COMMITTEES

Chief Patron
Dr. D. Karthikeyan, IAS.,
Convener, Vice Chancellor Committee

Patron
Prof. Dr. F.X. Lovelina Little Flower
Member, Vice-Chancellor Committee

Patron
Dr. C.A. Vasuki
Member, Vice Chancellor Committee

Patron
Prof. Dr. K. Murugavel
Registrar (i/c)

Convener
Dr. J. Angayarkanni
Professor and Head, Dept. of Microbial Biotechnology

Organizing Secretary
Dr. G. Kapildev
Assistant Professor, Dept. of Microbial Biotechnology

Organizing Members
Dr. V. Brindha Priyadarisini, Dr. K. Preethi, Dr. M. Gnanadesigan, Dr. V.S. Gnanambal, Dr. Sentila Rajan

ELIGIBILITY

Entry level Research scholars, Assistant professors, persons working in relevant industries.

No. of Participants: 15 members.

COURSE FEE

Course Fee: Rs.1,500/- for entry level Research scholars, Rs.2000/- for Assistant professors & persons working in relevant industries. Course fee includes training material and working lunch. Accommodation can be arranged for outstation candidates upon request and on payment basis.

HOW TO APPLY

Duly filled in application form along with a Payment Details should reach the Organizing secretary, "Biogalaxia- PTCGET 2023", Department of Microbial Biotechnology, Bharathiar University, Coimbatore -641046.

https://forms.gle/K4j7Tg6ubmvwYpV6A

BANK DETAILS

Name of Account	:	**Dr. G. Kapildev** Organizing Secretary
Account No	:	822610210000052
IFSC Code	:	BKID0008226
Bank	:	Bank of India
Branch	:	Bharathiar University, Coimbatore - 46

Registration fee can be remitted to the following account via NEFT / RTGS / Online Transfer

CONTACT

For any further clarification please contact
Dr. G. KAPILDEV, Organizing secretary
"Biogalaxia- PTCGET 2023",
Ph. No: 63810 04072, biogalaxiambt@gmail.com
Ms.B.Santhanalakshmi - 99941 65196 &
Mr. Manojkumar. S - 99656 45493
Translational Plant Research Lab (TPRL)
Department of Microbial Biotechnology
Bharathiar University, Coimbatore - 641046
www.bu.ac.in

DEPARTMENT OF MICROBIAL BIOTECHNOLOGY

BHARATHIAR UNIVERSITY, COIMBATORE - 641 046

BIOGALAXY

Seven days
National workshop on

PLANT TISSUE CULTURE AND GENETIC ENGINEERING TECHNIQUES (PTCGET-2023)

14th to 21st March, 2023

Biogalaxia 2023

About the University

Bharathiar University was established at Coimbatore by the Government of Tamil Nadu in February 1982 under the provision of BU Act, 1981(act 1 of 1982) after the name of the great national poet **Subramania Bharathi**, situated in a picturesque and serene landscape at the foot Maruthamalai hills, 15 Km away from Coimbatore city. Enshrined with the motto **"Educate to Elevate",** the University strives to realize the vision of India and excel in promoting and protecting the rich heritage of our past and secular ideals of the nation. The campus encompasses 39 departments with well-established library and internet facilities. Based on the academic achievements of the university, DST has provided funds under PURSE with which a central Instrumentation facility is under erection.

About the Department

The Department of Microbial Biotechnology was started in the academic year 2008 as a component of School of Biotechnology and Genetic Engineering. The department conducts M.Phil, Ph.D program and offers M.Sc., program in Microbiology. The Department has well established laboratories for conducting research in Cancer therapeutics, Clinical Biotechnology, Bio pharmacy, Translational plant research and Natural products research. The department receives funds for research projects from DST, DBT, CSIR, UGC, ICMR, TNSCST and DRDO. The decade long achievements of the Department has secured financial assistance from DST-FIST and RUSA. In addition to that the Department is also involved in consultancy services for water quality analysis and antimicrobial testing, project training is also provided for students in four different modules i.e, Biochemical and Molecular Identification of Bacterial Culture, Cloning Techniques, Downstream Processing Techniques and Plant tissue culture.

About the BIOGALAXY

The department is actively engaged in research, teaching and extension activities. BIOGALAXY, the students and scholars driven network of department of Microbial Biotechnology was instituted in 2008 under the supervision of faculty members. Several extension activities includes Blood donation camp, preparation of Blood donors data base, Nursery production of landscape plants for Tree planting, awareness camps etc. To disseminate the new ideas and innovations in science research, National level Workshop/Conference has been conducted every year as "BIOGALAXIA".

Objective:

The objective of the course is to provide basic and applied hands on training in plant tissue culture for development of skills for a successful career in entrepreneurship, generate technically trained human resource for tissue culture industries, R&D and as instructors in academics. To develop trained manpower in the area of plant genetic engineering techniques for the crop and medicinal plants improvement and also equip them with advanced theoretical and hands on practical knowledge.

Main Theme:

Plant tissue culture is a practice used to propagate plants under sterile conditions, often to produce clones of a plant. The biotechnological methods such as plant cell culture, somatic embryogenesis, cryo-preservation are quite applicable and useful for the conservation and sustainable utilization of forest resources.

The theme of the workshop is the applications of plant tissue culture in clonal propagation of forest tree species and conservation of rare and endangered plants. The workshop includes specialized techniques for direct and indirect organogenesis, somatic embryogenesis, micropropagation for large scale multiplication of plants, and cryopreservation of plant cell cultures.

Relevance in the national context:

Plant tissue culture has developed widely incorporated into biotechnology, the agricultural systems being a key factor to support many pharmaceutical and industrial outcomes. Since 1902 there is vast progress in plant culture and its application has emerged having great diversity in the science filed. Due to development and desire to grow on high scale production in the past few decades, tissue culture techniques were manipulated for improvement of plant growth, biological activities, transformation, and secondary metabolites production. A significant advance in techniques has been sought to deal with problems of low concentrations of secondary metabolites in whole plants. The augmented use of plant culture is due to a superior perceptive of plant oriented compounds and secondary metabolites from economically important plants. Due to development in modern techniques, several particular protocols have been developed for the production of a wide array of secondary metabolites of plants on a commercial scale. Plant tissue culture has to lead to significant contributions in recent times and today they constitute an indispensable tool in the advancement of agricultural sciences and modern agriculture.

Course content:

Course will cover orientation lectures along with hands-on experience in "Plant tissue culture and genetic engineering techniques" (Direct organogenesis, Indirect organogenesis, *A. rhizogenes* mediated root culture, *A. tumefaciens* mediated gene transfer & Agroinfiltration) and molecular techniques (Plant Genomic DNA isolation by CTAB method, Plasmid DNA isolation, restriction digestion, and transgene detection through PCR, Southern hybridization. observation of GUS and GFP gene expression)

IMPORTANT DATES

Last date for Registration : 8/03/2023

Announcement for selection of participants : 9/03/2023