

# BHARATHIAR UNIVERSITY: COIMBATORE Centre for University & Industry Collaboration (BU-CUIC)

**Offers Industry Collaborative Programme** 

CERTIFICATE COURSE ON "ADVANCE MOLECULAR DIAGNOSTICS AND NABL PROTOCOL FOR GOOD LABORATORY PRACTICES"

In Collaboration with



Microbiological Laboratory Research and Services India Private Limited (MLRS), Coimbatore



#### **About Bharathiar University**

The Bharathiar University was established at Coimbatore by the Government of Tamil Nadu in February 1982 under the Bharathiar University Act, 1981 (Act 1 of 1982). The University has 39 Departments, offering 54 post-graduate programs besides offering M.Phil. and Ph.D. programs. The University is an affiliating University. The jurisdiction of the University covers the districts of Coimbatore, Erode, Tirupur, and The Nilgiris with 135 affiliated colleges. The National Assessment and Accreditation Council have accredited the University with an 'A' Grade and ranked 14th among the Indian Universities by MoE and NIRF.

#### About BU-CUIC

Bharathiar University Centre for University and Industry Collaboration (BU-CUIC) was established as per the announcement in the Floor of Assembly, Government of Tamil Nadu order no. 5595/H2/2020-1 dated 17.04.2020, and includes the regulations given by the UGC letter no. D.O.No.F.1-14/2015/(CCP-II) dated 29.09.2015 in XII five-year plan. The primary motto of the centre is to bring the industry collaboration for training, soft skill development, student and faculty exchange for research, and consultancy and inviting industries for students' placement. In addition to the above, the centre will offer job oriented / Industry relevant and skill oriented courses for enhancing the employability of the students, scholars and for the up gradation of the employees in the industry. The courses will be offered by the centre in collaboration of expertise Industries and sector skills in the fields of Health / Hospitality / Service Sectors / Government and other need-based sectors.

#### **General Instructions to the students**

Interested students are invited to apply the course. Before applying the course, please read the course content, eligibility, career opportunities, special skill will be taught, programme highlights and course fee. Download the application and send the filled in application with necessary enclosures to the below address on or before 30.05.2022.

Director BU-CUIC, Bharathiar University Marudhamalai Road, Coimbatore-46 For University contact: 0422-2428239, bucuic2020@buc.edu.in

#### About the Industry:

Microbiological Laboratory Research and Services India Pvt. Ltd. (MLRS) was started <u>by former</u> with the objective of commercial production of high quality ready-touse microbiological culture media for clinical and industrial use and providing training in research & diagnostic microbiology.

MLRS has jointly developed a novel automated Antibiotic Sensitivity Testing patented technology - **MLRS-STaTAST**<sup>®</sup> with Anna University. MLRS-STaTAST<sup>®</sup> is quicker and affordable than the current automated <u>and</u> manual methods and is being used by several leading clinical laboratories and hospitals.

MLRS is also involved in the development of molecular methods for rapid and accurate identification and clinical diagnosis of microorganisms from clinical samples. MLRS also carries out contract research and validation services for different molecular diagnostic kits and kits manufacturers.

MLRS has collaborated with Bharathiar University (BU), Coimbatore under industry integrated programme. BU is a State University and accredited by NAAC with "A" Grade and ranked 14<sup>h</sup> among Indian Universities by MoE-NIRF, <u>This course is designed in such a way to deliver</u> a first-of-its-kind Certificate Program on "Advance Molecular Diagnostics and NABL Protocol for Good Laboratory Practices".

#### **Program Highlights:**

- This comprehensive Certification Course of 6 months is designed to address the growing needs for highly skilled clinical laboratory technologists in Molecular Methods for the diagnosis of diseases.
- This practical intensive curriculum is delivered through Experts of the industry, lectures by inviting the renowned faculty of **Department of Biotechnology**,

**Bharathiar University** and **Hands-on training of Diagnostic Assays** performed on sophisticated equipment(s) by Subject Matter Experts at MLRS.

- The regular theory and practical classes will be supplemented by expert lectures, Seminars, case studies by Industry Experts in the laboratory.
- Experiential Learning at MLRS and case studies conducted by Subject Experts will help students gain knowledge on Molecular Diagnosis in Healthcare Sector.
- Internship and Interview Opportunities will be provided for candidates on successful completion of the course.

