

## CSIR Integrated Skill India Initiative

### Training Programme in Advanced Plant Tissue Culture

#### Course Code: IICB-SDP-PTC-1

CSIR-IICB, Kolkata proposes a training course in advanced plant tissue culture to generate human resources that are employment-ready for the requirements of modern plant and agriculture departments in various educational and research institutions. This training will also propose value addition by providing customized assistance to the probable start-ups to set up their tissue culture facility and integrate with plant science departments in creating much-needed tissue culture based and genetically transformed plant growth and maintenance. This programme envisages development of a long-term relationship between CSIR-IICB and attending trainees. This will lead to a sustained flow of advanced information and training from IICB to various new start-ups or industries interested in establishment of their own plant tissue culture labs in the form of trained personnel who would draw on IICB's solid experience in plant tissue culture and modern plant biology. The program targets to students and employees from government labs/ Institutes, Universities, Tissue Banks, Industries, to setting up a fully functional plant tissue culture laboratory after personnel have been trained.

<b>No. of seats</b>	:	12 Nos.
	:	
<b>Education Qualifications</b>	:	B.Sc., B.Tech., M.Sc., M.Tech , PhD.
<b>Venue of the Course</b>	:	<b>CSIR-IICB, Kolkata</b>

#### Training Curriculum for Course:

##### Theory and Practical classes will comprise most and other related topics below:

Good plant tissue culture practice, including safety procedures, control of facilities, equipment, reagents, phytohormones • Principals of aseptic technique -Working in a Class II safety cabinet

- Media preparation
- Culture types, Micropropagation, callus & cell culture maintenance

Agrobacterium mediated genetic transformation of plants, Introduction to modern advances in plant tissue culture.

**Faculty:** Scientists from the department and reputed institutes will teach the theory and practical classes for the enrolled students.

**Selection Procedure:** The selection will be purely based on merit and reservation of seats as per GOI rules. The list of shortlisted candidates will be listed in the website. The selection of sponsored candidates will be done separately.

**Sponsorship:** Industries, non-profit making social organizations, universities, colleges, state and central Government, organizations, Industries are welcome to sponsor candidates of their interest.

**Methods of Teaching:** The theory classes will be taught in English. Both marker boards and power point presentations (Projector) are available for theory classes. Practicals will be demonstrated in the laboratories.

**Salient Features of the Course** 30% theory will reinforce Tissue culture Principles central to advanced tissue culture and 70% practical sessions will introduce instrumental techniques for plant tissue culture. Lectures assisted with Modernized teaching tools, Interactive sessions, group discussions and assignment based monitoring. Hands -on training at the state-of-the-art instrumentation facility

#### **Evaluation of Students:**

All the students will be continuously evaluated by,  
Theory Course

- a. Weekly assignments, class tests etc.
- b. One final examination

Practical Course

- a. Monthly assignments
- b. Practical Monthly examinations
- c. One final examination

#### **Certification**

**A certificate will be issued on successful completion of the course.**