5-Days National Workshop

on



"In Vitro Regeneration and Genetic Transformation of Crop Plants" 19-23 December 2022

organized by

School of Biotechnology, Gautam Buddha University Greater NOIDA, Gautam Budh Nagar, Uttar Pradesh

Aim: The aim of this workshop is to highlight the importance of plant tissue culture, and also to equip the participants with advanced theoretical and practical knowledge in the field of plant biotechnology.

Who should attend: The workshop is open to the UG & PG degree students, and research scholars from interdisciplinary departments (All Streams of Life Sciences & Biotechnology).

Number of participants: 20 (First come first served basis) Registration Fees: Rs. 5000/- (Includes Registration kit, Laboratory expenses, Working lunch, Tea & Snacks)

Workshop Coordinators:



Dr. Gunjan Garg



Dr. Bhupendra Chaudhary

Workshop Sessions: This workshop will cover orientation lectures along with hands-on experience in a variety of plant tissue culture techniques and genetic transformation methods. (See the detailed program schedule overleaf)

Registration: The registration fee of Rs.5,000/- should be paid through net banking to Punjab National Bank, Gautam Buddha University Branch, Greater Noida (U.P.) A/C No. 666000010000025 (IFS Code : PUNB0666000); or through Paytm to 9971550785 before the last date of application. Accommodation can be arranged for the outstation candidates upon request on payment basis @Rs.300/person/day at boys/girls' hostels.

Last Date to Apply: <u>30th November 2022</u> (Selected applicants will intimated by email on 5th December 2022)

About the University: Gautam Buddha University is an Uttar Pradesh state government university. University campus is spread over 511 acres lush green campus at Greater Noida and is recognized by the UGC under UGC Act, and is a member of the Association of Indian Universities. The University is modeled as a fully residential educational campus in line with the best institutions of higher learning across the globe. The uniqueness of its reputation is acknowledged through the format, content and pedagogy of its programs and their relevance to the society.

Apply Here : <u>https://forms.gle/ySR2LnaX5Jg5KJBy6</u>



PROGRM SCHEDULE



National Workshop

on

"In Vitro Regeneration and Genetic Transformation of Crop Plants" 19-23 December 2022

Days	Lectures (11-1pm)	Hands-on-Excercises (2.30-5.30pm)
Day 1	Speaker 1 Basics Concepts of Plant Tissue Culture	i. Seed surface sterilization for in vitro germinationii. Preparation of MS Culture Medium for <i>in vitro</i> Explants Culture
Day 2	Speaker 2 <i>In vitro</i> regeneration in plants	 i. <i>In vitro</i> plantlet regeneration from nodal segments and shoot tips of tobacco ii. Direct shoot organogenesis from leaf explants of tobacco
Day 3	Speaker 3 Cloning of gene of interest and its transfer to the plant cell	i. Development of binary vector having plant selection marker gene and 'gene of interest'ii, <i>Agrobacterium</i>-mediated genetic transformation of tobacco leaf explants
Day 4	Speaker 4 Molecular analysis of putative transgenic plants	i. Agrobacterium-mediated genetic transformation of tobacco leaf explants (continued)ii. Detection of the presence and copy number of transgene in putative transgenic lines
Day 5	Speaker 5 Analysis of gene expression in transgenic plants	Real-Time PCR based relative gene expression analysis of transgene in transgenic lines

<u>Enquiries</u>:

bhupendra@gbu.ac.in; gunjangarg@gbu.ac.in 9971550785; 9717968020