## **Best-In-Class Curriculum:**

During the program, the students will have in-depth lecture sessions in Molecular Diagnostics of diseases and the practical sessions will train the students in methods of:

- a) Collection of clinical samples
- b) Nucleic acid extraction procedures and its preservation
- c) PCR Amplification techniques including qualitative and quantitative/realtime PCR techniques
- d) Validation of primers and other reagents used for PCR
- e) Quality control systems
- f) Next-Generation Sequencing
- g) Data analysis & troubleshooting
- h) Developing Standard Operating Protocols (SOP) for a molecular diagnostic laboratory
- i) Basic methods of documentation and other protocols for NABLaccreditation for a molecular diagnostic facility.
- j) Maintaining Daily Log book for the practical work done during the course

### **Career Opportunities:**

• This Certificate Course by MLRS & BU (Centre for University & Industry Collaboration) offers students a complete practical exposure in various disciplines, much before they are recruited by any clinical laboratory.

- MLRS also has an MoU with Microbiological Laboratory, Coimbatore a leading NABL accredited clinical laboratory in India for providing internship and interview opportunities for recruitment.
- Enroll today and pave the way for a bright career in the stream of your choice in Clinical laboratory & Hospitals and Biotech & Pharma companies as Technical, Quality Control and Research Staffs\*.

**Disclaimer -** \*Roles and Responsibilities is based on the qualification degree (B.Sc./M.Sc. etc..) of the candidate and the recruitment policies and requirement of the organization.

## **Key Differentiators:**

- <u>This course is</u> One-of-its-kind AND Bharathiar University approved 6 months' Certificate program under Centre for University & Industry Collaboration for students of life sciences and other allied sciences in India.
- Experienced faculty from MLRS and Department of Biotechnology, Bharathiar University and other eminent resource persons.
- Hands-on training using various Mainstream Advance Clinical Sample Processing platforms
- Industry-relevant Training
- Workshops and Case Studies for improving workplace confidence
- Expert guidance and mentorship
- Demonstration of <u>latest</u> Instruments
- Certification by Bharathiar University on successful completion of examinations
- Job-ready skill training with 100% guaranteed interview opportunities.

## **Eligibility:**

- B.Sc./M.Sc. (Microbiology, Biochemistry, Molecular Biology and Allied Sciences)
- B.Tech./M.Tech. (Biotechnology and Allied Sciences)
- MBBS/MD
- Candidates working in a clinical laboratory, hospital, academic/ research institution, pharmaceutical, and food industry, with an interest in Molecular Diagnosis of Diseases.

# **Course Director In Bharathiar University**

Prof. A. Vimala, MBA, Ph.D

**Coordinating Department in the University** 

Department of Biotechnology

## **Course Director in MLRS:**

Dr K.N. Bramhadathan, Ph.D.

Technical Director, MLRS

- Former Professor and Head Dept. of Microbiology, Christian Medical College, Vellore
- More than 35 years of Teaching and Diagnostic experience
- Completed Several National and International Research projects with over 80 research publications in High-impact journals and filed several Patents

# **Course Coordinator in MLRS:**

Dr Rohit Radhakrishnan M.Tech., MBA., M.Sc., PGDIPR., Ph.D. Research Scientist, MLRS

- Developed and commercialized a Novel Antibiotic Sensitivity Testing Technology – MLRS-STaTAST
- Won awards at Nanotech Europe TU Berlin, CAHOTECH IIT, Madras and Velammal Healthcare Innovator Award - Velammal Hospital, Madurai.
- Several Research Publications in High-Impact Journals and filed 2 Indian Patents.

## **Important Details:**

Course duration:	CERTIFICATE COURSE
	6 Months
Registration:	Bi-ANNUAL (Through Bharathiar University website/ Application)
Course Dates:	Batches : June- November : December - May
Seats Available:	15 Seats
Course Fee:	₹ 99,000 (Rupees Ninety-Nine Thousand Only)
	Payment through online mode- <b>AC No</b> . 822610110002100,

IFSC Code: BKID0008226, Name of the Bank: Bank of India ,
Branch: Bharathiar University / DD in favour of Registrar,
Bharathiar University. Admission fee also applicable.
Last date for sending application: 30.05.2022