

Centre for Bioscience and Nanoscience Research (CBNR)

(Affiliated to Bharathiar University, CBE)

ISO 9001 : 2015 Certified



TRAINING

CBNR offers final year main project (B.Sc / M.Sc/ B.Tech/B.Pharm/M.Tech/M.Pharm/BAMS /BSMS) for the period of 1 to 6 months. Hands on training with cutting edge technology with NCBI or Paper publication in SCOPUS indexed /ISSN indexed Journals.

AREA OF RESEARCH

- ⇒ Microbiology / Biotechnology / Enzyme Technology
- ⇒ Molecular pathogenesis/ Forensic Microbiology
- ⇒ Biopharmaceutical / Phytochemistry/ Pharmaceutical Biotechnology
- ⇒ Bionanotechnology / Food Nanoscience
- ⇒ Food technology/Food processing/Food Biotechnology
- ⇒ Animal cell culture/Cancer Biology / MTT Assay

WHY CBNR ?

- ⇒ Projects students will be assisted by our research team
- ⇒ Individual /Independent research project in current field
- ⇒ Placement guidance will be given at the end of the project

SUMMER TRAINING / SHORT TERM TRAINING/ MINI PROJECT



Bionanotechnology

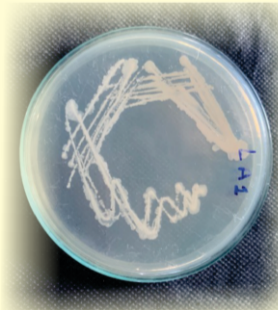
- ⇒ Biosynthesis of nanoparticles
- ⇒ Silver, Gold, ZINC, TiO₂
- ⇒ Anti microbial and IC₅₀ Value
- ⇒ Anti cancer activity
- ⇒ Drug Loading efficiency
- ⇒ Drug release and efficiency assay
- ⇒ DNA nicking assay
- ⇒ MTT Assay
- ⇒ Biosynthesis Scaffolds
- ⇒ Synthesis of Nanofibres and Nano filters for Environmental applications
- ⇒ Textile applications
- ⇒ ISO 20743 / AATCC 100 -2004
- ⇒ Properties of an Effective Antimicrobial Finish
- ⇒ Synthesis of Edible coating nano particles
- ⇒ Encapsulation of Nanoparticles
- ⇒ Durability study
- ⇒ Plant Nanoparticles for textiles

Molecular Biology

- ⇒ DNA /Plasmid / Isolation
- ⇒ DNA Finger Printing —RAPD/RFLP ISSR /SSR SNP
- ⇒ Molecular Diagnosis of diseases
- ⇒ Cloning & Sequencing for Amplified Products
- ⇒ 16s RNA /18s and 23s RNA study
- ⇒ Gene cloning and Gene Mapping
- ⇒ Southern and Western Blotting
- ⇒ Phylogenetic analysis and Barcoding
- ⇒ RNA isolation
- ⇒ cDNA synthesis
- ⇒ Multi drug resistant gene analysis
- ⇒ Plasmid mediated gene transfer

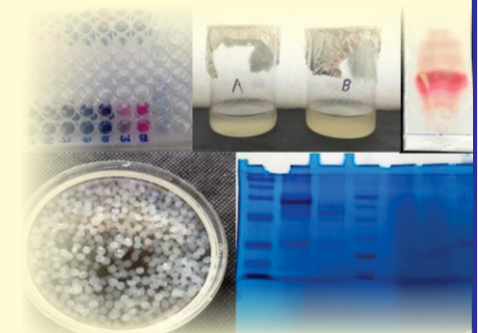
Animal Cell Culture & Cancer biology

- ◆ Basic principles of cell cultivation Mono-layer
- ◆ Aseptic techniques and transferring of cell culture
- ◆ Equipping and maintaining a cell culture lab
- ◆ Monitoring cell cultivation (determining cell count, vitality, sterility)
- ◆ Cytotoxicity / MTT assay
- ◆ DNA damage study
- ◆ Drug efficiency assay
- ◆ Molecular markers in *in vitro* toxicology/ Immunocytochemistry / PCR / Western Blotting
- ◆ ELISA techniques
- ◆ Egg inoculation



Food Technology

- ◆ Nutrients (protein, carbohydrates, ash, moisture, fat, fiber (soluble and insoluble) etc, and mineral (sodium, potassium calcium etc.) analysis
- ◆ Adulteration techniques
- ◆ Water and milk analysis
- ◆ Microbial load of the food samples (bacteria and Fungi)
- ◆ Product formulation
- ◆ HACCP and FASSI training



VISION AND MISSION

CBNR is a Centre for higher learning in the life sciences, provides all areas of academic and industrial at affordable cost to the students. we aimed to develop the skills that are necessary to the students and research scholars in the field of life sciences enable them for the placements and affinity towards the subject.

Contact

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