## One-day workshop on Bioinstrumentation 26th August, 2015

## **REGISTRATION FORM**

Title

Name

Designation

Institution

Institutional Address (Telephone, E-mail)

Residential Address (Telephone)

Contact Phone No.

E-mail ID

Name of the Research guide

Registration fee enclosed: Yes / No If Yes.

> DD No./ Receipt No. Name of Bank & Branch : Date

Amount

Date: Place:

Signature of the participant

## RGANIZING COMMITTEE

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Organizing Secretary Dr. M. NALINI PADMANABHAN

Assistant Professor Department of Biotechnology Karpagam Academy of Higher Education

This workshop will enable students to understand the principles of various instruments used in biology laboratories and effectively use them in systematic manner to produce consistent experimental data.

Dr. M. Nalini Padmanabhan **Organizing Secretary** 

Department of Biotechnology, Karpagam Academy of Higher Education, Pollachi Main Road, Eachanari (Post), Coimbatore-641021. E-mail: madannalini@gmail.com

Phone: +91-9176424990.

Commission, New Delhi by the Ministry of Human Resources under Section 3 of UGC Act 1956, of University Grants Karpagam Academy of Higher Education is established

26th August, 2015



Organized by

Department of Biotechnology

in association with

Labmate (Asia), Chennai

KARPAGAM ACADEMY OF HIGHER EDUCATION

(Established Under Section 3 of UGC Act 1956) Pollachi Main Road, Eachanari Post, Coimbatore - 641021. Phone: 0422-6453777, 6471113-5; Fax: 0422-2611043

Web: www.kahedu.edu.in

Development of India, New Delhi. Karpagam Arts and Science College (Autonomous) was evolved into Karpagam Academy of Higher Education in the year 2008 for the purpose of conferment of Deemed to be University status by Ministry of Human Resource Development vide its order No. F.9.24/2004. U.3 (A) dated

Blending of quality education, industry and heritage is the main focus of the Academy. The University is taking a number of steps to promote higher education and research in this region. There are 29 departments and 79 programs in the Academy. Extensive Ph.D. program, Karpagam Acaemy of Higher Education - Industry Partnership, Entrepreneur Development Cell, Ashreya, a counseling cell and Innovation Incubator are the special features of the

Be it Arts or Science, Commerce or Management, Humanities or Engineering, we ensure that our education epitomizes excellence in every sphere. Steered by the dynamic spirit of our Chancellor, Dr. R. Vasanthakumar - eminent industrialist and philanthropist and the extensive experience of Shri. K. Murugaiah, Chief Executive Officer, Dr. S. Subramanian, Vice-Chancellor and Dr. G. Sekar, Registrar, our Academy will continue to initiate the emergence of excellence.

## The Department

The Department of Biotechnology at Karpagam Academy of Higher Education is a center for excellence in research. Biotechnology is "the commercial application of living organisms or their products, which involves the deliberate manipulation of their DNA molecules." This implies a set of laboratory techniques developed within the last 20 years that have been responsible for the tremendous scientific and commercial interest in biotechnology, the rise of many new companies, and the redirection of research efforts and financial resources among established companies and universities. The Department was started in 2001 and has consistently delivered 100% results. More than 100 students were placed in various companies during the last 3 years through our placement cell. The Department holds to its credit 6 students as entrepreneurs. Students of Biotechnology have received many awards from various Scientific Associations.

### demics

Department oners 3 year UG degree and a 2 year PG degree in schnology. Emphasis is laid on the latest advancements in the

### **Facilities**

The Department has a well furnished Microbiology lab, Plant Tissue culture lab, Animal Cell culture lab and Instrumentation lab. Walkin cold room, walk-in incubators, computer lab, and instrumentation lab with sophisticated instruments like HPLC, GC, Gel Documentation Unit, FTIR, PCR, RT-PCR, ELISA, Fermentor, Lyophilizer. Fluorescence microscope, Spectrophotometer, animal house facility etc., are available for teaching and research activities.

