

CALL FOR ADMISSION 2026

# APT

## ASSISTANT PROFESSOR TRAINING PROGRAM

India's first end-to-end  
academic career programme  
for life scientists.

128

TOTAL HOURS

35

PHASE 2 SESSIONS

11

MODULES

6

EXPERT FACULTY

3

PROGRAM PHASES

**With Job Placement Assistance**

Open to all Life Science  
Graduates & Faculty Aspirants

**APPLY NOW**

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## A Brief Story About The Company



# ABOUT US

**Biotecnika Info Labs Pvt. Ltd.** was founded with a single mission: to bridge the gap between academic potential and professional success for India & life science community.

Over the years, Biotecnika has grown into the country's most trusted destination for CSIR NET coaching, bioinformatics, AI ML training, research career guidance, and academic professional development.

India's Leading  
Life Sciences  
Education &  
Career  
Development  
Platform



# WHAT WE DO

- Deliver India's most comprehensive **CSIR NET Life Sciences coaching**, trusted by thousands of qualifiers annually
- Provide specialised **training in Bioinformatics, Genomics, AI/ML for Life Sciences, and Computational Biology**
- Mentor research scholars and postgraduates toward **JRF fellowships, PhD admissions, and faculty positions**
- Offer **certificate and diploma programmes** developed in partnership with leading industry and academic institutions
- Run a thriving digital community of over **5 lakh life science professionals across India**



**20+**  
Years of  
Excellence

**10K+**  
NET Qualifiers  
Trained

**500+**  
Expert-Led  
Courses

**OUR REACH  
& IMPACT**

**5L+**  
Community  
Members

## Why Biotechnika Designed APT ?

After years of helping students clear CSIR NET, our team kept hearing the same story: 'I qualified, but I don't know how to face a faculty interview.' Or 'I got the job – but nobody trained me to actually teach.' APT was built in direct response to this gap. It is the only programme in India that takes a life science graduate from exam preparation all the way through to interview-ready, classroom-confident academic professional.



**Dear Aspiring Academic,**

*When I look at the life sciences landscape in India today, I see something both exciting and deeply concerning.*

*Exciting – because there has never been more opportunity. NEP 2020 is reshaping universities. New colleges are opening. Research funding from DBT, DST, and ICMR is at an all-time high. The demand for qualified, capable faculty in life sciences and biotechnology is enormous.*

*Concerning – because the training pipeline is broken.*

*Shekhar Suman*  
CEO & MD

## A Note from — **The CEO**

Every year, tens of thousands of brilliant students clear CSIR NET. They know their biochemistry, their cell biology, their molecular genetics. What they don't know is how to stand in front of 120 undergraduates and teach it. They don't know how to write a grant proposal, navigate a NAAC audit, handle a disruptive student, or answer "how will you bring in research funds?" in a selection committee interview.

Nobody taught them these things. And that failure belongs to the system – not to them.

APT is our answer to that failure.

We built APT because we believe that India's next generation of university faculty deserves more than just exam coaching. They deserve a complete professional education – one that prepares them not just to qualify, but to lead, inspire, publish, and build the institutions that will shape Indian science for decades to come.

APT is the programme I wish had existed when I started my career. I am proud that Biotecnika now offers it to you.

Train to Teach. Built for Academia.

Warm regards, Founder & CEO, Biotecnika Info Labs Pvt. Ltd.

# PROGRAM OVERVIEW

APT – Academic Professionals Training is Biotechnika’s flagship academic career programme. It is designed for life science graduates who don’t just want to clear an exam, but want to thrive as university faculty.

<p><b>APT</b> IS STRUCTURED IN 3 PROGRESSIVE PHASES</p>	<ul style="list-style-type: none"> <li>Covering CSIR NET subject coaching</li> <li>Professional academic skills training</li> <li>Hands-on supervised teaching practice</li> </ul>	<p>totalling <b>128 hours</b> of expert-led instruction.</p>
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## The Core Philosophy of APT

Most coaching programmes stop at the qualifying exam. APT goes further.

