

1st Annual Online Certificate Course in Biotechnology Techniques 1st July – 22nd August, 2026 (6.00pm – 8.00pm IST)

Course Overview & Objective

This comprehensive course equips learners with essential and advanced biotechnology techniques—from molecular biology, microbiology, and biochemistry to genomics and analytical methods. It emphasizes practical understanding, experimental design, troubleshooting, and data interpretation, preparing participants for real-world research, diagnostics, and industry applications with strong lab readiness and technical confidence.

Course Highlights

Core Foundations

Structure & function of DNA, RNA & Proteins, Transcription & Translation Essentials,
Scientific Solution preparation & Calculations

Microbiology Techniques

Sterilization & Media Preparation, Bacterial Culturing & Growth Kinetics, Antibiotic Sensitivity & Phage
Titration, Gene Transfer: Transformation, Transduction, Conjugation

Biochemistry & Analytical Techniques

Protein Estimation Assays (BCA, Bradford, Lowry, Biuret), UV Spectroscopy & Nanodrop Analysis,
Carbohydrate Estimation Methods, Chromatography: HPLC, GC, TLC, Affinity, Ion Exchange,
Advanced Analytics: LC-MS / GC-MS

Protein Science & Purification

Cell Lysis to Protein Recovery, Purification Strategies & Troubleshooting,
Stability, Degradation & Storage Insights

Molecular Biology Techniques

PCR & Primer Design, Advanced PCR: qPCR & ddPCR, Nucleic Acid Extraction,
Gel electrophoresis & Blotting (Western, Southern, Northern)

Genetic Engineering & Modern Biology

Recombinant DNA Technology & Cloning Strategies, Vector Design & Transformation Techniques,
CRISPR-Cas9 Genome Editing, DNA, Protein & Genome Sequencing

Immunology & Diagnostics

Antigen-Antibody Interactions, ELISA (Direct, Indirect, Sandwich, Competitive),
Sensitivity vs Specificity Concepts

Advanced Cell & Imaging Techniques

Flow cytometry & data analysis, Immunofluorescence techniques, Cell culture fundamentals,
Microscopy: Fluorescence, Confocal, Electron

Lab Readiness & Compliance

Lab Safety & Biosafety Practices, GMP & GLP Guidelines
Instrument Handling & Best Practices

Q & A, Troubleshooting, Self Assessment

Reading Material will be Provided

Sessions Recordings will be Available to Watch

E-certificate for All Registered Participants

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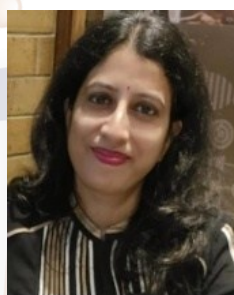
Speakers



Dr. Aruna G Agrawal
Director
Flowcytometry Solutions
Jaipur, India



Dr. Madhuri Cherukumilli
Assoc. Dir., Search & Evaluation Lead
Global Business Dev. & Alliance Mgmt.
Merck, Darmstadt, Germany



Dr. Sushma Singh
Professor
Dept. of Biotechnology
NIPER-Mohali, India



Dr. Geetanjali Sundaram
Professor & Head
Dept. of Biochemistry,
University of Calcutta, India



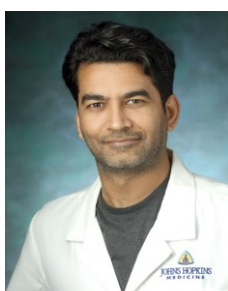
Dr. Purvi Purohit
Professor
Dept. of Biochemistry,
AIIMS Jodhpur, India



Dr. Hemant Agrawal
Director
Flowcytometry Solutions
Jaipur, India



Dr. Praveen Sharma
GBA Group-Instruments Sales Manager
Gulf Bio Analytical Group
Dubai, UAE



Dr. Rajendra Kumar
Instructor
Genitourinary Oncology
John Hopkins University, USA



Dr. Dhiraj Bhatia
Associate Professor,
Dept. of Biological Sciences & Engg.
IIT-Gandhinagar, India



Dr. Ravi Tandon
Assistant Professor
SBT, JNU
New Delhi, India



Dr. Santosh Poddar
Senior Technical Officer
Microscopy Facility
IISER Pune, India



Dr. Anirudh Singh
Associate Professor
SAM Global Uni
Raisen, M.P., India



Dr. Satyabrata Bag
HOD QC,
3B BlackBio Dx Ltd
Bhopal, India

Who Can Attend

- Students, Lab Technologist, Researcher, Postdoc, Faculty, Doctor, Industry Professional, etc
- Students preparing for **competitive exams** like **CSIR NET, GATE Life Sciences & Biotechnology, DBT-JRF, ICMR-JRF, IIT-JAM, CUET (PG) etc**
- This online course is designed for students, researchers, doctors and technical people at any step of their career and will cover the important concepts and principles of biotechnology techniques
- Participants from academic/non-academic institutions from all over the world are encouraged to apply

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How to Apply

-Fill Registration form online by clicking the “REGISTER” button below

-Participants working/studying in India can make a payment by scanning the QR below and share the receipt via email at training@flowsols.com

-International participants, first fill the registration form and then send us the request for payment link at training@flowsols.com

Registration Fee*

For participants from India

Student/Research Fellow (non-PhD)/Trainee/Technologist (From academia)	INR 2000
Postdoc/MD/Resident Doctor (JR/SR)/ Technical or Scientific Officer/ Core Manager/Faculty/ Medical Consultant	INR 2800
Diagnostic Lab/Company/Non-Academia-Clinical or Research	INR 3500

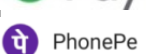
For participants from outside India

SAARC/South East Asia/Africa/South America	USD 60
Other Countries	USD 100

**Discount on Registration Fee
10% for Group of 5 or More**

**Scan the Below QR Code
and Pay
(For participants from India)**



 Pay
 PhonePe
 Paytm
 BHIM UPI



***Registration Fee is non-refundable**



Reading material provided



Recordings available for all sessions



E-Certificate given to registered participants



Online course is 48 hours over 22 days

Last Date of Registration: 29th June 2026

Contact Us: training@flowsols.com, +91-7665130114