DETACH & SEND

Application Form

for the training on "Hands-on Training in Industrial Biotechnology: Lab-Scale Bioprocessing, qPCR, GC Analysis and Patent Processing"

17.12.2026 – 18.12.2026

1. Name (in block letters)

Dr / Mr / Mrs. _____

2. Designation _____

3. Qualification _____

4. Age _____ **5. Sex** _____

6. Correspondence Address

_____

_____

7. Email ID _____

8. Mobile No. _____

9. Accommodation ☐ Yes ☐ No

_____ _____

Date **Signature of the Participant**

Send the filled form (soft / hard copy) to bioprocessabt2026@gmail.com on or before **02.12.2026**.

AT A GLANCE

Key Details

PARTICIPANTS

15 seats

Only on a first come, first served basis

COURSE FEE

Rs. 2,950

Rs. 2,500 plus 18% GST, per candidate

DATES

17–18 Dec 2026

Madras Veterinary College, Chennai

How to apply

- Filled application should reach the Training Coordinator on or before **02.12.2026**
- Selection will be intimated on or before **04.12.2026**
- Pay only after receiving the selection letter, through **NEFT**

BANK DETAILS FOR NEFT

The Professor and Head
Dept. of Animal Biotechnology

S.B. A/c No. **332902010702715**
IFSC **UBIN0557056**
Bank **Union Bank of India**
Branch **MVC Vepery**

Travel, Boarding & Lodging

Accommodation will be provided only for participants, on payment and based on availability. Participants are requested to make their own arrangements for accommodation, food and transport.

Location · distance from MVC

Egmore Railway Station	**0.75 km**
Dr. M.G.R. Central Railway Stn.	**1.5 km**
CMBT, Koyambedu	**10 km**
Chennai Airport	**17 km**

Contact Us

TRAINING COORDINATOR

Dr. S. Meignanalakshmi

Professor, Dept. of Animal Biotechnology, Madras Veterinary College, Chennai – 600 007

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TRAINING CO-COORDINATOR

Dr. G. Kalaiselvi

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TAMIL NADU VETERINARY AND ANIMAL SCIENCES UNIVERSITY

NATIONAL LEVEL TRAINING PROGRAMME

Hands-on Training in Industrial Biotechnology:

Lab-Scale Bioprocessing, qPCR, GC Analysis and Patent Processing

17–18
December 2026

ORGANIZED BY

Department of Animal Biotechnology

Faculty of Basic Sciences, Madras Veterinary College, Chennai – 600 007, Tamil Nadu

THE UNIVERSITY

About TANUVAS

Tamil Nadu Veterinary and Animal Sciences University (popularly abbreviated as TANUVAS) is the first Veterinary and Animal Sciences University in South Asia, established in 1989. TANUVAS has been conferred with the prestigious "Sardar Patel Outstanding ICAR Institution Award – 2011", recognizing its outstanding performance in education, research and extension in the field of Agricultural Sciences, including Veterinary Science. TANUVAS is ranked first among the 15 State Veterinary Universities in India by the ICAR.

1989	First veterinary & animal sciences university in South Asia
No. 1	Among 15 State Veterinary Universities in India (ICAR)
2011	Sardar Patel Outstanding ICAR Institution Award

State-of-the-art facilities

The Department of Animal Biotechnology is housed in two blocks of three floors each, with state-of-the-art facilities to carry out research in various facets of biotechnology. The Central Embryo Biotechnology Laboratory is located at the University campus in Madhavaram.

THE HOST DEPARTMENT

Department of Animal Biotechnology

The Department of Animal Biotechnology (ABT) was started through the pioneering efforts of visionary staff in **1989** — the same year TANUVAS was established.

1999

Recognized by the Indian Council of Agricultural Research (ICAR) as a **"Centre of Excellence in Veterinary Biotechnology and Immunology"**.

2012

Awarded the ICAR **"Niche Area Scheme of Excellence in Avian Biotechnology"** to research "Improved and expanded vaccines and immunological understanding of avian viruses".

ISO/IEC 17025:2017

The **Rabies Diagnostic Laboratory** is accredited in the field of biological testing, providing rabies diagnostic services to the public.

2021–2025

Supported by the **DST-FIST programme** of the Department of Science and Technology to improve infrastructure for PG education, with a funding outlay of **Rs. 300 lakhs**.

THE PROGRAMME

About the Training Programme

This intensive hands-on training programme offers participants practical exposure to the core techniques that drive modern industrial biotechnology. Through guided laboratory sessions, trainees will gain experience in **lab-scale bioprocessing**, including fermentation setup, process monitoring and downstream handling, alongside **quantitative PCR (qPCR)** for gene expression analysis and microbial quantification. The programme also covers **Gas Chromatography (GC)** for the identification and quantification of bioprocess products and metabolites. A dedicated session on **patent processing** introduces intellectual property fundamentals, patent searching, and the steps involved in protecting biotechnological innovations.

Designed for students and researchers, the training bridges the gap between academic knowledge and industrial practice, equipping participants with job-ready skills and the confidence to apply them in research and industry settings.

Eligibility

UG or PG students and researchers from Veterinary, Medical, Pharmacy, Arts & Science and Engineering colleges, scientific institutions, etc., with a basic degree of **M.B.B.S. / B.V.Sc. / B.Pharm. / B.Tech. / M.Sc. / B.Sc.** in Biotechnology, Life Sciences, Physics, Chemistry, Chemical Engineering, Biomedical Engineering, Biological Sciences or related disciplines.

WHAT YOU WILL LEARN

Core Topics

01 Microbial Fermentation and Bioreactor Technology
Basics of microbial fermentation research and bioreactor design, with a hands-on demonstration of running a lab-scale bioreactor.

02 Microbial Screening and Product Discovery
How to isolate and screen microbes and identify useful biotechnological products from them.

03 Gas Chromatography (GC) Analysis
GC instruments, preparing standards and developing methods, through a lecture and practical work.

04 Quantitative PCR (qPCR)
Principles of qPCR, followed by practical sessions on detecting and quantifying microbial genes.

05 Genome-Based Approaches in Biotechnology
How genomic tools take research from finding a gene to applying it.

06 Biotechnology to Combat Antimicrobial Resistance (AMR)
New biotechnology strategies for tackling AMR.

07 Intellectual Property Rights and Patent Processing
How a research discovery becomes a protected patent, with practical guidance from a practising patent attorney.