Phase 2 of APT is open to ALL life science graduates and faculty aspirants – not just CSIR NET qualifiers. Whether you cleared NET, SET, SLET, or UGC NET, or hold a PhD without appearing for any exam, APT’s professional training is designed for you.

You can join APT as a complete package (Phase 1+2+3) or enrol in Phase 2+3 directly if your exam preparation is already complete.





# WHO IS THIS PROGRAM FOR?

APT (Phase 2 & 3) is open to anyone serious about a career in academic teaching or research. See if you fit the criteria below.

## ELIGIBILITY

Requirement	Details
Minimum Qualification	Master's degree (MSc / MTech / MVSc) in any Life Science, Biotechnology, Biochemistry, Microbiology, Bioinformatics or related discipline
For Phase 1 (CSIR NET)	Any MSc Life Sciences student in final year or post-graduate appearing / planning to appear for CSIR NET
For Phase 2 + 3 (APT Core)	Open to all – no NET/SET/SLET qualification required to join the professional training module
Age Limit	No upper age limit. APT welcomes working professionals returning to academia
Language of Instruction	English (with Hindi support where needed)

## Who Should Enroll 6 Learner Profiles

### CSIR NET LS Qualifiers

You've cleared the exam and now want to know what comes next. APT prepares you for the faculty interview, the classroom, and the research environment – all the things the coaching class never covered.

### UGC NET / SET / SLET

Qualifiers Your eligibility certificate is in hand. Now you need the skills to match. APT's pedagogy, assessment design, and interview preparation modules are directly aligned to university hiring standards.

### PhD Scholars & Research

Fellows You are deep in your thesis but thinking about the academic job market. APT gives you a structured head start – grant writing, scientific publishing, mentoring undergraduates, and acing the selection committee.

### WHAT APT IS NOT

APT is not a quick certification course. It is not a passive video library. It is a 128-hour professional development programme with live sessions, real assignments, peer interaction, and supervised teaching practice. It asks for commitment – and it delivers a career transformation in return.

### ENROLMENT OPTIONS

Requirement	Details
Full APT (Phases 1 + 2 + 3)	CSIR NET coaching + Professional Training + Microteaching – the complete 128-hour journey
APT Core (Phases 2 + 3)	Professional Training + Microteaching – for those who have completed NET/SET/PhD or already have exam preparation handled

# PROGRAM STRUCTURE

## PHASE 1 - CSIR NET Life Sciences Coaching

**65 hrs**

Comprehensive unit-wise coaching covering all 13 units of the CSIR NET Life Sciences syllabus, aligned to the latest CSIR exam pattern. Can be taken as a standalone or as part of Biotechnika's existing CSIR Capsule Course.



### Postdoctoral Researchers

You've done the research. Now it's time to transition into a faculty role. APT helps you translate your research experience into teaching skills and institutional contribution – exactly what hiring committees want to see.

### Junior Lecturers & Ad-hoc Faculty

You are already teaching but never received formal pedagogical training. APT fills that gap – Bloom's Taxonomy, LMS, NEP 2020 compliance, NAAC documentation – the practical toolkit for the modern Indian lecturer.

### CSIR NET Aspirants (Pre-Qualification)

Still preparing? APT's Phase 1 covers the full CSIR NET Life Sciences syllabus. And knowing what lies beyond the exam – the career, the classroom, the grant – is itself a powerful motivator.

## **PHASE 2 - Professional Academic Training**

### **11 Modules 48 hrs**

The heart of APT. 35 expert-led sessions across 11 modules spanning andragogy, instructional design, lab management, EdTech, assessment, research supervision, academic writing, ethics, NEP 2020/NAAC/NBA, and interview readiness. Open to all.

## **PHASE 3 - Teaching Practice – Microteaching**

### **15 hrs**

The capstone of APT. Each participant delivers supervised 15-minute microteaching sessions with structured feedback from faculty and peers. This is where theory becomes classroom confidence.

