



**DEMPO CHARITIES TRUST'S**

**Dhempe College of Arts and Science, Panaji-Goa**

**DEPARTMENT OF BIOTECHNOLOGY**

**Report on one-day State Level Hands-on Training on 'Microbes through the lens'**  
**16<sup>th</sup> February 2024**

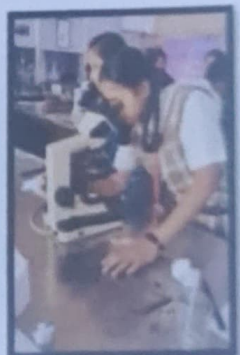
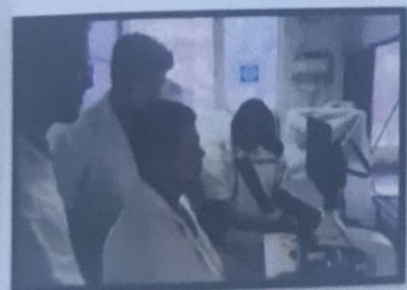
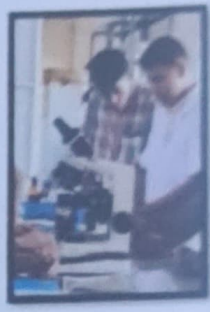
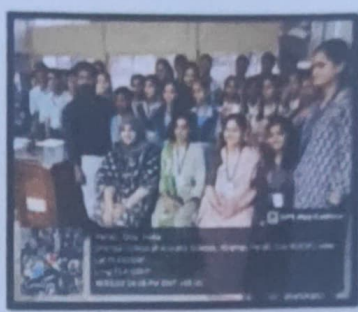
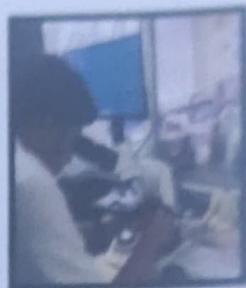
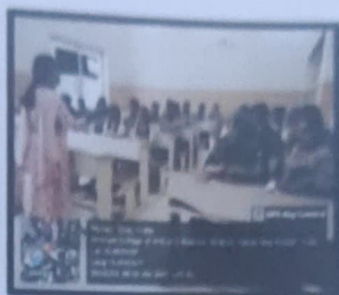
A one-day Hands-on Training workshop on 'Microbes through the lens' was organized as an outreach program by the Department of Biotechnology at Dhempe College of Arts and Science, supported by the DBT Star College Scheme, Department of Biotechnology, Government of India on 16<sup>th</sup> February 2024. The co-ordinators were Dr. Salma Mujawar and Dr. Amara Mulla. The student co-ordinators were Mr. Shwet Teli, Mr. Siddhit Shenvi, Mr. Herambh Prabhudessai & Mr. Kiran Burli (FY BSc. Biotechnology). The workshop attracted students from multiple schools across the state, reflecting a diverse and inclusive participation from various educational institutions. The schools that participated were Jadeed Urdu High School, Chimbel, Union High school, Ribandar and Auxilium High School, Panjim.

The training session was held for students and teachers of high schools across the state of Goa, in an offline mode in the department of biotechnology. The department In-charge, Mrs. Mrunal Phadke welcomed the participants and highlighted the motive behind organising the workshop. She also mentioned the contribution of DBT Star college scheme, which provided financial support for the training. The sessions began with an introductory lecture on 'Basics of microscopy', by Dr. Preethi Pandit, Assistant Professor, Biotechnology. Participants engaged in in-depth technical sessions conducted by Dr. Salma Mujawar & Dr. Amara Mulla, covering a myriad of topics, including hands-on training on working with different microscopes such as light microscope, Inverted microscope with green, yellow filters, Brightfield microscope with a digital camera and Stereo microscope. The student co-ordinators guided the participants in laboratory procedures.

A total of 28 participants (25 students & 3 teachers) were trained to observe microorganisms (Bacteria, yeast and fungi) using techniques of light microscopy. The participants got a hands-on experience on preparation of microbial slides using simple staining procedures. An introduction to morphology & diversity of marine plankton was also done using stereo microscope. In addition, the concept of Bioluminescence and isolation of bioluminescent bacteria from squids was explained.

The hands-on training on 'microbes through the lens' concluded with a vibrant valedictory ceremony & distribution of certificates to participants and student co-ordinators. This diverse gathering set the stage for a collaborative and insightful learning experience for the

participants. Overall, the workshop introduced the fascinating field of microbiology to high school student participants preparing them for the challenges and opportunities in this dynamic field.



Total no: of beneficiaries: 28  
Males: 14 Females: 14

*Salma*

Dr. Salma Mujawar

(Faculty Coordinators for the workshop, Department of Biotechnology)

*Mulla*

Dr. Amara Begum Mulla

*Borker*

Principal

Datta Charities Trust

Champe College of Arts & Sciences

Ranali - Goa

*Phadke*