

Name: **Dr. V. Geetha**

Designation: Assistant Professor

Department: Chemistry

Qualification: M.Sc., PhD.

Experience: Teaching -01 Year

Research: 6 Years

Area of Specialization(s): Nanomaterial synthesis and its applications

Email (Official ID): geethav@psgrkcw.ac.in



Academic Qualification

Degree	Branch	Institution/University Name	Year of Graduation
Ph.D.,	Chemistry	VIT University, Vellore	2018
M.Sc.,	Pharmaceutical Chemistry	VIT University, Vellore	2013
B.Sc.	Biochemistry	Auxilium College, Vellore	2011

Research Guidance

Programme	No. of Students	
	Completed	Pursuing
M.Sc.,	4	-

Research Publications (Indexed)

1. Muhammad S, Rupam S, **Geetha V**, Tripti A, Soumyanti P, Jai P, Hideki K, Shalini Devi K.S., 2025. Plasmonic fingerprinting: next-generation SERS architectures for sensitive heavy metal quantification, *Talanta open*, Accepted [IF: 3.7]
2. **Geetha V*** and Sathiyar, G., 2025. Recent trends in use of plant-derived carbon dot-based fluorescent probes for heavy metal ion detection and their biological applications. *Trends in Environmental Analytical Chemistry*, p.e00259. [IF: 13.4]
3. Chinnasamy, M., Venkatesh, N., Marimuthu, P., Sathiyar, G., Alharbi, S.A. and **Geetha V**, 2025. Synthesis, characterization, and biological evaluation of novel bioactive Schiff base meta complexes and their molecular docking studies. *Journal of Environmental Chemical Engineering*, 13(2), p.115835. [IF: 7.2]

4. Taneja, S., Ramasamy, S.K., Pareek, B., **Geetha V**, Periyasami, G. and Sengottuvelu, D., 2025. Effectively Controlling NIR Emissive Property and the ESIPT Behavior of Modified Styryl Dyes by Atomic Substituent: DFT/TD-DFT Approach. *Journal of Fluorescence*, pp.1-13. [IF: 2.9]
5. Narayanan, L., Maruthavanan, T., Vaithiyathan, R., **Geetha V**, Vivekanandan, K.E., Kaliyannan, G., Kumar, P.S.M., Bosco, M.S.A.J., Murugadoss, G. and Suseem, S.R., 2025. Comprehensive investigation of antibacterial, cytotoxic, and antioxidant activities of 3 Ipomoea staphylin flower extract with isolation and characterization of Beta-sitosterol. *Journal of Molecular Structure*, 1336, p.142045. [IF: 4.7]
6. Ahamed, A.A., Alharbi, S.A. and **Geetha V**, 2025. A julolidine aldehyde dansyl hydrazine Schiff Base as fluorescence chemosensor for Zn^{2+} ions recognition and its application. *Journal of Fluorescence*, 35(6), pp.4547-4557. [IF: 2.9]
7. Franklin E, Sampathkumar N, Geetha V, Tahani A.A, Ponnusamy R, Anderson A, Selvakumar R. A Carboethoxy Quinoline-Derived Schiff Base Chemosensor: Crystal Structure, Selective Hg^{2+} Ion Detection and its Computational Study, *Environmental Research*, 2024, 252, 118983. [IF: 8.30]
8. Sathiyar G, **Geetha V**, Selva Kumar R, Jintae L, Selvaraj B. Recent Progress in Triazine- Based Fluorescent Probes for Detecting Hazardous Nitroaromatic Compounds, *Journal of Environmental Chemical Engineering*, 2024, 112804. [IF: 7.70]
9. Sathish Raam R, Chitra Devi V, Mothil S, Deenadhayan R, Ananth R, **Geetha V**, Arunachalam C, Arivalagan P, Sabariswaran K, Modification of cellulose acetate membrane by integrating magnetite@ xanthan gum nanocomposite to enhance performance characteristics, *Journal of Environmental Chemical Engineering*, 2024, 12, 112435. [IF: 7.70]
10. Kathirvel R, Poongodi M, Vetriarasu V, Vivekanandan K.E, Selvakumar K, Sami Al Obaid, A. Pugazhendhi, **V. Geetha**, Quinoline-quinoline schiff-base as an effective chromogenic, fluorogenic, and smartphone assisted RGB detection of Pb^{2+} ion in near aqueous medium, *Environmental Research*, 2024, 118530. [IF: 8.30]
11. C. Sharmila, P. Arthi, N. Arunadevi, **V. Geetha**, Enhancing sustainability: chitosan biopolymers with Ag nanoparticles for eco-friendly applications in food packaging, *Biomass Conversion and Biorefinery*, 2024. [IF: 4.0]
12. R. Selva Kumar, A. Chinnathambi, A.A Sulaiman, **V. Geetha**, A. Pugazhendhi, G. Sathiyar, Chelation-enhanced fluorescence-enabled coumarin-hydrazone Schiff bases for the detection of Al^{3+} ions and its real-time applications, *Journal of Molecular Structure*, 2024, 1302, 137411. [IF: 4.7]
13. Mathivanan Dhamodiran, Kamaraj Chinnaperumal, J Dhanish, **Geetha V**, Maha A Alshiekheid, SR Suseem, Isolation, structural elucidation of bioactive compounds and their wound-healing ability, antibacterial and In silico molecular docking applications, *Environmental Research*, 2024, 252, 119023. [IF: 7.70]