## **Total: 128 Hours**

**Live Online Sessions | Recordings on LMS | Certificate of Completion**



# PHASE 1

## CSIR NET LIFE SCIENCES

### Syllabus Coverage

**Unit 1** - Amino Acids · Thermodynamics & Bioenergetics · Enzymology · Proteins

**Unit 2** - Cell Organelles & Protein Targeting · Gene & Chromosome Organization · Cell Division

**Unit 3** - Replication & Repair · Transcription · Translation · Gene Regulation

**Unit 4** - Cell Signaling · Cancer Biology · Immunology

**Unit 5** - Basics of Development · Fertilization · Cleavage & Gastrulation · Sea Urchin & Amphibian Development · Plant Developmental Biology

**Unit 6** - Photosynthesis · Nitrogen Metabolism · Plant Hormones

**Unit 7** - Circulatory System · Nervous System · Endocrinology & Reproduction

**Unit 8** - Mendelian Principles · Extensions of Mendelian Principles · Gene Mapping · Mutations

**Unit 9** - Diversity of Life Forms (A–F)

**Unit 10** - Niche & Habitat · Population Ecology · Community Ecology

**Unit 11** - Palaeontology & Evolutionary History · Hardy-Weinberg Equilibrium · Animal Behaviour

**Unit 12** - Gene Therapy · Marker-Assisted Breeding

**Unit 13** - Molecular Biology & Recombinant DNA Methods · Histochemical & Immunotechniques · Spectroscopic Techniques



# PHASE 2

## PROFESSIONAL ACADEMIC TRAINING

### Detailed Curriculum

35 sessions across 11 modules.

Sessions marked [P] include a 30-minute hands-on practical component.

#### MODULE A INTRODUCTION & ORIENTATION

##### *2 Sessions · 3 Hours*

- Course Induction – Orientation, Learning Goals & Programme Roadmap
- 2 State SET/SLET vs UGC NET vs CSIR NET – Differences, Eligibility, Application & Preparation Strategy

#### MODULE B HIGHER EDUCATION PEDAGOGY & PSYCHOLOGY

##### *2 Sessions · 3 Hours*

- Adult Learning Theory (Andragogy) vs. Pedagogy  
Understanding Student Diversity & Different Learning Styles
- Cognitive Load Theory – Teaching Complex Biological Pathways  
Without Overwhelming Students · Bloom's Taxonomy in Practice with Examples

#### MODULE C INSTRUCTIONAL DESIGN & CURRICULUM PLANNING

##### *2 Sessions · 3 Hours*

- Backward Design: Starting with Learning Outcomes · Creating Effective Syllabi & Mapping CSIR NET Topics to University Credit Systems
- 6 Lesson Planning: The 5E Model (Engage, Explore, Explain, Elaborate, Evaluate) – Assignment: Design an Effective Lesson Plan

## MODULE D HANDS-ON STEM & LABORATORY MANAGEMENT

### 3 Sessions · 4.5 Hours

- Designing Inquiry-Based Lab Practicals – Moving Beyond “Cookbook” Experiments
- Lab Safety, Chemical/Bio-Waste Management & Standard Operating Procedures (SOPs) – Case Study Discussion
- Inventory Management & Budgeting – Running a Lab on a Limited Grant – Assignment: Situation-Based Lab Management Scenarios

## MODULE E 21ST CENTURY TEACHING METHODOLOGIES & EDTECH TOOLS

### 4 Theory Sessions + 4 Practical Sessions + Doubt Clearing · 7 Hours

- [P] Virtual Labs & Simulations (Labster, PhET) to Supplement Physical Experiments
- [P] Learning Management Systems (LMS): Using Moodle / Google Classroom for Course Delivery
- [P] Online vs. Hybrid Teaching – Zoom Breakout Rooms, Padlet, Mentimeter & Recording Lectures for LMS
- [P] AI in the Classroom: Using ChatGPT/Claude for Lesson Prep while Preventing Student Misuse
- DC Doubt Clearing Session (1 Hour)

## MODULE F ASSESSMENT, EVALUATION & FEEDBACK

### 3 Sessions · 4.5 Hours

- Formative vs. Summative Assessment – Using Clickers & Polls for Real-Time Feedback
- Designing High-Quality MCQs & Subjective Questions Aligned to Bloom’s Taxonomy
- Invigilation and Evaluation Duties – Roles, Responsibilities & Case Studies  
Assignment: Design a Bloom’s - Aligned Question Paper

