2), pp.1989-2004. (Springer).
11. Maroof, G.S., Valiyathur, M.F., **Katiyan, M.R.**, Kottur, A.B. and Sakvai, M.S., 2025. Alginate/Bentonite-gC3N4 Hydrogel Beads for Enhanced Photocatalytic Water Remediation. *Materials Chemistry and Physics*, p.131956. (ELSEVIER).
12. G Maroof, Valiyathur MD Furqaan, **Katiyan Mohammed Rehan**, Kottur Anver Basha, Sakvai Mohammed Safiullah (2025). Development and characterization of a high-performance, reusable alginate-supported Bentonite-gC3N4 photocatalyst for superior photocatalytic activity. *Materials Letters* 397 (2025): 138802. (ELSEVIER).
13. P. Mohamed Ashfaque, K. Abdul Wasi, **K. Mohammed Rehan**, J. Sathish Banarji, S. Mohammed Safiullah, K. Anver Basha (2022). Anticorrosive behaviour of poly (vinyl

carbazole-co-methoxy ethyl methacrylate) and its nanocomposites. *Materials Today: Proceedings*, 62, 5665-5670. (ELSEVIER).

14. G.D. Babu, Ranjith Kumar, Mohamed Ashfaque, **Mohammed Rehan**, Abdul Wasi, Mohammed Safiullah, Anver Basha, Synthesis, Characterization and Anticorrosion Studies of Furfuryl Based Methacrylate Copolymer and its Titanium Nanocomposites", *International Journal of Emerging Technologies and Innovative Research* (UGC and ISSN Approved), ISSN:2349-5162, Vol.10, Issue 9, page no. ppf873-f885, September-2023.

Conferences / Symposium attended and Participated

1. Presented a paper entitled "Synthesis and Characterization of Poly(Glycidyl methacrylate)/Graphene oxide Nanocomposite" in the internal conference on Advanced Functional Materials and Devices 2024 (AFMD-2024) (Materials for Environment & Sustainable Development Goals) organized by nanotechnology research centre, SRM IST, Chennai during 26 to 29 Feb 2024.
2. Presented a paper entitled "Synthesis and Characterization of Functional Methacrylate polymer and its nanocomposites" in the international virtual conference on "Advances in chemistry and materials (ICCM 2021)" organized by Department of Chemistry Saveetha Engineering College (Autonomous) in association with Thiruvalluvar university during 21st and 22nd July 2021.
3. Presented a paper entitled "Functional Polymer and its Nanocomposites- Synthesis and Characterization" in the 5th International Conference on "Recent Advances in Materials Chemistry (ICRAMC- 2021)" organized by the Department of Chemistry, SRM University (Chennai) and Universite Gustave Eiffel (France) during 18-20 February 2021.
4. Presented paper entitled "Development of Functional Polymer Nanocomposites" in International Conference on "Advanced Nanomaterials and Their Applications" Organized by the Department of Chemistry, School of Basic Sciences, VISTAS during 24-25, March 2021.
5. Presented a paper in the one-day International Seminar on "Recent Trends in Materials Chemistry (RTMC-2019)" organized by P.G. & Research Department of Chemistry, C. Abdul Hakeem College (Autonomous), Melvisharam on 18th July 2019.
6. Presented a paper in the one-day Seminar on "Impact of Chemistry on Ozone Depletion and its Solution" organized by P.G. & Research Department of Chemistry, C. Abdul Hakeem College (Autonomous), Melvisharam on 16th October 2019.
7. Presented a poster in the one-day Seminar on "Chemistry and Environmental Pollution (CEP 2018)" organized by P.G. & Research Department of Chemistry, C. Abdul Hakeem College (Autonomous), Melvisharam on 13th February 2018.

8. An attended A Three Day Virtual Faculty Development Programme on "Emerging Trends in Chemistry" organised by the Department of Chemistry, Kongu Engineering College, Perundurai, Erode from 13.12.2021 to 15.12.2021.
9. Participated in the International Conference on Nanoscience and Nanotechnology (ICONN 2019) organized by Department of Physics and Nanotechnology, SRM IST – India during 28 – 30th January 2019 in association with Shizouka University, Japan; National Chiao Tung University, Taiwan; GNS Science, New Zealand; CSIR – National Physics Laboratory and the Institution of Engineering Technology, co-sponsored by Science & Engineering Research Board (DST-SERB) & CSIR India.
10. Participated in National Workshop cum training on Recent Trends in Chemistry conducted by C. Abdul Hakeem College (Autonomous), Melvisharam, in collaboration with Wetlab Championship and Shaastra (IIT Madras Event) on 27th and 28th November 2019.
11. Participated in the “DBT – Sponsored National Workshop on Hands on Training on Fish Cell Culture Techniques: Development and Applications held at Aquatic Animal Health Laboratory, NABL Accredited and OIE Reference Laboratory in P.G. & Research Department of Zoology, C. Abdul Hakeem College (Autonomous), Melvisharam on 22nd March to 27th March 2021.
12. Participated in the 6th International Conference on Recent Advances in Material Chemistry (ICRAMC-2022) organized by the Department of Chemistry, SRM institute of Science and Technology, association with Alternative Energies and Atomic Energy Commission (CEA) & Universite Gustave Eiffel, France, during 17-19, February, 2022.