



CSIR-CCMB

## Skill Development Program on Wildlife DNA Forensics

17<sup>th</sup> to 21<sup>st</sup> March 2025



**Objective:** To sensitize and provide hands on training to participants on DNA Technology and its use in Wildlife Forensics.

### Eligibility:

1. **Working Officers:** Any officer working in wildlife and forest departments at/above the Range Forest Officer, Police, coastguard, customs, central excise, Food safety authentication department, judiciary, law enforcement department, academic institution, university or a research laboratory
2. **Students:** B.Sc. degree holders and above

**Age group:** 18–50years

**Number of Seats:** 12-14

**Date of Commencement:** 17<sup>th</sup> March 2025

**Venue of the Course:** CCMB Annexe-II Medical Biotechnology (CCMB-CRF building), Hyderabad, 500007

**Course Fee:** ₹20,000/-inclusive of stay and meals.

**Residential/non-residential:** Strictly Residential

### Training Curriculum:

- Introduction to DNA, DNA technology and its applications including wildlife forensics
- Status of Wildlife crime in India and abroad
- Case Studies from LaCONES, CSIR-CCMB
- Demonstration of collection, preservation, packaging and transportation of biological samples collected in the field
- Isolation of DNA from various type of biological samples
- Quantification of DNA by spectrophotometric and in-gel methods
- Provide knowledge about the “Universal Primers” technology for Species Identification developed by CCMB.
- PCR amplification of the DNA isolated from various types of biological samples
- Sequencing and Data analysis of PCR products for Species Identification from various type of biological samples
- Understanding the use of Microsatellite markers and Sex specific markers for individual identification, relatedness, sexing and repatriation
- PCR amplification using single/multiplex markers
- Genotyping and scoring of alleles: DNA profiling
- Data analysis for individual identification, relatedness, sexing and repatriation
- Troubleshooting
- Report preparation
- Impart knowledge about the legal application and implication of the DNA analysis report generated

### Salient Features of the Training:

- 20% theory and 80% practical sessions are as per the course curriculum.
- Hand-out information on teaching modules.
- Tutorials (personal attention)
- Lectures are assisted with multimedia aids
- Central facility visits within the laboratory
- Evaluation by assignments/exams
- A certificate will be issued to the successful candidates