



## Centre for Research & Development

### Research Supervisor (Guide) Profiles

#### Discipline of Supervision: **Biotechnology**



#### **Dr. Manikandan K**

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

#### **Areas of Specialisation:**

Host-microbe interactions, RNA biology,  
Nanobiotechnology, Bioactive compounds, Dental biofilm studies

Dr. Manikandan K is an Assistant Professor in the Department of Life Sciences at Kristu Jayanti University (Deemed-to-be), Bengaluru, and a member of the Internal Quality Assurance Cell (IQAC). He obtained his B.Sc. in Biotechnology from Madurai Kamaraj University, securing University Third Rank and the Marudhu Pandian Endowment Scholarship, and his M.Sc. in Biotechnology from Alagappa University, with dissertation research at NEERI, CSIR-Nagpur, under the supervision of Dr. Hemant Purohit. He cleared CSIR-JRF (NET-LS) with an all-India rank of 29 and earned his Ph.D. from The Maharaja Sayajirao University of Baroda, Gujarat, focusing on the role of multifunctional noncoding RNAs in regulating pathogenicity in *Staphylococcus aureus*, under the supervision of Dr. Mrinalini Nair. During his doctoral research, he was awarded the prestigious UGC-RFSMS fellowship. His research interests encompass host-microbe interactions, RNA biology and nanobiotechnology. He has published several peer-reviewed articles, authored book chapters, and presented papers internationally, including at the Biochemical Society conference, Edinburgh, UK, supported by a DBT travel grant. He has also received a research grant from the KSCST under the Student Project Programme (SPP), earned academic distinctions, and served as a member of the editorial board of the American Journal of Bioscience and Bioengineering.

#### **Selected Publications:**

1. Menon, S., Mishra, A., **Kathirvel, M.**, Biju, C., Prudhvi, P., and Rao, G. E. (2023). Phytochemical analysis and in vitro evaluation of antibacterial and antidermatophytic activity of *Centella asiatica* (L.) Urban extracts. *Medicinal Plants - International Journal of Phytomedicines and Related Industries*, 15(3), 571–578. <https://doi.org/10.5958/0975-6892.2023.00057.6>
2. **Kathirvel, M.**, MENON, S., Saranya, P., and Mariappan, K. G. (2024). In Vitro and In Vivo Investigation of Probiotics Isolated from Human Milk. *Journal of Microbiology, Biotechnology and Food Sciences*, 14(2), e9587. <https://doi.org/10.55251/jmbfs.9587>
3. **Kathirvel, M.**, Pasupathi, K., Dhamodaran, S., Selvakani, S., and Mariappan, K. G. (2021). Green mediated synthesis of silver nanoparticles using *Ipomoea quamoclit* to explore the potential antimicrobial activity against human pathogens. *Current Trends in Biotechnology and Pharmacy*, 15(5), 471–479. <https://doi.org/10.5530/ctbp.2021.3s.42>