

***One Day Work Shop On
“Biosignal Data Acquisition
and Processing using
LabChart” (Bio-DAQ)”***

August 14th 2025

Coordinators

Dr.S.Nirmala Devi, Professor

&

Dr.T.Jayasree, Asst. Professor (Sl.Gr)

***Centre for Medical Electronics,
Department of Biomedical Engineering,
College of Engineering Guindy,
Anna University,
Chennai- 600025.***



**In Collaboration
with**



**ADInstruments South Asia (I) Pvt Ltd
New Delhi**

ORGANIZING COMMITTEE

Chief Patron : Dr. S.Usa
Member, Convener Committee,
Anna University, Chennai.

Patron : Dr. J. Prakash
Registrar
Anna University, Chennai

Dr.P.Hariharan
Dean,CEG
Anna University, Chennai

Chair : Dr. S.Poonguzhali,
Director,
Centre for Medical Electronics,
Dept. of Biomedical Engineering
Anna University, Chennai.

Co-Chair : Dr. S. Balasivanandha Prabu
Director, CSRC
Anna University, Chennai

Coordinators : Dr.S. Nirmala Devi, Professor
Dept. of Biomedical Engineering,
Anna University, Chennai.

Dr.T.Jayasree,Asst.Professor (Sl.Gr)
Dept. of Biomedical Engineering,
Anna University, Chennai

IMPORTANT SCHEDULE:

Last Date Submission of

Application : **08.08.2025**

Intimation of Selection : **11.08.2025**

**ABOUT CENTRE FOR MEDICAL
ELECTRONICS**

Centre for Medical Electronics was established in the year 1998 in Anna University, Chennai. The Centre aims to develop affordable and cost effective medical devices and analysis tools that enhance healthcare in India. The main focus of this Centre is Research, Development and Training. The Centre carries out multidisciplinary research in the field of health care. The core strength of the Centre is in research areas such as Cardiac Function Analysis, Development of low-cost rehabilitation aids, Gait analysis, Biosensors and Instrumentation, Biosignal Processing, Medical Image processing, Medical Informatics, Brain Electrical Activity Monitoring, Biomechanics, Medical Standards, Modeling and Simulation Studies in Medicine, Cognitive Neuroscience, Medical Embedded Systems, and Brain Control Interface Applications.

ABOUT THE PROGRAM

This hands-on workshop is designed for students, educators, and researchers interested in mastering biosignal acquisition and analysis. Participants will gain practical experience with both wired and wireless physiological monitoring systems, focusing on the PowerLab data acquisition unit and LabChart software. It also explores applications in cardiovascular, respiratory, and neuromuscular studies, enabling real-time analysis and interpretation of physiological data. Participants will learn how to customize recordings for research and classroom demonstrations.

OBJECTIVE OF THE HANDS-ON TRAINING PROGRAM

- The sessions will cover recording techniques for biosignals.
- Wired - ECG, EMG, EEG, EOG, Respiration, Hand grip, Heart sounds & Pulse.
- Wireless - ECG, Respiration, Skin temperature & 3 axis acceleration.

PROGRAM HIGHLIGHTS

At the end of the workshop the participants will be able to:

1. Learn to set up and utilize PowerLab systems for capturing high-fidelity physiological signals
2. Explore LabChart features, including real-time data visualization, signal processing, and analysis tools tailored for Biomedical research.
3. Understand the integration of wired & wireless physiological monitoring systems for applications ranging from exercise physiology to sleep studies.

ELIGIBILITY

Preference to Faculty members, Research Scholars, Students and Industrial persons can participate. The number of participants is limited to 40 based on "First Come-First serve". Accommodation & TA/DA will not be provided.

WORKSHOP VENUE

Rehabilitation Engineering Laboratory
1st floor, Dept. of Biomedical Engineering
Centre for Medical Electronics,
Anna University, Chennai-600025.

REGISTRATION FORM

Name (in capitals):
Gender:
Qualification:
Designation:
Department:
Experience (in years):
Institution:
Address for Communication:
.....
E-mail:
Phone (Off.):
Mobile No.:

DECLARATION

I declare that all the details furnished above are true to the best of my knowledge and I agree to abide by the rules and regulations governing the conduct of programme.

Date: Signature of the Applicant

Certificate from Head of the Institution/Organization

Dr./Mr/Mrs/.....
.....is an employee of our Institute and is hereby sponsored by us. He/She will be permitted to attend the one-day workshop, if selected.

Signature with seal HoD

REGISTRATION

Selection intimation will be sent by Email. There are only limited entries. The participants will be selected on "First-Come-First-Serve" basis. Applications without DD will not be entertained.

FEE DETAILS:

Industry delegates/ Faculty/ Research Scholars: Rs 236 including GST (200+18%)
Students: Rs 177 including GST (150+18%)

DD to be drawn in favor of:

"The Director, CSRC, Chennai"

Note: Soft copy of the filled Registration form along with DD should be send to the below mail address on or before 08.08.2025. Hard copy along with DD should be submitted on the day of workshop without fail.

Email: jai_t@annauniv.edu
: sndevi2018@gmail.com

ADDRESS FOR CORRESPONDENCE

Dr.S.Nirmala Devi & Dr.T.Jayasree
Coordinators

Dept. of Biomedical Engineering
Centre for Medical Electronics,
Anna University, Chennai-25
Phone no: 044-2235-7982/ 7984