Skill Development Program on Wildlife Forensics

(30th October 2023– 3rd November 2023)

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

Eligibility:

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

Age group: 18 - 45 years

Number of Seats: 10-12

Venue of the Course: iHub, Annexe-II, CSIR-CCMB, Hyderabad

Course Fee: Rs 25,000/- inclusive of stay (double occupancy, AC Room) 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 (SOP)
- 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 type of biological samples
- Sequencing and Data analysis of PCR products for Species Identification from various type of biological samples
- Understanding the use 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