

3-Day National Workshop on “Histochemical Techniques & Systematics in Biological Sciences”

Venue- Conference Hall, Department of Zoology Nagaland University

Date: 11th March – 13th March, 2026

Number of participants- 39

INTRODUCTION

A three-day National Workshop on **“Histochemical Techniques and Systematics in Biological Sciences”** was organized by the Department of Zoology, Nagaland University from **11th to 13th March 2026**. The workshop aimed to enhance the knowledge and technical skills of participants in various histochemical methods used in biological research.

The programme focused on providing both **theoretical knowledge and practical training** in histochemical techniques, beginning with fundamental procedures such as animal dissection, tissue fixation, sectioning, slide preparation, and staining methods. In addition, the workshop included sessions on **systematics in biological sciences**, an important field that deals with the study of biological diversity, its origins, and evolutionary relationships among organisms. Systematics integrates taxonomy, classification, and phylogenetics, which are essential for researchers working in biological sciences.

OVERVIEW OF THE WORKSHOP

11th March 2026

The workshop commenced with an inaugural session held at the Conference Hall of the Department of Zoology. The programme was chaired by **Dr. Ramita Sougrakpam**. The event was honoured by the presence of **Prof. Jagadish Kumar Patnaik**, Hon’ble Vice-Chancellor of Nagaland University, who attended as the Chief Guest. Participants from various colleges and institutions attended the workshop, along with research scholars, postgraduate students, and faculty members of the Department of Zoology, Nagaland University.



Figure: Felicitation of Honourable Vice Chancellor



Figure: Group photo after Inaugural programme

Following the inaugural session, **Dr. Dhananjay Kumar** delivered an insightful lecture on various **“Histochemical techniques”** from 12:00 PM to 1:00 PM. In his lecture, he introduced the participants to the fundamental principles of histochemistry, emphasizing the importance of proper tissue handling, preparation of histological sections, and the role of staining techniques in identifying cellular and tissue components. He also highlighted how histochemical methods are widely applied in biological and biomedical research for studying

tissue structure, function, and pathology. The participants found the lecture intellectually stimulating and informative.



Figure: Interaction with participants for anatomy practical

The afternoon session (2:00 PM – 4:30 PM) was conducted by **Prof. Ranjit Kumar**, Head of the Department of Zoology, who provided hands-on training on “**Animal dissection, tissue fixation, and section cutting**”. Participants were given practical demonstrations and guidance on the correct procedures involved in tissue preparation. The session was highly engaging, as participants actively took part in the practical training and gained valuable laboratory experience.

12th March 2026

The second day of the workshop began with a lecture by **Dr. Pukhrambam Rajesh Singh** from 10:00 AM to 1:00 PM on “**Staining techniques and double staining methods**”. The lecture covered the importance of staining in histology, the principles behind different staining procedures, and the application of double staining techniques for distinguishing various cellular components within tissues. This session was followed by a detailed hands-on training, where participants practiced the staining procedures under expert guidance.



The afternoon session was originally scheduled to be conducted by **Dr. Santanu Mitra**, but due to a leg injury he was unable to attend. In his place, **Dr. Lobeno Mozhui** delivered an engaging lecture on **taxonomic studies**, drawing examples from her area of specialization, particularly insects. She discussed the significance of taxonomy in understanding biodiversity and explained various morphological characteristics used in insect classification.



This lecture was followed by a practical demonstration session, where insect dissection, specifically stingless bee dissection, was demonstrated by **Ms. Noyingbeni Odyuo**, a research scholar from the Department of Zoology, Nagaland University. This session proved particularly beneficial for participants working in related research areas, as it provided practical insights into insect morphology and taxonomy.

13th March 2026

On the final day of the workshop, **Dr. Pranay Punj Pankaj** delivered a lecture on **“Tissue fixation, block preparation, and tissue analysis”**. He explained the importance of proper fixation techniques in preserving tissue morphology and discussed the processes involved in embedding, block preparation, and microscopic analysis of tissue sections. The lecture was followed by a hands-on training session, during which participants were given the opportunity to practice the procedures themselves under supervision. The session encouraged active participation and allowed attendees to reinforce the techniques learned throughout the workshop.



The programme concluded with an interactive session, during which participants asked questions and clarified their doubts with the resource persons. Finally, the workshop concluded

with a **valedictory session**, during which certificates were distributed to all participants in recognition of their active participation and successful completion of the workshop.

