



Centre for Research & Development

Research Supervisor (Guide) Profiles

Discipline of Supervision: **Biochemistry**



Dr. C C S Vasundhara

Associate Professor
Department of Life Sciences
School of Biological and Forensic Sciences

Areas of Specialisation:

Phytomedicine, Non-communicable disease (Diabetes mellitus, CVD),
Environmental Science, Fabrication of Bioplastics, Biosensors

Dr. Vasundhara, Associate Professor in the Department of Life Sciences, Kristu Jayanti Deemed to be University, Bengaluru, with expertise spanning Biochemistry, Clinical Diagnostics, Biomedical Research, and Environmental Biotechnology. With eight years of teaching experience and two years of industrial experience as a Biochemist at Aravind Eye Hospital, she brings a strong combination of academic, clinical, and applied research perspectives. She is a trained and certified phlebotomist and has been trained in Quality Management Systems and Internal Audit in Medical Laboratories as per ISO 15189:2012, conducted by QCI, New Delhi. Her doctoral research investigates the Clinical monitoring of biomarkers associated with diabetes and cardiovascular disease in experimental rats treated with Boerhavia diffusa leaves, exploring its therapeutic potential as a plant-based intervention for chronic metabolic disorders. Her research interests extend to Phytomedicine, Biosensors, Non-invasive diagnostics, Environmental Biotechnology, and Sustainable materials. She has completed a Seed Money Project on a Self-Monitoring Non-Invasive Diagnostic Device (2023-2024) and is currently engaged in a Shodh Pravartan Research Project on biodegradable plastic production using Cordyceps sp. She has published in Scopus-indexed and peer-reviewed journals and contributed to book chapters and conference proceedings. She is also a Life Member of the Society of Biological Chemists, India.

Selected Publications:

1. Veena, G.O., Devi, S. Gayathri., Sripathi Shubashini, K. & **Vasundhara, C.C.S.** (2025). In vitro anti diabetic activity of PVA encapsulated silver nanoparticles of of ethanolic extract of Pisonia grandis leaves, Research Journal of Biotechnology, 20 (4); 50-60, <https://doi.org/10.25303/204rjbt050060>
2. Joy, R.A., Devi, G.S., **Vasundhara, C.C.S.** & Priyadharshini, M.S. (2024). Effect of biologically synthesised silver nanoparticles from ethanolic extract of Boerhavia diffusa on high fat diet and streptozotocin-nicotinamide induced obese and diabetic rats, African Journal of Biological Sciences, 6(14); 11071 - 11087. <https://doi.org/10.48047/AFJBS.6.14.2024.11071-11087>
3. Joy, R. A., Devi, G. S., **Vasundhara, C. C. S.** & Priyadharshini, M. S. (2025). Exploring the therapeutic potential: investigating the synthesis, characterization and in vitro anti diabetic efficacy of a silver nanoparticle ethanolic extract from Boerhavia diffusa. Research Journal of Biotechnology, 20(10); 296-304. <https://doi.org/10.25303/2010rjbt2960304>