



Workshop on

Molecular Microbial Systematics:

Experiencing the importance of Preserving Microbial diversity through Polyphasic Approach

March 6-8, 2019

Organized by

CSIR-CENTRAL LEATHER RESEARCH INSTITUTE

Adyar, Chennai 600 020.

and

Sponsored by

MINISTRY OF ENVIRONMENT AND FOREST (MoEF)

Government of India



About CSIR-CLRI

The CSIR-Central Leather Research Institute (CSIR-CLRI), a central hub in Indian leather sector with direct roles in education, research, training, testing, designing, forecasting, planning, environmental technologies, social empowerment and leading in science and technology related to leather.

In addition, CSIR-CLRI is involved in research and development related to Significant areas of Biotechnology such as Microbial isolation for enzymes with desired traits, enzyme characterization, molecular biology for enhanced expressions.



About the workshop

Microorganisms have the largest genetic diversity on earth, billions of species of bacteria are suspected to exist, however only 1-5% of them are characterized. This workshop will be useful for the participants to enumerate the heterogeneity of microbes in various adverse environment by both culture dependent and culture independent approaches. It will be helpful for the participants to learn various methods and techniques involved in studying microbial diversity through identification of organism using various molecular tools. The assigned lectures will be useful for the participants for their further research and career.

Course modules

Following methods and techniques will be demonstrated:

Module 1: Culture dependent microbial diversity

Module 2: Isolation of DNA and amplification of 16S rRNA gene

Module 3: DNA sequencing

Module 4: Sequence analysis and phylogeny

Identification of bacterial strains, primer designing, analysis of 16S rRNA submission of sequences to GenBank, Construction of phylogenetic tree.

Highlights

- Molecular identification of microbes
- Chemotaxonomic analysis
- 16S rRNA sequencing and phylogenetic tree construction
- DNA G+C content

About the Department

Biotechnology in CLRI has taken a definite shape after the formation of the Department in 1990. The focus is in the area of enzyme technology towards development of potent enzymes by cost effective methods for its application in leather and allied industries. Our research at the interface of chemistry and biology is intended towards the generation of novel generic classes of proteins using synthetic chemistry, bio-computing and target-engineered metabolic circuits.





Laboratory & Facilities

Department of Biotechnology, CSIR-CLRI, Chennai is well equipped with specialized facilities like: Gradient PCR machine, Gel doc, DNA sequencer, Microplate reader, UV- Visible spectrophotometer, Refrigerated centrifuges, Fermenter, Deep freezer (-80°C), Gel electrophoresis system, Lyophilizer, Fluorescence microscope, Autoclave, High- performance liquid chromatography.

Who can participate?

Researchers pursuing Ph.D., early career Scientists and Faculty members working in the area of microbial diversity and taxonomy. Maximum 12 to 15 participants will be selected based on their research interest. Participants have to send the details (Hand written / Typed) with their name, designation and contact details along with a short note (100 to 150 words) on how the workshop will benefit their research in future and details could be forwarded to : clriworkshop@gmail.com

Applications should be submitted on or before 26th February 2019.

No Registration Fee

Accommodation (sharing basis and based on the availability) and Working Lunch will be provided.

PATRON

Dr. B CHANDRASEKARAN

Director

CSIR-Central Leather Research Institute

For any queries regarding this workshop, please contact

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