KRISTU JAYANTI
(DEEMED TO BE UNIVERSITY)
Under Section 3 of UGC Act 1956
A CMI INSTITUTION | BENGALURU | INDIA

Centre for Research & Development

Research Supervisor (Guide) Profiles
Discipline of Supervision: Microbiology

Dr. C M Reena Josephine

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

Areas of Specialisation:

Agricultural Microbiology, Nanotechnology, Biotechnology

Dr. C. M. Reena Josephine is an Associate Professor in the Department of Life Sciences, School of Biological and Forensic Sciences at Kristu Jayanti (Deemed to be) University, Bengaluru. She holds a Ph.D. in Biotechnology from Karunya Institute of Technology and Sciences, along with advanced degrees in Microbiology and Biotechnology from India and Malaysia. Her research expertise includes agricultural microbiology, nanotechnology, and plant growth-promoting rhizobacteria (PGPR). She has published extensively in peer-reviewed journals, contributed book chapters, and presented at numerous national and international conferences. She has received several awards and recognitions, including the Best Paper Award from the Committee of Biotechnology, Polish Academy of Sciences (Biotechnologia Journal), and the Young Researcher Award. She was granted a patent for "A Novel Composition for Controlling Pathogen in Maize", which formed part of her Ph.D. research. She has also completed multiple online courses on NPTEL SWAYAM related to her area of expertise. In addition to her academic work, she has served as a resource person, academic expert on boards of studies, and has guided student research projects funded by scientific councils such as KSCST. With strong expertise in microbial biotechnology, molecular biology, and nanoscience, she continues to advance sustainable agriculture and biotechnology research.

Selected Publications:

1. Josephine, R., and Thomas, J. (2019). 16S microbial phylogeny of multifunctional plant-growth-promoting rhizobacteria from the rhizosphere of maize (Zea mays L.) for agricultural soil fortification. BioTechnologia, 100(2), 143–154. https://doi.org/10.5114/bta.2019.85324

2. Roopa, P. P., **Reena, J. C. M**., Deepa, R., Chandana, S. V., Yajushi, Y. V., and Sowmya, S. (2025). Green Synthesis of Zinc Oxide Nanoparticles from Aqueous Extracts of Citrus sinensis Peel: Their Characterization and Relevance. Research Journal of Biotechnology, 20(7), 134–141. https://doi.org/10.25303/207rjbt1340141

3. **Josephine, C. M. R**., and Thomas, J. (2021). Plant Growth Ameliorating and Rhizosphere Competent Native Acinetobacter pittii Strain F2 5 from the Rhizosphere of Zea mays L. Indian Journal Of Agricultural Research, (Of). https://doi.org/10.18805/ijare.a-5822