

Centre for Research & Development

Research Supervisor (Guide) Profiles

Discipline of Supervision: Biochemistry



Dr. Malathi R
Assistant Professor
Department of Life Sciences
School of Biological and Forensic Sciences

Areas of Specialisation:
Phytochemistry, Neurodegenerative disorders,
Free redical chemistry, Clinical Biochemistry, Molecular Biology

Dr. Malathi R is an Assistant Professor in the Department of Life Sciences at Kristu Jayanti (Deemed to be University), Bengaluru. She holds a Ph.D. in Biochemistry from Bharathiyar University, with her doctoral research focused on "Neuroprotective Role of Fisetin on Rotenone-Induced In Vitro and In Vivo Models of Parkinson's Disease." She has published over 20 papers in leading journals, with 135 citations and an h-index of 4. She has completed clinical training programs in Hematology and Histopathology and has successfully undertaken a Karnataka State Council for Science and Technology (KSCST) funded project on "Elicitation of Natural Oils in Plants with Larvicidal and Mosquito Repellent Properties and Formulation and Evaluation of Novel Mosquito Repellent Products", with funding of ₹5 lakhs. Her technical expertise spans a wide range of molecular biology, biochemistry, and clinical techniques, including plasmid DNA extraction, plant and mammalian genomic DNA extraction, RNA isolation, RT-PCR, PCR, molecular docking studies, agarose gel electrophoresis, denaturing and non-denaturing PAGE, Western blotting, ELISA, radial immunodiffusion, rocket immunoelectrophoresis, anti-hemolytic assays, clinical analysis, histopathology and staining techniques, Soxhlet extraction, antioxidant assays, in vitro anti-inflammatory activity, and in vitro anti-arthritic activity.

Selected Publications:

- **1**. Malathi R., Dsouza, V., Puja, P., R, R., and P, S. (2023). Molecular Docking of Fisetin as a Multi-target drug in the treatment of Alzheimer's disease. Research Journal of Pharmacy and Technology, 5813–5817. https://doi.org/10.52711/0974-360x.2023.00941
- **2**. Ramani, S., Basak, S., Puneeth S, P., Mahato, K., & **Malathi R**, M. (2021). Anti Hemolytic Activity of Rutin incase of Phenyl Hydrazine induced Hemolysis. Current Trends in Biotechnology and Pharmacy, 15(5), 467–470. https://doi.org/10.5530/ctbp.2021.3s.41
- **3. Malathi R**, M. (2021). A study on the Electrolytes Concentration and Lipid Profile in Cardiac and Cardiovascular defective patients. Current Trends in Biotechnology and Pharmacy, 15(5), 507–510. https://doi.org/10.5530/ctbp.2021.3s.47