

List of students projects

To encourage research ability of students we teach literature survey and finding research problem themselves to customize the project for each and every student according to their interest. Here we have listed few project titles relevant to students pursuing degrees in Biotechnology, Botany, Zoology, Microbiology, Biochemistry, Genetics, Molecular Biology, Bioinformatics and other life science related departments. Following are the list of few project types that can be carried out at our facility:

1. **Synthesis of silver nanoparticles and DNA barcoding of *Mangifera indica* seed coat: Evaluating its antibacterial and water purification capacity.**
2. **RT-PCR based Gene expression studies using mulberry leaves/roots to check polyploidy.**
3. **Isolation, Identification and Characterization of Cellulolytic Bacteria from Fruit Peels Compost and Bacteria from Spoiled Fruits.**
4. **Anti-cancer and anti-oxidant investigation of Turmeric root extracts using cell lines.**
5. **Genetic variation and DNA Barcoding studies of few Rose species collected from Lalbagh Botanical Garden, Bangalore.**
6. **Artificial Intelligence-based Prediction of Depression, Anxiety and Stress.**
7. **DNA Barcoding of Watermelon and Synthesis of Silver Nanoparticles from Healthy and fungal infected rind to evaluate its efficacy.**

- 8. Isolation and Identification of bacteria present in unfiltered Drinking Water using Biochemical, Molecular methods and its Antibiotic Resistance.**
- 9. Chromosome analysis and Gene expression studies from different varieties of Pisum.**
- 10. Antiproliferative capacity of Tulsi leaf extracts on cancerous cell lines.**
- 11. DNA Barcoding, Synthesis of Silver Nanoparticles from Muskmelon and Investigate its Antimicrobial and Antioxidant property.**
- 12. Estimation of different enzymes from animal tissues using Chemiluminescence studies.**
- 13. Genetic Variation of Onion Species using RAPD and RFLP Markers.**
- 14. Fluorescence studies to quantify different hormones and their levels in animal tissues.**
- 15. Synthesis of different nanoparticles from fruits and comparison of antioxidant activity with its extract.**
- 16. Removal of Phosphorus from wastewater using isolated bacterial strain.**
- 17. Isolation and characterization of lactic acid bacteria from raw and fermented ginger.**
- 18. Quantification of hormones and its biochemical characteristics through serology tests.**
- 19. *In silico* and *in vitro* anti-inflammatory activities of cardamom extract.**
- 20. Isolation and Identification of Biosurfactant bacterial strains from garbage soil through molecular techniques.**

21. Bacterial metagenomics using Nanopore to check bacterial abundance in soil samples.
22. Isolation of soil bacteria through culture dependent and culture independent methods; comparison of bacterial diversity.
23. Characterization of endophytic fungi from Aloe vera and analysis of its secondary metabolites.
24. Gut Microbiome analysis from any biological sample to investigate abundance of micro-organisms present in it.
25. Isolation, purification and characterization of known proteins from different sources and SDS PAGE.
26. Detection of virus species from plant samples using Nanopore technology.
27. *In silico* Autodocking studies to predict the ligand protein relationship while treating various diseases.
28. To predict the Heart health based on Artificial Intelligence programs.
29. Screening chemical libraries and ADMET studies to check the efficient ligand for diseases.
30. Cytotoxicity and oxidative stress related studies of extracts from medicinal plants.

*** We offer affordable prices, hands on training, experience certificates and recommendation letters will be provided. Special discounts on group projects will be given. Customized and publication oriented research will be provided for every batch of students. Novel projects can be planned shuffling above project works and changing sample sources. Prices vary based on duration of project and topics. Please mail us for any enquiries.**