# WEEK-LONG FACULTY DEVELOPMENT PROGRAMME ON

# MODERN PCR TECHNIQUES: APPLICATIONS AND INNOVATIONS IN BIOLOGY

19-23 NOVEMBER 2024





#### **SPONSORED BY**

**DEPARTMENT OF BIOTECHNOLOGY**GOVT. OF INDIA, NEW DELHI





ADVANCED LEVEL INSTITUTIONAL BIOTECH HUB HANDIQUE GIRLS' COLLEGE

Panbazar, Assam, India

# IN COLLABORATION WITH

#### **BIOAKADEMY**

Bioakademy

The training unit of AGT Biosciences (OPC) Private Limited Recognized by MCA & MSME, Govt. of India. Guwahati Biotech Park, Amingaon Guwahati, Assam, 781031, India

# HANDIQUE GIRLS' COLLEGE



Founded in 1939 by Rajabala Das amidst India's nationalist movement, Handique Girls' College stands as a proud beacon of women's education and empowerment in Assam and the entire North-East. Driven by Das's vision and her courageous efforts to challenge societal norms, the establishment of this institution was made possible with vital support from philanthropist Radha Kanta Handique, whose generosity helped establish a solid foundation for the college in pre-independence India. Initially, the college operated under the name 'Gauhati Girls' College' in a modest building within Panbazar Girls' High School. Later, it was renamed to honor Handique's legacy, reflecting the gratitude of generations of students and faculty for his role in advancing women's education.

In 2011, Handique Girls' College furthered its academic mission by establishing the Institutional Biotech Hub, one of the first DBT-approved hubs in the region, under the Government of India. This facility has been a tremendous asset to students, offering hands-on experience with advanced biological tools like PCR and ELISA, bridging the gap between theoretical knowledge and practical applications. The hub supports faculty research, undergraduate projects, M.Sc. dissertations, and even Ph.D. research, while also opening its doors to scholars from nearby institutions, fostering regional academic collaboration.

# **BIOAKADEMY**



Bioakademy serves as the training division of AGT Biosciences (OPC) Private Limited, a start-up based in Guwahati, India. Founded in 2021, AGT Biosciences is incorporated under the Ministry of Corporate Affairs and recognized by the Ministry of Micro, Small and Medium Enterprises (MSME), Government of India. The company's mission is to establish a global standard in providing top-tier training and research services for academia and industry.

Backed by a team of skilled and dedicated professionals, AGT Biosciences offers tailored research services and training in Molecular Biology, Bioinformatics, Biochemistry, Data Analysis, and Scientific Writing. Bioakademy hosts regular short-term training sessions, workshops, and internship programs tailored for students and faculty. AGT Biosciences collaborated with IIT Guwahati, Assam and Gauhati University, Assam for conducting joint training and R & D activities.

For more information, reach us via email at agtbiosciences@gmail.com or call +91-8011726712.

# **ABOUT THE PROGRAMME**

The Faculty Development Program (FDP) on "Modern PCR Techniques: Applications and Innovations in Biology" focuses on advancing educators' and researchers' understanding of the latest developments in Polymerase Chain Reaction (PCR) methodologies. PCR, a revolutionary tool in molecular biology, has undergone significant advancements since its inception, evolving from conventional methods to more refined and high-throughput techniques like qPCR (quantitative PCR), digital PCR, and multiplex PCR. These

innovations are transforming applications across a wide array of biological fields, from genetic research and medical diagnostics to environmental biology and forensic science.

This FDP aims to explore these modern PCR advancements, providing participants with a solid grasp of their practical applications and implications in research and teaching. By bridging the gap between fundamental concepts and state-of-the-art innovations, the program seeks to equip faculty with skills and insights that can enrich their curriculum and enhance student engagement with cutting-edge biological techniques.

#### RESOURCE PERSONS



**Prof. Probodh Borah**Director of Research (Veterinary), Assam
Agricultural University, Assam



**Dr. Sofia Banu**Associate Professor
Dept. of Bioengineering & Technology
Gauhati University, Assam



**Dr. Vijay Kumar Singh** Assistant Professor IASST, Guwahati, Assam



**Dr. Purabi Deka Bose**Assistant Professor
Dept. of Mol Bio & Biotechnology
Cotton University, Assam



**Dr. Manas Das**Assistant Professor
Dept. of Zoology
Gauhati University, Assam

# **EXPECTED LEARNING OUTCOMES**

The expected learning outcomes for the participants are the following:

- In-depth Knowledge of Modern PCR Techniques
- Hands-on Experience with PCR Instruments and Data Analysis
- Application of PCR in Various Biological Fields
- Enhanced Teaching and Research Strategies Using PCR
- Understanding Emerging PCR Innovations and Trends
- Fostering Interdisciplinary Collaboration through PCR Applications

#### WHO CAN ATTEND?

The programme is open to faculties (regular/adhoc/temporary) in teaching profession of any life science discipline from any College/University/Institutes.

## **REGISTRATION PROCESS**

Interested participants are required to register online on or before **15 November 2024**. Registration is FREE and there is no fee required for attending the program. Please fill up the online registration form by visiting the link:



## https://forms.gle/DTc2Cau1KAoH6Avo6.

## **IMPORTANT POINTS**

- The FDP is open to faculties from any life science discipline.
- FDP will be held from 19<sup>th</sup> to 23<sup>rd</sup> November 2024.
- Last date of submission of registration form is 15 November 2025. Selected participants shall be notified via e-mail.
- It is mandatory for all participants to attend all the technical sessions.
- All the Hands-on session will be conducted at Lab No. 003, AGT Biosciences, Guwahati Biotech Park, Amingaon, Assam.
- Transportation services will be provided to the participants from Handique Girls' College to Bioakademy-AGT Biosciences, Guwahati Biotech Park, Amingaon, Guwahati, Assam.
- Total seat capacity is limited to 20 (candidates will be selected on first-come-first serve basis
- Registration is FREE.
- The participants will be provided certificates upon successful completion of the FDP.
- Breakfast and lunch will be provided to the participants.

## ORGANIZING BOARD OF THE PROGRAMME

#### Patron:

Dr. Ranjit Sarma, Principal, HGC, Guwahati, Assam.

#### **Advisors:**

Dr Madhurima Hazarika Choudhury, Vice-Principal, HGC, Guwahati, Assam.

Dr Akan Das, Director, AGT Biosciences (OPC) Private limited, Guwahati, Assam

#### **Convenor:**

Dr. Uday Sankar Senapati, Co-ordinator, Biotech-Hub, HGC, Guwahati, Assam.

#### Memhers

Dr. Pranab Bujarbarua, HoD, Department of Botany, HGC, Guwahati, Assam.

Dr. Eva Rani Kalita, HoD, Department of Zoology, HGC, Guwahati, Assam.

Dr Bidita Das, Assistant Professor, Department of Psychology, HGC, Guwahati, Assam.

Dr Jyotshna Saikia, Assistant Professor, Department of Physics, HGC, Guwahati, Assam.

#### **Technical Support:**

Tandralee Kataki, Biotech Hub, HGC, Guwahati, Assam.

Ms. Harshita Kalita, Biotech Hub, HGC, Guwahati, Assam.

# **CONTACT US**

For further information, write to us by mail or WhatsApp at:

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