



# One day workshop on Anaerobic Microbiology



**Friday, 28<sup>th</sup> February 2020 @ 10.00 am to 4.00 pm**

## THE FACILITY

Under the aegis of Department of Science and Technology (Govt. of India), through Fund for Improvement of Science and Technology (FIST) programme, the Anaerobic glove box facility was established in Department of Biotechnology, Bharathiar University, Coimbatore in 2018.

## THE EVENT

As a part of Guest lecture series of the Department every year, this workshop is being organized for the first time. Workshop will involve, inauguration followed by lectures by two eminent scientists in the field of Anaerobic microbiology. Conclusively, session would be facilitated after live demonstration of the Anaerobic glove box, cultivation methods and traditional/modern variants of the same.

## SCOPE OF THE WORKSHOP

Biotechnology encompasses advanced biological studies with plant and animals including the microbes for human life. Among the microorganisms anaerobic culturing is unique as it deals with oxygen sensitive organisms especially the methanogens. Lack of oxygen as terminal electron acceptor forces bacteria to transfer their electrons outside the cell. For example, some metallo-proteins require an oxygen free environment to stay in a reduced state, while others are sensitive and even reactive to oxygen. Thus, anaerobic chamber developed more than 40 years for cultivation of anaerobes. It remains a significant tool for research and other associate applications under anoxic conditions.

Application of modern strategies has greatly expanded the scope of understanding diversity especially those anaerobic microorganisms which are often uncultivable. In particular, anaerobic techniques that permit the successful cultivation of microorganisms on solid media have opened new avenues to study their physiology, metabolism and alternate pathways of them using molecular, genomic and proteomic tools. The anaerobic chamber has emerged as a cutting-edge research to study biomass, biofuels, bioremediation and to investigate drug discovery and infectious diseases. Due to advancements in scientific approaches, technicians in the clinical laboratory can now employ anaerobic chamber to diagnose diseases in clinical specimens, and sometimes to determine their susceptibility to antibiotics. This workshop highlights the role of anaerobic chamber as a routine laboratory tool for experimentation, diagnosis as well as research in niche areas.

**Organised by :** Department of Biotechnology, Bharathiar University, Coimbatore-641046.

**Venue :** DBT - Seminar Hall.

**For Registration Contact :** prabakaran@buc.edu.in, +91-9865076485 (M), 0422-2428294 (O).

**Registration fees :** ₹ 50/-



# One day workshop on **ANAEROBIC TECHNIQUES**



Organised by  
Molecular Microbiology Lab  
Department of Biotechnology  
BHARATHIAR UNIVERSITY  
Coimbatore-641046.

## *Certificate*

This is to certify that Dr./Mr./Ms. ....  
has participated in One day Workshop on **Anaerobic Techniques** with the aegis of Department of Science and Technology (Govt. of India) under Fund for Improvement of Science and Technology (FIST) programme – Phase II of Department of Biotechnology, Bharathiar University, Coimbatore on February 28, 2020.

**Dr. S. R. PRABAGARAN**

**Associate Professor & Co-ordinator**

**Prof. V. VIJAYA PADMA**

**Head of the Department**