## MODULE G RESEARCH SUPERVISION, ACADEMIC WRITING & PUBLICATIONS

### 4 Sessions · 6 Hours

- The Grant Writing Lifecycle – Finding Funding Agencies (DBT, DST, ICMR) & Writing a Winning Proposal
- Scientific Writing – Structuring a High-Impact Manuscript, Cover Letter & Research Proposal
- Time & Project Management for Academics – Trello / Notion for Balancing Teaching, Research & Administration
- Mentoring Undergraduate Research – Guiding a Small Project into a Conference Poster or Publication

## MODULE H MENTORSHIP, COMMUNICATION & CLASSROOM MANAGEMENT

### 3 Sessions · 4.5 Hours

- Active Listening & Student Counselling – Being a Mentor, Not Just a Lecturer – Relevant Case Study
- De-escalation Techniques – Handling the Disruptive or Disengaged Student – Relevant Case Study
- Public Speaking for Scientists – Body Language & Voice Modulation in Large Halls  
Assignment: Student Management Scenario Responses

## MODULE I ETHICS, ACADEMIC INTEGRITY & PROFESSIONAL DEVELOPMENT

### 3 Sessions · 3 Hours

- Research Ethics – Understanding Plagiarism, Predatory Journals & Data Manipulation
- UGC Regulations & Career Advancement Scheme (CAS) – Navigating the API Score for Promotions
- Networking for Academics – Building a Personal Brand on LinkedIn & ResearchGate

## MODULE J 2026 FACULTY TOOLKIT – NEP 2020, NAAC, NBA & INDUSTRY-ACADEMIA CONNECT

### 5 Sessions · 5 Hours

- NEP 2020 – Vision & Structural Change, Assessment Reforms, 50-Hour CPD Mandate & The Future of Accreditation
- NBA Accreditation – What It Is, Why It Matters & The Outcome Trail
- NAAC Accreditation – What It Is, Why It Matters & The Evidence Trail
- J4 Industry-Academia Connect – Understanding MoUs, Networking Strategies & Audit Documentation
- Synchronising NEP, NBA & NAAC – One-Nation One-Data Platform, Digital Workflow & Strategic CPD Planning

## MODULE K INTERVIEW READINESS & CAREER ADVANCEMENT

### 3 Sessions · 4.5 Hours

- The Teaching Demo – Acing the 15-Minute Presentation Before a Selection Committee – Assignment: Record a 10-Minute Online Teaching Demo
- Drafting a Compelling Faculty CV, Research Statement & Statement of Purpose (SOP) -
- Mock Interviews – Answering “Why do you want to teach”& “How will you bring in funds”? + PhD Admission Mock Interviews



# PHASE 3

## TEACHING PRACTICE

### Microteaching

#### 15 Hours of Supervised, Peer-Reviewed Teaching Practice

Each participant prepares and delivers a 15-minute microteaching session — a real mini-lecture on an assigned topic — observed live by APT faculty and fellow participants.

After each session, structured feedback is provided on content clarity, pacing, board/slide use, body language, audience engagement, and question-handling. Participants also give peer feedback using a guided rubric.

For many participants, this is the first time they have ever taught in front of an audience. The microteaching environment is designed to be safe, supportive, and genuinely transformative.

**This is the capstone of APT — the moment all the theory becomes classroom reality.**



#### Subject & Pedagogical Knowledge

- Mastery of CSIR NET Life Sciences syllabus (Phase 1)
- Deep understanding of adult learning theory, Bloom's Taxonomy, and the 5E instructional model
- Ability to design learning-outcome-driven syllabi, lesson plans, and assessments



#### Classroom & Lab Skills

- Confidence to stand in front of 120 undergraduates and deliver an engaging lecture
- Skills to design and supervise inquiry-based laboratory practicals
- Competence in lab safety, SOPs, bio-waste management and inventory budgeting



