



Centre for Research & Development

Research Supervisor (Guide) Profiles

Discipline of Supervision: **Biochemistry**



Dr. Shinomol George K

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

Areas of Specialisation:

Neurotoxicology and neuroprotection, environmental toxicology and bioremediation, phytochemistry

Dr. Shinomol George K is an Assistant Professor in the Department of Life Sciences at Kristu Jayanti (Deemed to be University). She earned her Ph.D. in Biochemistry from CSIR-CFTRI, Mysore, supported by a CSIR fellowship, and pursued Post-Doctoral Research as a DST–Women Scientist at NIMHANS, Bengaluru, specializing in Neurotoxicology. She has successfully led five funded research projects from national, international, and state agencies and is an approved Ph.D. guide at VTU, Belagavi, currently supervising doctoral research. She has published over 25 peer-reviewed journal articles (cumulative impact factor >55), 16 book chapters and edited volumes, and numerous conference proceedings, with citations exceeding 1200. She has received prestigious travel grants from IBRO, DST, and CSIR, serves as an ad hoc reviewer for scientific journals, and acts as a Ph.D. examiner for leading institutions. She holds life memberships in international scientific societies. Her research interests focus on neurodegenerative disease-causing toxins (Parkinson's, Alzheimer's, Huntington's), neuropharmacology of Ayurvedic plants for mitochondrial protection, bionanoparticles and environmental toxicology (including heavy metal remediation), as well as phytochemical-based wound healing, mosquito larvicides, and tardigrades as survival models. Her technical expertise spans in vitro, ex vivo, and in vivo models, including rodents, drosophila, zebrafish, and C. elegans.

Selected Publications:

1. **Kunnel, S. G.**, Subramanya, S., Satapathy, P., Sahoo, I., and Zameer, F. (2019). Acrylamide Induced Toxicity and the Propensity of Phytochemicals in Amelioration: A Review. *Central Nervous System Agents in Medicinal Chemistry*, 19(2), 100–113. <https://doi.org/10.2174/1871524919666190207160236>
2. Revathi, K. B., Mimansa, Aishwarya, M., Madhlika, P. S., Apeksha, A., Rajeswari, N., and **Kunnel, S. G.** (2024). Cadmium biosorption: Lake waters in Bengaluru-mitigation of cadmium-induced oxidative stress by *Selaginella bryopteris*. *Water Science*, 38(1), 311–323. <https://doi.org/10.1080/23570008.2024.2343582>
3. Sampath Kumar, B., Ravi M, S., Kapoor, J., Joy, A., C. Daniel, E., **Kunnel, S. G.**, ... Francis, D. (2024). Cycloisolongifolene-8,9-Dehydro-9-Formyl Inhibits Lipooxygenase and Might Play a Role in the Wound-Healing Property of *Clerodendrum infortunatum* and *Tagetes erecta*. *Journal of Herbal Medicine*, 43, 100843. <https://doi.org/10.1016/j.hermed.2023.100843>