

### CONVENER

**Prof. (Dr.) Alvina Farooqui**  
Head, Department of Bioengineering,  
Integral University

### CO-CONVENER

**Dr. Ashish**  
Assistant Professor, Department of Bioengineering,  
Integral University

**Dr. Khwaja Osama**  
Assistant Professor, Department of Bioengineering,  
Integral University

### PROGRAM COORDINATION COMMITTEE MEMBERS

#### 1. Microbial Techniques

Er. Soban Ahmad Faridi  
Mr. Faizan Hafeez Khan  
Mr. Syed Mohd Ali  
Mr. Ameen Khan  
Ms. Priyanka Dubey  
Er. Gyanendra Tripathi  
Dr. Mohd. Amir

#### 2. Molecular Techniques

Dr. Reena Vishvkarma  
Dr. Zeeshan Rafi  
Dr. Azhar Kamal  
Dr. Latafat Chaudhary  
Dr. Tafeeq Ahmad  
Er. Suhail Ahmad  
Er. Nuzhat Bashir

### ABOUT INTEGRAL UNIVERSITY, LUCKNOW

Integral University, a seat of educational excellence, is a premier university in Lucknow, the capital city of the state of Uttar Pradesh, India. It was established under Act Number 9 of 2004 by the State Government. The University is duly approved by the University Grants Commission (UGC) under sections 2(f) and 12B of the UGC Act, 1956, Medical Council of India, Pharmacy Council of India, Indian Nursing Council, Council of Architecture, Bar Council of India, Indian Association of Physiotherapists, National Council for Teacher Education, UP State Medical Faculty and Distance Education Bureau.

Integral University is accredited as A+ by NAAC and recognized as a Scientific & Industrial Research Organisation (SIRO) by the Department of Scientific & Industrial Research, Ministry of Science & Technology, Government of India

### REGISTRATION FORM

## ONE-WEEK WORKSHOP ON "MOLECULAR AND MICROBIAL FERMENTATION TECHNIQUES" (05-10 AUGUST, 2024)

### HOW TO APPLY?

Candidate must apply online solely through Integral University Website.

#### REGISTRATION LINK

<https://www.iul.ac.in/FrmAdvProgramReg.aspx>

Registration Fees : Rs. 1500/-

Note: External students have to upload a Forwarding letter from the Head/Dean/Director of Department/Faculty/ Institute

### VENUE

**DEPARTMENT OF BIOENGINEERING**  
INTEGRAL UNIVERSITY, LUCKNOW

#### FOR ANY QUERY CONTACT

**Dr. Ashish**  
E-mail: ashish@iul.ac.in | Contact : +91-7042 757 830

**Dr. Khwaja Osama**  
E-mail: osama@iul.ac.in | Contact : +91-9452 68 4037

**Accommodation : Is available for limited seats  
at a minimal charge of  
Rs. 800/- per day Including Food.**

SCAN QR  
CODE FOR  
REGISTRATION



**ONE WEEK  
WORKSHOP**

ON

**MOLECULAR AND MICROBIAL  
FERMENTATION TECHNIQUES**

**05-10 AUGUST, 2024**

Organized by  
**DEPARTMENT OF BIOENGINEERING  
FACULTY OF ENGINEERING**  
INTEGRAL UNIVERSITY, LUCKNOW-226026



## ABOUT THE DEPARTMENT

The Department of Bioengineering under the Faculty of Engineering is committed to apply engineering principles to biological sciences in order to develop systems and processes that will prove to be beneficial for the society.

The department offers undergraduate and post graduate courses in engineering viz. B.Tech Biotechnology, B.Tech Food Technology, B.Tech Biomedical Engineering, B.Tech-M.Tech Biotechnology (Dual Degree), M.Tech Biotechnology (Full Time 2 Year Course), M.Tech Biotechnology (Evening 3 Year Course), M.Tech Bioinformatics, M.Tech Food Technology, M.Tech Biochemical Engineering, M.Tech Bio Medical Engineering and PhD in various areas of specialization under the Faculty of Engineering. The Department has fully equipped research laboratories and well qualified faculty members having doctoral, post doctoral degrees in engineering and research trainings from India and abroad. The department is working in the area of genetic engineering, infectious diseases, targeted drug delivery systems, nanobiotechnology, cancer biology, molecular immunology, bioinformatics, plant biotechnology, computational and system biology, animal biotechnology, microbiological engineering, fermentation technology, mathematical modelling and simulation, bioprocess engineering and controls etc. The department also has the distinction of providing good placement to the students in association with CCG&D and many students qualify national level exams like GATE, CSIR-NET, UGC-NET, ICAR-NET, CAT, MAT etc.

## ABOUT THE WORKSHOP

Biotechnology is the fastest growing interdisciplinary branch of science of the

21<sup>st</sup> century. It not only influences all aspects of society & ecosystems but also expands its applications in various chemical and scientific inventions into practical solutions and products. Microbial Fermentation & Molecular Techniques are needed in industries involved with the research & development, innovation and manufacture of biomaterials such as vaccines, enzymes etc. Hence it is a need of the hour to update students, researchers and professionals with recent developments / advancements in different areas of Microbial Fermentation and Molecular Techniques.

## WORKSHOP MODULE (OPTIONAL)

\* Students choose either Module 1 or Module 2

### Module 1 - Microbial Fermentation Techniques:

1. Media Preparation & Sterilization.
2. Isolation of Microbe from Soil.
3. Purification Techniques.
4. Standardization of Growth Curve.
5. Preservation Techniques.
6. Scale-up in Bioreactor.

### Module 2 - Molecular Techniques:

1. Genomic DNA Isolation from Plant.
2. Plasmid DNA Isolation from E. coli.
3. DNA analysis by agarose gel electrophoresis.
4. Quantification of DNA by U.V. Method.
5. SDS PAGE analysis of Proteins.
6. Real Time PCR (Demonstration).
7. ELISA.

## WHO SHOULD ATTEND THE WORKSHOP?

The course is open for students of UG and PG Level with the background of Biochemical Engineering, Microbiology, Biochemistry, Biotechnology, Life Sciences, Chemical Sciences & Technology and allied disciplines. The number of seats is limited to 150 candidates and the registration for the program will be made on the first come first serve basis.

- Candidates outside of Lucknow may be provided with lodging and fooding facilities in university's hostel on payment basis.

## EVENT SCHEDULE AND CRUCIAL DATES

### Registration Begins : 25 July, 2024

- Last date for receipt of filled online application form : **August 02, 2024**
- Announcement of the list of candidate accepted for workshop : **August 03, 2024**
- Commencement of workshop : **August 05, 2024**

## RESOURCE PERSONS

Faculty members, Supporting Staff Members and Research Scholars of the Department will deliver lectures and provide hands on training on the various topics to cover entire spectrum of the Workshop's theme.