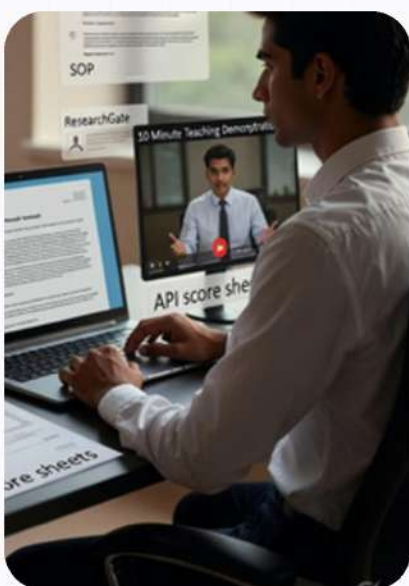
### Digital & EdTech Fluency

- Hands-on experience with Moodle/Google Classroom LMS, virtual labs (Labster, PhET), and hybrid teaching tools
- Practical skills in AI-assisted lesson preparation (ChatGPT, Claude)
- Ability to record, upload, and manage lecture content on an LMS



### Research & Academic Writing

- Roadmap for applying to DBT, DST, and ICMR grants
- Skills to write and submit a high-impact research manuscript or review article
- Confidence in mentoring undergraduate and postgraduate research projects toward publication



### Institutional Compliance & Career Readiness

- Working knowledge of NEP 2020, NAAC, NBA, UGC-CAS, and API score computation
- A polished faculty CV, research statement, and SOP – interview-ready on Day 1
- A recorded 10-minute teaching demonstration to share with selection committees
- Mock interview experience, including the toughest faculty hiring questions
- A professional presence on LinkedIn and ResearchGate

# ASSIGNMENTS & ASSESSMENTS

*APT is not a passive learning experience. Every module in Phase 2 builds toward a practical deliverable:*

## ELIGIBILITY

Module	Assignment / Deliverable
Instructional Design (C)	Design a structured Lesson Plan using the 5E Model for an assigned topic
Lab Management (D)	Respond to situation-based STEM lab management scenario cases
Assessment Design (F)	Create a complete question paper (MCQ + Subjective) aligned to Bloom's Taxonomy
Classroom Management (H)	Analyse and write responses to student management scenario cases
Phase 3: Microteaching	Live supervised 15-minute teaching session with peer and faculty feedback

# CERTIFICATION

## Certificate of Completion – APT (Academic Professionals Training)

*Issued by Biotechnika Info Labs Pvt. Ltd. upon successful completion of Phase 2 and Phase 3, including submission of all required assignments.*

*Participants who complete Phase 1 additionally receive a CSIR NET Coaching Completion Certificate.*



# PROGRAM DELIVERY & FORMAT

## ASPECT

## DETAILS

### Mode

Live Online (Zoom / Biotechnika LMS) with session recordings

### Schedule

Late Evening batches on Weekdays- designed for working professionals and full-time students

### Session Length

1.5 hours (most Phase 2 sessions) or 1 hour (Phase J and doubt-clearing sessions)

### Recordings

All sessions recorded and available on LMS for 6 months post-programme

### Assignments

Submitted digitally; feedback provided by faculty within 5 working days

### Microteaching (Phase 3)

Live online sessions with webcam required – scheduled in small groups of 10–12

### Support

Dedicated WhatsApp group, weekly Q&A with faculty, and peer discussion forum on LMS

### Batch Size

Limited to 40 participants per batch to ensure personalised attention

### Language

English (with Hindi explanations where helpful)

### Duration

Approximately 4–5 months (full APT) or 2–3 months (APT Core – Phases 2+3 only)

# MEET YOUR FACULTY



**Mrs. Tithi Saha**

Programme Orientation ·  
Pedagogy & Learning Theory ·  
Classroom Management & De-  
escalation · NEP 2020



**Dr. Tanushree Saxena**

NET/SET/SLET Navigation · Lab  
Safety & Bio-Waste · Scientific  
Writing · NBA Accreditation ·  
Mock Interviews



**Mrs. Somrhita Pal**

NET/SET/SLET Navigation · Lab  
Safety & Bio-Waste · Scientific  
Writing · NBA Accreditation ·  
Mock Interviews



