INSTITUTIONAL BIOTECH HUB
PETTIGREW COLLEGE, UKHRUL, MANIPUR.
Under the Department of Biotechnology,Ministry of Science &Technology, New Delhi
Govt. of India (NER-Programme) Phase II.

सत्यमेव जयते

ABOUT THE INSTITUTIONAL BIOTECH HUB

The Institutional Level Biotech Hub, sponsored by the Department of Biotechnology, Ministry of Science & Technology, New Delhi Govt. of India(NER-Programme) Pettigrew College (Phase I) was established on September 19,2013 and the Phase II was set up on 27th March 2023 under the Department of Biotechnology, Govt. of India, New Delhi viz order number No.BT/NER/143/SP44587/2021 dated 10th February 2023.The main objective of the IBT-Biotech Hub is to support and enhance the knowledge by providing infrastructure facility, awareness and exposure to advancement in Scientific Technology among the Students and to the society through seminar, workshops and Outreach programme .

PROJECT TITLE/ FOCUS AREAS

Conservation and Management of Biodiversity: Between Local Communities and Protected Areas in Ukhrul District of Manipur.

ACTIVITIES CONDUCTED AS PART OF THE ONGOING 3RD YEAR PROJECT(MARCH-JUNE)2025.

1. **Two-Day Training Programme on Apiculture**

Date: 3rd–4th March 2025

Participants: 16 undergraduate students (4th semester), 4 faculty members.

The Institutional Biotech Hub (IBH) conducted a Two-day training Programme on Apiculture. The Ukhrul District has rich traditional knowledge and biodiversity. Apiculture training can be developed to incorporate local plant species, flowering seasons, and traditional ecological knowledge, making

conservation more culturally rooted and effective. Apiculture is a sustainable, eco-friendly livelihood option that does not harm the environment. Training students in beekeeping encourages income generation without exploiting forest resources, thereby reducing pressure on protected areas.

2. One-Day Lecture Programme on "Application of Molecular Biology Techniques in Taxonomy"

Date: 15th May 2025

Participants: 38 students, 9 faculty members

This academic enrichment session introduced participants to advanced tools that are now essential in modern biology. It enhances their technical knowledge and employability in scientific research and conservation sectors. Many species, especially in biologically rich but underexplored areas like Ukhrul District, Manipur, remain undescribed. Molecular tools can accelerate the discovery of new species and help build comprehensive genetic databases for regional biodiversity. 38 students and 11 faculty members were present.

3. Two-Day Hands-On Training Programme on "Zooplankton Identification and Water Quality Management for Pond Biodiversity Conservation"

Date: 10th–11th June 2025
Participants: 28 students, 7 faculty members

This intensive practical training aimed to develop participants' proficiency in zooplankton taxonomy, aquatic bioassessment, and limnological monitoring techniques. The session included field-based collection, sample preservation, taxonomic identification under microscopy, and interpretation of zooplankton diversity indices in relation to water quality parameters.The programme incorporated training on standard methods for analyzing physico-chemical parameters such as pH, dissolved oxygen (DO), Free carbon dioxide (CO_2), and temperature, critical for evaluating the ecological health of freshwater systems. Zooplankton, being sensitive to trophic state changes, were discussed as effective bioindicators for ecological monitoring and management of lentic ecosystems.