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# Hands-on Training *in* Molecular Biology Techniques *4<sup>th</sup> to 8<sup>th</sup> December 2023*



**Organized By**

**Central Tasar Research and Training Institute**

**Central Silk Board**

**Ministry of Textiles: Govt. of India**

**Piska-Nagri, Ranchi - 835 303, Jharkhand**

## **ABOUT THE ORGANIZATION**

Central Tasar Research and Training Institute (CTRТИ) is the premier institution in India dedicated to research and training in the field of tasar silk cultivation and production. With its impeccable legacy, the institute has been at the forefront of ensuring the sustainable growth of the tasar sericulture sector.

The CTRТИ boasts of modern infrastructure, with well-equipped laboratories that cater to various scientific research needs. Its Molecular Biology Lab is furnished with cutting-edge equipment and apparatus to ensure practical training par excellence.

With a team of seasoned scientists and experts, the CTRТИ ensures that all training programs are delivered at the highest standards. The faculty comprises specialists with in-depth knowledge and vast experience in the field of molecular biology and related disciplines.

Understanding the importance of practical skills in the ever-evolving world of molecular biology, CTRТИ is organizing this intensive training program. It's meticulously crafted to provide participants with hands-on experience, ensuring they grasp the nuances of various molecular biology techniques.

## **OBJECTIVE OF THE TRAINING PROGRAM**

Immerse participants in hands-on experience, enhancing their skills and expertise in molecular biology techniques. This program aims to bridge the gap between theoretical knowledge and practical application in a state-of-the-art laboratory environment.

## **PROGRAM HIGHLIGHTS**

### **Introduction to Molecular Biology Techniques**

Basic lab tools, safety procedures, and setups commonly used in molecular biology.

### **DNA/RNA Isolation and Purification Techniques**

Extraction and purification of DNA & RNA and validate the success of their extraction with a Qubit Fluorometer.

### **Gel Electrophoresis - Principles and Practice**

Casting of agarose gel, loading of samples, electrophoresis of agarose Gel, and analyzing DNA bands.

### **Polymerase Chain Reaction (PCR) - Basics and Applications**

PCR reaction setup for cDNA synthesis and amplification of the gene of interest using thermal-cycler, and interpretation of results.

### **Molecular Cloning - Techniques and Troubleshooting**

Ligation, transformation, and confirmation of successful cloning.

### **Real-time PCR (qPCR) and its Role in Quantitative Analysis**

Setup the qPCR reaction, run the procedure, and learn how to interpret the data.

## **TARGET AUDIENCE**

Scientists/Teaching Faculties/Research Scholars/Postgraduate students from Zoology/Botany/Life Sciences/Biotechnology or any subject of biological sciences are eligible to participate.

## VENUE

Theory Sessions – Conference Hall – I, CTRTI, Ranchi

Practical Sessions – Central Instrumentation Facility, CTRTI, Ranchi

## REGISTRATION FEES

Registration Fee - INR 5000/-

(Registration fee includes training kit, tea, snacks and working lunch)

## TRAVEL & ACOMMODATION

Hostel facility on a payment basis (Rs. 300/- for accommodation, breakfast and dinner) will be arranged for the participants who require accommodation. Participants must arrange their own travel and the institute will not provide any financial support.

## HOW TO APPLY

Interested participants should register for the workshop by filling up a google form (online)/registration form (attached with brochure) and mail it to [moltechtrgctrti@gmail.com](mailto:moltechtrgctrti@gmail.com) on or before **15<sup>th</sup> November 2023**.

Totally 20 candidates will be selected (first come first serve basis). Selected candidates will be intimated on or before **18<sup>th</sup> November 2023** and candidates have to pay the registration fees as mentioned above. Participation will be confirmed only upon the receipt of the registration fee on or before **22<sup>nd</sup> November 2023**.

Registration fee can be transferred through online RTGS/UPI to the following account detail,

**Bank Name:** Central Bank of India

**Branch:** Sukhadeonagar, Ranchi

**Account Name:** Director CTR&TI Ranchi

**Account Number:** 1917804302

**IFSC Code:** CBIN0282343



BHIM UPI Payments Accepted at  
Director CTRTI Ranchi



Account Number : 1917804302, IFSC Code: CBIN0282343  
Scan and Pay using any UPI supported Apps

## ORGANIZING COORDINATOR

**Dr. Immanuel Gilwax Prabhu**

Scientist - C

Silkworm Breeding and Genetics

Central Tasar Research and Training Institute - Central Silk Board

Piska-Nagri, Ranchi - 835 303.

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## CONTACT DETAILS

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Director

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Contact No. +91 9449994014



# CSB - CENTRAL TASAR RESEARCH AND TRAINING INSTITUTE, RANCHI

## Hands-on Training Program in Molecular Biology Techniques

December 4<sup>th</sup> to 8<sup>th</sup>, 2023

### Registration Form

Name: .....

Date of Birth: ..... Gender: .....

Occupation (Teaching Faculty/Scientist/Research Scholar/Student): .....

.....

Department: .....

Address: .....

.....

Contact No.: .....

Email ID: .....

Education Qualification (University, year of passing, division/department):

.....

.....

How the training will help in your research work and share any prior experience you may have in molecular research?

.....

.....

Special Accommodations (in payment basis)/Requirements (if any): .....

Payment Details:

Registration Fee - Rs. 5000/-

Mode of Payment - ..... Payment Ref. No. - ..... Date: .....

Declaration:

I hereby declare that all the information provided above is true to the best of my knowledge. I have read and understood the terms and conditions and agree to abide by them.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Online Registration Link:

<https://docs.google.com/forms/d/e/1FAIpQLSeX-PDvPWTIaCAqci779MvJcQyIx0GPy-bILuzaD6oXI>

[Q-NQA/viewform?usp=sf\\_link](https://docs.google.com/forms/d/e/1FAIpQLSeX-PDvPWTIaCAqci779MvJcQyIx0GPy-bILuzaD6oXI/Q-NQA/viewform?usp=sf_link)