**Dr. Nupur Nagwekar**

STEM Lab Design · Inquiry-Based  
Practicals · Inventory Budgeting ·  
Grant Writing (DBT/DST/ICMR)



**Himani Agarwal**

Digital Teaching Tools · Virtual  
Labs & Simulations · Hybrid  
Classrooms · AI-Assisted  
Pedagogy · Project Management  
for Academics



**Mrs. Urmimala Ray**

5E Lesson Planning · Student  
Counselling & Mentorship · NAAC  
Documentation · Teaching Demo  
Preparation · Academic  
Networking



**Dr. Prangya Rath**

Undergraduate Research  
Mentoring · Research Ethics &  
Integrity · UGC-CAS & API Scores  
· Industry-Academia Connect ·  
CV & SOP Writing



## Mrs. Tithi Saha

**Academic Manager- Competitive exams**  
**Subject expert of Genetics and Molecular biology**  
**Years of teaching experience: 16+ years**  
**Certifications: UGC CSIR NET (LS) in 2009**  
**No. of publications: 1 Research article + 1 Book Chapter**

Tithi Saha is a seasoned educator and life sciences expert with a strong academic and research background in Biotechnology. She holds a Master's degree in Biotechnology from the prestigious Nirma University, Ahmedabad, and successfully qualified the CSIR-NET examination in 2009, a testament to her academic excellence and deep subject understanding. She has also been a Gold Medallist of her batch. She began her academic career as an Assistant Professor at Guru Ghasidas Vishwavidyalaya, Bilaspur, where she played a pivotal role in teaching and mentoring students in core areas of life sciences. For the past 12 years, she has been an integral part of Biotechnika, one of the most trusted platforms for life sciences education and research training in India and currently working as Category Head of Competitive Exams.

With over a decade of teaching and mentoring experience, her areas of expertise include Genetics, Molecular Biology, Molecular Tools, and Evolution. She is known for her clarity of concepts, structured teaching approach, and her ability to make complex topics both engaging and accessible to students. Passionate about nurturing the next generation of scientists, she continues to inspire thousands of GATE, CSIR-NET, and life sciences aspirants across the country.



## Dr. Tanushree Saxena

**Dr. Tanushree Saxena**  
**Academic Manager- CR and allied fields**  
**Subject expert of Biotechnology**  
**1. Years of experience -10 yrs Teaching + 5 yrs research**  
**2. No. of papers published- 6 Papers + 6 book chapters**

Dr. Tanushree Saxena is an accomplished expert in Genetics, Molecular Biology, and Research Techniques, with a Ph.D. in Biotechnology. She brings over 9 years of teaching experience and 5 years of hands-on research expertise to her current role as Category Manager – Clinical Research & Allied Fields and Academic Support Specialist at Biotechnika.

Her academic journey includes a significant research tenure at the Birla Institute of Scientific Research (BISR), a sister concern of BIT Mesra, Ranchi, where she contributed to various research projects, authored scientific publications and book chapters, and mentored postgraduate and undergraduate students in dissertations and training programs.

Dr. Saxena has also served as a lecturer and guest faculty across several reputed institutions. A recipient of the prestigious DAAD Fellowship, she attended a summer school at Leibniz University, Hannover, Germany. She has consistently topped her classes, securing top ranks in her Ph.D. coursework, postgraduate Biotechnology, and undergraduate Botany. Her academic brilliance is further highlighted by multiple awards for oral and poster presentations at national and international conferences.



## Mrs. Urmimala Ray

**Academic Manager- BioIT Department**  
**Subject expert of Biochemistry**  
**Years of teaching experience: 16+ years**  
**Publications: 2 Research Papers**  
**Certification: CSIR-NET JRF**

Urmimala Ray brings 16+ years of experience in life sciences teaching, academic leadership, student mentoring, and research-focused training. As the Academic Category Manager – Bio-IT Team at Biotecnika, she oversees academic strategy, course delivery coordination, learner engagement, content planning, and team execution for specialized programs in bioinformatics, AIML and computational biology. Her academic and technical expertise includes biochemistry, cell and molecular biology. She has extensive experience in mentoring students for academic and career progression, guiding short-term research projects, and supporting practical and concept-based learning for B.Sc., M.Sc., CSIR NET, GATE, and DBT aspirants.

