# **REGISTRATION FORM**

Name:	
Designation:	
College:	
Contact no:	
Email-id:	

# Registration fee: Rs.500/-

Registration and sponsorship payments available through SBI collect and by Cheque/DD made in favour of "Mahatma Gandhi Mission's College of Engineering and Technology" payable at Navi-Mumbai.

# For further queries and confirming the registration contact:

Jyothi Warrier, Convener, NW ABDR-2018 M: 9920239479
Nishant Patil, Secretary, NWABDR-2018 M: 8369137667
Parvathy Krishna, Treasurer, NWABDR-2018 M: 9920711965

Email: mamcet.biomed@amail.com

Note: 1. Outstation participants have to make their own arrangements for accommodation.

- 2. Registration on first come first serve basis.
- 3. Last Date of Registration is 6th April 2018.

# **Chief Patron**

Shri. Kamal K. Kadam Chairman, Mahatma Gandhi Mission &

Former Education Minister, Govt. of Maharashtra

# **Patrons**

Dr. Sudhir N. Kadam Vice Chancellor, MGM Institute of Health

Sciences (MGMIHS)

Dr. Nitin N. Kadam Managing Trustee, MGM Trust
Dr. K. G. Narayankhedkar Director General, MGM Group of

**Engineering Colleges** 

Dr. S. K. Narayankhedkar Principal, MGM's College of Engineering

&Technology (MGMCET)

# **Advisory Committee**

Dr. Sandhya Agarwal
Dr. G.D. Jindal
HOD, BME & BT Department
Professor, BME, MGMCET
Mr. U.R. Bagal
Asst. Professor, BME, MGMCET
Dr. Kshipra Deshmukh
Dr. Niranjan Khambete
HOD, BME & BT Department
Professor, BME, MGMCET
Asst. Professor, BT, MGMCET
Secretary, BMESI &

Manager, Clinical Engineering, Deenanath Mangeshkar Hospital &

Research Centre

G. Muralidhar Bairy Jt. Secretary, BMESI & Asso. Prof., BME, MIT, Manipal

Resource Persons

Dr. Amiya R. Bhowmick Asst. Professor, Mathematics Dept, ICT,

Mumbai.

Ms. Jyoti Jethe Research scholar, BME, MGMCET

 ${\bf Organizing}\ Committee$ 

Priyanka Jadhwar

Shashikant Rathod

Jyothi Warrier Asst. Prof. , BME, MGMCET &

Convener, NWABDR

Sandeep Singh Asst. Prof., BT, MGMCET &

Co-Convener, NWABDR Asst. Prof., BME, MGMCET &

Nishant Patil Asst. Prof. , BME, MGMCET & Secretary, NWABDR

Asst. Prof., BME, MGMCET &

Jt. Secretary, NWABDR
Parvathy Krishna Asst. Prof., BT, MGMCET

Asst. Prof. , BT, MGMCET Treasurer, NWABDR

Preeti Athavale Asst. Prof. , BME, MGMCET

Member, NWABDR

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Member, NWABDR Asst. Prof. , BT, MGMCET

Shweta Choudhari Asst. Prof., BT, MGMCET
Member, NWABDR
Akanksha Rajpoot Asst. Prof., BT, MGMCET

Member, NWABDR

Ashwini Tidke Asst. Prof. , BME, MGMCET

Member, NWABDR Asst. Prof. , BME, MGMCET

Member, NWABDR Arbacheena Bora Asst. Prof. , BME, MGMCET

Member, NWABDR



# NWABDR 2018



# MGMCET Department of Bio-Medical Engineering (BME) & Biotechnology (BT) in association with Bio-Medical Engineering Society of India (BMESI) Organizes

# NATIONAL WORKSHOP ON ANALYSIS OF BIOLOGICAL DATA USING R-STUDIO

08TH APRIL 2018 & 15TH APRIL 2018

# **NWABDR-2018**

Mahatma Gandhi Mission's College of Engineering and Technology,

Department of Bio-Medical Engineering

& Biotechnology

Plot no 1, Sector 18, Kamothe,

Navi Mumbai – 410209.

# About the College and the Department

MGM's College of Engineering &Technology was established in 1986 by Hon. Shri Kamal Kishore Kadam (M.Tech., IIT-Mumbai, Ex-Minister of Education, Maharashtra) with a futuristic vision to provide qualitative education by applying innovative and dynamic techniques. This ISO 9001-2000 certified college is affiliated to University of Mumbai and approved by AICTE, New Delhi.

Bio-Medical Engineering department has been running Undergraduate courses since 1986. It has been often getting RANK in University of Mumbai. Bio-Medical Engineering department has been running Postgraduate courses and PhD program since 2000 and 2016 respectively. Sixty PG projects in 24 research area have led to good number of publications.

