Skill Development Program on Wildlife Forensics

28th November – 2nd December 2022

Objective: To sensitize and provide hands on training to participants on DNA Technology

and 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

Date of Commencement: 28th November 2022

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

Course Fee: Rs 25,000/- inclusive of stay (double occupancy, AC Room) and meals during

the course.

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