She previously served as a Lecturer in the Department of Life Sciences at Garden City University, where she trained undergraduate and postgraduate students in core biotechnology disciplines, guided academic projects, supervised practical learning, and contributed to institutional scientific and academic initiatives. A CSIR-NET JRF qualified scholar (AIR 62 in June 2015 and AIR 76 in Dec 2017), she has received the Biotecnika Legacy Award and Best Faculty Award in recognition of her academic excellence and long-standing contribution to life science education. She is valued for her academic depth, structured execution, and commitment to industry-aligned learning.



## Mrs. Somrhita Pal

**Subject expert of Plant Biotechnology and Environmental sciences**  
**Years of teaching experience: 12+ yrs**  
**Certifications: B.Ed, UGC-CSIR NET qualification in 2019.**  
**No. of publications: 3 research papers**

Somrhita Pal holds a M.Sc. and B.Ed., along with NET qualification, and has been actively involved in academics for over 11 years, specializing in Cell Biology, Genetics, and Plant Biotechnology. A Master's from Calcutta University, she began her teaching career as a lecturer at the college level, where she served for five years before joining Biotecnika. She has also served as an instructor in a UGC-sponsored National Workshop on Mushrooms Cultivation

Her research contributions include publications in both national and international platforms, such as MDPI's Journal-Agriculture and Science and Culture, with a focus on plant regeneration, morphogenesis, and sustainable agriculture. Her professional philosophy is deeply rooted in the belief that gathering knowledge is a passion, and spreading it is a devotion.



## Himani Agarwal

**Subject expert of Cell Biology and Bioprocess Engineering**

**Years of teaching experience: 5+ years of teaching and research experience**

**Certifications: GATE BT (2019), NGS sequencing, CRISPR**

**No. of publications: 6 research articles + 2 book chapters**

Himani Agarwal is a final-year Ph.D. scholar in Biotechnology with a strong academic foundation and a research focus on plant growth, development, and stress physiology. She earned her B.Sc. (Hons) in Biotechnology and M.Sc. in Biotechnology & Bioinformatics from North Eastern Hill University (NEHU), Shillong, in 2017 and 2019, respectively, securing the Bronze Medal for academic excellence in both degrees. In 2019, she qualified the GATE (BT) examination, further strengthening her academic credentials. With over four years of research experience as a Junior Research Fellow at ICAR-NEH, Umiam, and Amity University, Noida, she has developed expertise in molecular biology, plant signaling, data analysis, scientific communication, and academic writing.

Himani has presented her research at several national and international conferences, earning Best Speaker Awards for poster presentations. She has authored six Scopus-indexed research and review articles, contributing significantly to the field of plant biotechnology.



## Dr. Prangya Rath

**Subject expert of Plant Physiology**

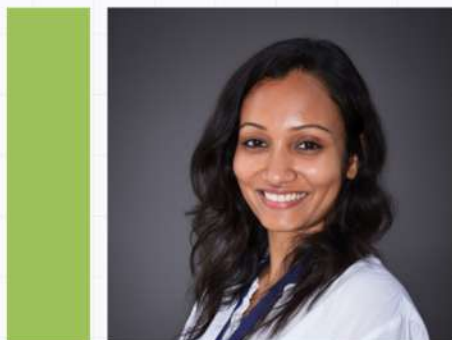
**Years of experience: 6 years biotech research+ 1.5 years teaching, scientific writing**

**No. of papers published: 40 (articles, reviews, chapters, reports) + 1 book**

**Certifications: Phd, Rank holder in TIFR 2015, CSIR NET LS 2016 & 2017, CSIR JRF 2017**

Dr. Prangya Rath (PhD) is a CSIR-SRF NET (Life Sciences) qualified researcher & academician interested in the fields of life sciences, biotechnology, molecular biology, and cancer biology. She has more than 5 years of experience in the field. She completed her graduation in Zoology (H) from Delhi University, post-graduation in Biotechnology from the South Asian University Delhi, and completed her PhD with Biotechnology sp. from Amity University with funding from the Council of Scientific & Industrial Research (CSIR).