A total of 1395 students have araduated in past 25 years. Getting placement in Campus interview in reputed companies like PHILIPS, IGATE, GE-Healthcare, Infosys and Roche Diagno. We are proud of our alumni who have been placed at the helm of prestigious firms like GE Health care, Siemens, Philips, Medtronics, Boston scientific, BTL India Pvt Ltd, AUM Meditec, Honeywell, Capaemini, Coanizant Technology, Citiustech Technology, Roche Diagnostics, AMT Dental Pvt. Ltd. etc.

Department is proud to have a healthy combination of experienced teachers and enthusiastic youngsters alike. Cardiovascular (diagnosis/monitoring), Body Composition, Tele Medicine, Blood Glucose Measurement, Nuclear Medicine, MEMS, Nano-engineered Bio-sensors, Bio-Medical Transducers, Bio-signal Processing, Body Composition, Electrical Impedance Tomography, Wavelet Processing, Hearing Aids, Respiration Analysis, Neuro-muscular (diagnosis/monitoring/prosthetics), Magnetic Stimulation, Spirometry, Planter Pressure Measurement, HRV, Bio-electric Signals, Signal Acquisition & Processing, VLSI, Tele-Medicine using Bluetooth & ZigBee, µP and μC interfacing, Image Processing, Stress Cardiograph, Embedded Systems, Transducers and Bio-sensors, Signal Acquisition & Processina, Medical Imagina, Nuclear Medicine are few of the topics to mention as expertise of our faculty. Our faculty has many technologies to their credit which are commercially in domestic international available and market.

The Department of Biotechnology was established in 2007. The department is one of its kinds imparting quality education and promoting goal-orientated interdisciplinary research by interfacing modern biology with upcoming technologies. The program is designed to train students to deal with any technological applications that use biological systems. Graduate qualification in biotechnology can lead to placements in research laboratories run by government and corporate sector. Students may focus their research work on animals, bacteria, humans, plants, viruses, Bioprocessing & Fermentation Engineering etc.. The department consists of faculty members who possess doctorate degree from eminent institutes and have a common goal to encourage students to fulfill their potential and to excel in their work. We provide hands on experience and opportunity to students to explore them in their field

### About BMESI

Biomedical Engineering society of India (BMESI) is a non-profit professional All India Organization having headquarters at Department of Biomedical Engineering, Manipal Institute of Technology, Manipal. It organizes symposia, conferences, lectures. study programs etc. covering broad areas of biomedical engineering. It establishes contacts with other learned and professional organizations, and publishes newsletters, official journals and magazines. Expert advisory panels are set and collaboration is made with pool of eminent researchers and scholars in the field of biomedical engineering throughout the country. It continuously strives to improve the standards, terminology, equipment, methods and safety practices for state of the art health care to the people.

## About Workshop

The significance of Biological data and its effective analysis is unavoidable to have a good piece of research and to make a fruitful decision. From students to scholars, individual researchers to research institutes throughout the world come across this data analysis part to carry out their research. Statistics and statistical analysis plays a crucial role in research and analysing biological data. The aim of this workshop is to provide hands on training in understanding the concepts in data science and statistical analysis using R programming which is one of the most widely used open source package in the field of Data Science across the world. This workshop will help the

participants in applying proper research methodology and improving their analysis by applying various statistical techniques using R programming.

The Scope of workshop is to cover theoretical discussion and practical exposure on the following aspects of statistical analysis using R: Introduction to R & R-Studio; Data types in R; Importing and handling data in R; Working with functions in R; Exploratory Data Analysis using R (Data Visualization); Descriptive Statistics (summary Measures) using R: Simple and Multiple Linear Regression Analysis; Resampling methods in Biology (Model selection); Discussion of some Case studies from Biology.

At the end of the workshop, participants should be able to : Get familiar with R programming language; Understand statistical analysis using R programming; Explore how to analyse research biological data using R programming; Explore how to represent biological data using basic graphs in R.

## **Hands-On Committee**

Shashikant Rathod Asst. Prof., BME, MGMCET Shweta Choudhari Asst. Prof. . BT. MGMCET Survapal Prajapati Lab Technician Nazim Momin Lab Attendant

Bhaskar V Gaikwad Lab Attendant

## **Student Committee**

Iismi Easow BE, BME, MGMCET Akhildev Devdas BE, BME, MGMCET Prajakta Mhatre TE, BME, MGMCET Siddhant Oiha TE. BT. MGMCET Shrikant Patil TE, BT, MGMCET Aneesh Moza TE. BT. MGMCET