



**DHR-ICMR**

sponsored five-day Workshop on  
**"Emerging Trends in Wearable  
 Sensors for Health Care Applications"**

27<sup>th</sup> to 31<sup>st</sup> May 2019

**REGISTRATION FORM**

Name: .....

Designation: .....

Institution with Address: .....

Address for Communication (Phone): .....

Email: .....

Registration Category: Student / Faculty / Research Scholar

(If student mention the year and branch)

DD No. & Date: .....

DD Amount in Rs: .....

Accommodation needed: Yes / No

(On Prior request accommodation will be arranged )

Date:

Place:

Signature of the Participant

Signature with seal

Head of the Institution/HOD

(Photocopy of this form can also be used)

**How to Apply**

**Payment Mode 1:** Participants are requested to fill the registration form and send both the hard copy & soft copy of the same to the Organizing Secretary along with DD to be drawn in favour of "KCG College of Technology", Chennai.

Or

**Payment Mode 2:** Snapshot and email the details of online Transaction with UTR No, Bank Name and Date to the Organizing Secretary.

Bank Account No : 526301010020010  
 Bank Name : Union Bank of India  
 Branch : SSI Guindy  
 Type of Account : CA  
 IFSC Code : UBIN0552631  
 Account name : KCG College of Technology.

**Registration Fee**

Academicians / Research Scholars Rs.1500/-

Students UG / PG Rs.1000/-

**Contact**

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**Address:**

**KCG COLLEGE OF TECHNOLOGY**

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 Chennai - 600097.

Phone : 044 - 28389001 / 9003871717

www.kcgcollege.ac.in



**KCG**

**COLLEGE OF TECHNOLOGY**

( A Unit of Hindustan Group of Institutions )

A Christian Minority Institution

Affiliated to Anna University and Approved by AICTE, New Delhi

An ISO 9001 - 2015 Certified Institution and Accredited by NBA



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Organized by

Department of Electrical and Electronics Engineering

**About KCG College of Technology**

KCG College of Technology (a unit of Hindustan Group of Institutions) was found in 1998 to fulfill the Founder-Chairman, Dr. KCG Verghese's vision of "To Make Every Man a Success and No Man a Failure". It is a Christian Minority Institution, approved by All India Council for Technical Education (AICTE), New Delhi and affiliated to Anna University, Chennai. The campus of KCG College of Technology is beautifully landscaped in a lush green stretch of land spread over 50 acres with a built-up area of 4 lakhs sq.ft at Karapakkam, which is about 10 km from Adyar in Old Mahabalipuram Road / Rajiv Gandhi Salai, the IT corridor of Chennai.

The National Board of Accreditation (NBA) has granted accredited status to five undergraduate programmes (EEE, ECE, CSE, IT, Mechanical). KCG is one among the very few institutes in India under Platinum Category of "AICTE-CII Survey of Industry Linked Technical Institutes". Six departments have been accorded permanent affiliation by Anna University and five departments have been approved as Research Centres by Anna University to offer Ph.D. Programmes.

**About the Department**

The Department of Electrical and Electronics Engineering (EEE) has been functioning since the inception of the college from 1998. The department offers under graduate programme in Electrical and Electronics Engineering and post graduate programme in Power Electronics and Drives to cater to the ever growing challenges of technical excellence in all areas of Electrical and Electronics Engineering. The department has received AICTE- CII National award for "Best Industry Linked Electrical Engineering and Allied Institute" and won the "Sustainable Institute Industry Partnership Award" from SEED Education. The department has Permanent affiliation to Anna University and recognized as Research Centre by the Anna University for pursuing research under Ph.D. programme. The department has over Rs.150 lakhs worth funded and consultancy projects from leading organizations and core industries such as DST, NIWE, CVRDE, IEL, AICTE, HITACHI, and RAMBAL. The department also has DST-FIST supported Power System Protection Laboratory.

Initiated Industrial collaboration with the University of LEEDS, UK for Newton Bhabha Funded Project. Recipient of Best Department award for the four consecutive years 2015-16, 2016-17, 2017-18

& 2018-19. Winners of Protosem program sponsored by Forge Accelerator, CIBI, NSDC, MSME, Siemens and General Electric (GE) skill training certification courses are offered as value addition. State-of-the art project and research lab equipped with modern tools like ETAP, MATLAB, Lab VIEW, dSPACE Control Station, VVVF Drives, and Power Quality Analyser etc.

**About the Workshop**

The design and development of wearable sensors for biomedical applications has gathered considerable attention in medical community and industry. In this workshop, we provide an overview of the emerging, flexible and wearable sensing platforms for health care and medical applications which includes wearable consumer electronics, soft robotics, medical prosthetics, electronic skin and health monitoring system. The selection of flexible and stretchable materials and the fabrication of sensors based on materials are introduced. Hands on of the different solid state and liquid state physical platforms and mechanical deformation based working mechanism of wearable sensors are examined. Finally, this workshop offers some insight into the challenges and opportunities facing wearable sensors in health care application.

**Targeted Participants**

Faculty and students of Engineering (BME, ECE, EEE, EIE & ICE), Medical Colleges, Bio-Science Branches of various Institutions and working professionals of Hospitals and clinical laboratories (Nursing and Technicians) are eligible for the programme.

**Topics of the Programme**

- Bio-Sensor in Clinical Dentistry
- Clinical Aspects of Implantable Bio-sensors
- Advances in Neonatal Care Sensors
- Embedded Sensors for Monitoring Multiple Organ System
- Microbial Bio-sensors through Synthetic Biology or Genetic/Protein Energy
- Current Research Trends, Future Challenges & Limitations of Biosensor Technology.
- Nanomaterial's based Bio-sensors
- Miniaturized Sensor Technologies for Diagnostic Applications
- Can sensor reduce the Healthcare Applications for Common Man?
- Geriatric Applications & Limitations of Sensing Devices
- Enhanced Everyday Devices for Cardiac Monitoring
- Rhythm Abnormalities Identification, What is new?
- New Methods of measuring Blood Pressure and their Clinical Implications
- Devices in monitoring Heart Failure, What is new?

**Organizing Committee****Chief Patrons**

**Dr. Elizabeth Verghese**, Chairperson, HGI

**Dr. Anand Jacob Verghese**, Director & CEO, HGI

**Dr. Annie Jacob**, Director

**Patrons**

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**Dr. Sumathi Poobal**, Vice Principal

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**Mr. R. Selvam**, Assistant Professor - EEE

**Resource Persons**

**Dr. T. R. Muralidharan**

Professor & Head, Department of Cardiology  
Sri Ramachandra Medical Centre, Chennai

**Dr. Narasimha Ragahvan**,

Dentist & Biomaterial Scientist

**Dr. S. Nagendra Boopathy**

Assistant Professor, Department of Cardiology  
Sri Ramachandra Medical Centre, Chennai

**Dr. B. Vinod Kumar**

Assistant Professor, Department of Cardiology  
Sri Ramachandra Medical Centre, Chennai

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Paediatrics, RKP Mother & Child Hospital

**Dr. Niraikulam Ayyadurai**

Senior Scientist, Bio-Technology Division, CSIR-CLRI, Chennai

**Dr. Thayalan**

Consultant Medical Physicist & Radiological Safety Officer (RSO),  
Dr. Kamakshi Memorial Hospital PVT. LTD