### Workshop

Bioinstrumentation will provide an insight for students about the usage of various instruments in a sophisticated laboratory. This program will enable the individuals / students to handle different instruments as well as effective utilization of the same for various experimental techniques to present a qualitative data.

## Objectives of the workshop:

- 1. To enable in understanding the importance of handling various instruments and use it in an effective manner for experimental purposes.
- To provide information on the principle and methodology of using the instruments for analysis of biomolecules in determination of their characteristics.
- To foster the exchange of knowledge and experience among academicians, researchers and professionals. This could enhance the rapid and accurate methods of producing experimental data thus facilitating production of more quality research and development.

The One day Workshop will be held at the Department of Biotechnology, Karpagam University, Eachanari-Post, Pollachi Main Road, Coimbatore - 641 021, which is about 10 km from Coimbatore Railway station, on Coimbatore - Pollachi main road.

### PARTICIPANTS

Students undergoing B.Sc./M.Sc./M.Phil./Ph.D. in Botany / Zoology / Microbiology / Biochemistry / Biotechnology degree from recognized institutions.

## MEGISTRATION HEE

## **Participants**

Faculty, Research Scholars, Undergraduate / Post graduate students | Rs. 300/-

The participants can pay their registration fee through a crossed bank draft drawn in favor of "Karpagam University", payable at Coimbatore and shall send the same along with the duly filled registration form on or prior to 24th

## Dr. M. Nalini Padmanabhan **Organizing Secretary**

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\*Spot registration will be accepted only if prior intimation is made through email.

# Workshop Schedule

From	To	Activity
09.00 h	09.30	Registration
10.00	10.30	
10.30	11.00	Lecture - Labsafe, Minilys, Orbital Shaker
11.00	11.15	Magnetic stirrer, Colibri Refreshments
11.15	12.00	Observing the displayed instruments
12.00	13.00	Preparation of samples for analyses
13.00	13.45	Lunch
13.45	14.30	Lecture on Compound M.
14.30	15.30	Lecture on Compound Microscope - PrimoStar Results & analysis
15.30	15.45	Tea break
15.45	16.30h	Discussions & Feedback

## Report

# One-day Workshop on BIOINSTRUMENTATION

Department of Biotechnology, KAHE in association with Labmate(Asia) Chennai, conducted a workshop on *Bioinstrumentation* on August 26, 2015. There were 120 participants of which 93 were registered participants. The registered participants included two faculty members from Govt. Arts & Sciences College, one from Sree Narayana Guru College (SNGC) and one from Nehru Arts & Science College, Coimbatore, and students at UG/PG levels from PSGR Krishnammal College for Women, SNGC, Hindusthan College of Arts & Sciences, Coimbatore and the rest from various departments of KAHE.

The Director Shri. Thiagarajan, a marketing professional and one technical person from Labmate one technical person from Carl Zeiss were present. The following instruments

- a) Minilys Tissue Homogenizer (Bead Beater) from Bertin Technologies, France
- b) Labsafe Safety Aspiration Device
- c) Colibri Micro-volume Spectrophotometer Berthold, Germany
- d) Orbital Shaker from Hoefer, USA
- e) Magnetic Stirrer 2 mag, Germany
- f) Binocular Compound Microscope Model PrimoStar Carl Zeiss, Germany were displayed in the UG lab (I Floor). The forenoon session included of an one hour power point presentation on details on working principle of the instruments by the Director, Labmate. Subsequently demonstration of instruments such as Minilys a flexible compact, personal bench top homogenizer, Lab safe- a safe aspiration system for cell culture labs to collect spent media, an orbital shaker, magnetic stirrer, Colibri microvolume spectrophotometer and Light Microscope attached with phase (Carl Zeiss) was done by the technical persons. Overall the workshop was very much informative to all UG and PG students and was able to understand handling of instruments; the feedback given by the participants. Thus, this workshop served to be an informative platform for students undertaking the classes on Bioinstrumentation as core paper in their course.