14. Sabariswaran Kandasamy Pitchai Marimuthu a, Andy Ramu, Nachimuthu Venkatesh, A. Asrar Ahamed, **Geetha Venkatesan**, Arunachalam. C, Design and Synthesis of Simple Quinoline-based Organic Molecules as Dual/Multifunctional Chemosensors for the detection of Cu²⁺/Fe³⁺ ions, *Journal of Molecular Structure*, 2024, 138530. [IF: 4.7]
15. Prakash Kumar Sarangi, Rajesh K Srivastava, J Gitanjali, Govindasamy Sathiyam, **Geetha V**, Sabariswaran Kandasamy, Exploring cutting-edge advances in green ammonia production and storage technologies, *Fuel*, 2024, 371, 131863. [IF: 6.7]
16. P. Kar, G. Sathiyam, K.E. Vivekanandan, **V. Geetha**, G. Siva, R. Subramani, K. Sabariswaran, A comprehensive review on tailoring factors of porous bismuth oxyhalide photocatalysts for wastewater treatment application, *Journal of the Taiwan Institute of Chemical Engineers*, 2023, 105234. [IF: 5.70]
17. **V. Geetha**, R. Vijayaraghavan, and N.C. Sarada, *Boswellia ovalifoliolata* bark extract derived carbon dots for selective fluorescent sensing of Fe³⁺, *Journal of Environmental Chemical Engineering*, 2019, 7, 103013. [IF: 7.70]
18. **V. Geetha**, R. Vijayaraghavan, N.C. Sarada, and G. Sathiyam, Fluorescent zinc oxide nanoparticles of *Boswellia ovalifoliolata* for selective detection of picric acid, *Frontier Research Today*, 2019, 2, 2002.
19. **V. Geetha** and N.C. Sarada, GC-MS Analysis of Bioactive Compounds from Bark and Leaf of *Boswellia ovalifoliolata*, *Asian Journal of Chemistry*, 2018, 30, 15-19.
20. **V. Geetha** and N.C. Sarada, Chemical composition and anti-inflammatory activity of *Boswellia ovalifoliolata* essential oils from leaf and bark, *Journal of Forestry Research*, 2018, 29, 373-381.
21. N.C. Sarada, M. Susmita, M. Shiny, **V. Geetha**, G. Ganesh, R. Lakshmi pathy, and A. Sheela, GC-MS and LCMS Analysis of Ethanolic Extract of *Drypetes sepiaria*, *Malaya Journal of Biosciences*, 2014, 1, 207-213.

Reviewer in journal

Wiley, Springer and Environmental engineering and management Journal

Paper Presentations in Conference

International

1. Presented a poster presentation in PVKN Government College, Chittoor.
2. Presented a paper in international symposium on conservation of aquatic and terrestrial biodiversity (ISCATBIO – 2016) held at Thiruvalluvar University, Vellore (28-30th September)

3. Presented a paper in APST 2016 held at School of Advanced sciences (SAS), VIT University, Vellore (24-26th October)
4. Presented a paper in international conference on current trends in Biotechnology (ICCB 2016) held at School of Biosciences and technology (SBST) VIT University, Vellore. (8-10th December)

National

1. Presented a paper in National conference on a Bio Prospective approaching herbal medicine and microbiology – 2014 held in Sivaraj siddha medical college, Salem. (22-23rd November 2014)

Participation in Conference

2. Participated in international conference on Advanced materials for Sustainable technology (ICAMST-2025) on 23-24th January 2025 organized by the Department of Physics and chemistry, PSGR Krishnammal College for women, Coimbatore.

Participation in Faculty Development Programme

- i. Faculty development programme on pharmacogenomics-focus on pharmacokinetics. (3rd February 2015)
- ii. Faculty development programme on recent trends in natural product research. (2nd September 2016)
- iii. September 2016)
- iv. Faculty development programme on nanomaterials for environmental monitoring and
- v. biomedical applications. (23rd June 2017).
- vi. One week faculty development programme on next generation technologies: Green hydrogen and carbon capture for a sustainable future 9-14th December 2024 organized by PSGR Krishnammal college for women, Coimbatore.
- vii. 5-day national level online FDP programme on Beyond boundaries: Driving Innovation in research 26- 30th December 2024 organized by Auxilium college for women, Vellore.
- viii. FDP on IPR: Translating Research from campus to corporate world organized by the IPR Cell, Bharathiar University on 31st January 2025

Participation in Webinar

1. National level webinar on sustainable waste management: transforming waste biofuels and high value products conducted by BIRAC E- YUVA, PSGR Krishnammal College for women, Coimbatore on 20th march 2025
2. National level webinar on Upstream processing conducted by BIRAC E- YUVA with Department of Botany, PSGR Krishnammal College for women, Coimbatore on 19th February 2025

Conference/Seminar/Workshop Organized

Organized a workshop entitled pharmaceutical industry: Trends, Challenges and insights on 4th August 2025 organized by PG and Research, Department of Chemistry, PSGR Krishnammal College for women, Coimbatore

Indexing and Citations

354 citations; h-index and i10-index - **11**

- Teaching and learning with Gemini Academy **KCW TLC** on 19.09.2025
- Integration of Technology in the Teaching-Learning Process & Technological Tools and Techniques including Digital Resources **KCW TLC** on 7 to 8 august 2025.
- Case and Project based Teaching/Learning on 07.10.2025 by **KCW TLC**