She has qualified CSIR UGC NET (Lectureship) Life Sciences in 2013 & 2016, CSIR JRF & NET Life Sciences 2017, and CSIR SRF & NET Life Sciences 2021. Her interest deals with molecular biology, metabolic disorders, cancer biology, biotechnology, genetic engineering, environmental biotechnology, etc. She has published over 30 scientific articles and has a good track record of scientific writing, publications, teaching, and biotechnology experiments.



## Dr. Nupur Nagwekar

**Subject expert of Plant Physiology**

**Years of teaching experience: 9+ years**

**Certifications: UGC-CSIR NET (2013), Nexus: Preincubation Program (10 week residential training for entrepreneurs) in 2017, The Science of Pulse Processing: Training Program in 2025, 'Python' certification course by Log2Base2 in 2026**

**No. of publications: 2 research papers as 1st author**

Dr. Nupur Nagwekar cleared the CSIR NET exam in 2013. She completed her Ph.D. in Biotechnology from Institute of Chemical Technology, Mumbai, in 2019. She has been associated with Biotecnika as a faculty from 2019 and is an R&D consultant in the food sector with focus on dehydration and novel processing of plant based materials.



# BEYOND APT

## THE BIOTECNIKA ACADEMIC ECOSYSTEM

### CSIR NET Coaching

Full unit-wise coaching across all 13 CSIR NET Life Sciences units

### APT – Academic Professionals Training (Phase 2 + 3)

Full unit-wise coaching + Assistant Teachers Training

### PG Diploma: AI/ML & Data Science for Life Sciences

12-month industry-partnership programme with Boltzmann & Jenni AI for life scientists entering computational biology

### JRF Track

Separate advanced programme for CSIR JRF rank holders – fellowship applications, PhD admissions & early research career mentorship

### Bioinformatics Courses

Standalone courses in NGS, genomics, proteomics, and computational tools for life science research careers

# FREQUENTLY ASKED QUESTIONS

## ***Q: Do I need to have cleared CSIR NET to join APT?***

No. Phase 2 and Phase 3 of APT are open to all life science graduates regardless of exam qualification. If you are still preparing for NET, you can join the full APT package (Phase 1 + 2 + 3).

## ***Q: I cleared NET two years ago. Is APT still relevant for me?***

Absolutely. The skills taught in Phase 2 – pedagogy, EdTech, grant writing, NEP compliance, mock interviews – are relevant at every stage of an academic career. Many APT participants are experienced lecturers seeking to formalise and upgrade their teaching practice.

## ***Q: Is this a live programme or a recorded course?***

APT is primarily a live, instructor-led programme. All sessions are delivered live online. Recordings are available on LMS for revision. Phase 3 microteaching must be attended live.

## ***Q: What is the batch size?***

Each APT batch is capped at 40 participants to ensure personal attention from faculty and meaningful peer interaction during microteaching

## ***Q: Will I receive a certificate?***

Yes. Participants who complete Phase 2 and Phase 3 including all required assignments receive an APT Certificate of Completion from Biotecnika Info Labs. Participants who also complete Phase 1 receive an additional CSIR NET Coaching Completion Certificate.

## ***Q: I am a working professional. Can I manage the schedule?***

APT batches are designed for working professionals and full-time students. Live sessions are held on weekdays, in late evenings. All sessions are recorded for LMS access, so you never miss content even if you miss a live session.

## ***Q: How is APT different from a regular Faculty Development Programme (FDP)?***

Most FDPs are 3–5 day workshops organised by individual colleges. APT is a 128-hour structured programme with live sessions, hands-on assignments, microteaching practice, mock interviews, and a career-focused curriculum built specifically for the Indian academic job market. It is significantly more comprehensive than a standard FDP.

# READY TO BECOME THE PROFESSOR YOUR STUDENTS DESERVE ?

APT is more than a training programme. It is the professional foundation for a life in academia.



Seats are limited to 40 per batch. Early registration is strongly advised.

Apply Online

 [apt.biotechnika.org](http://apt.biotechnika.org)

## For queries:



### Contact Us

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