# JERUSALEM COLLEGE OF ENGINEERING DEPARTMENT OF BIOMEDICAL ENGINEERING REPORT ON WORKSHOP & HANDS-ON TRAINING

Date: 01.03.2023

Title of the Workshop: Real-time Data Acquisition and Ergonomics Analysis

**Resource Person:** 

Dr. K. Baskaran, M.E., PhD, MISTE,

Biomedical Engineer & South Regional Manager,

Gentech Marketing and Distribution Pvt. Ltd., New Delhi, India.

Venue: Biomedical Instrumentation Laboratory

A one-day Workshop and Hands-on Training on 'Real-time Data Acquisition and Ergonomics Analysis' was successfully completed on 28.02.2023 (Tuesday). The Workshop was conducted for III year students at the Biomedical Instrumentation Laboratory (Lab-41), third floor, main block, Jerusalem College of Engineering from 09.00 a.m till 03.30 p.m.

In the hands-on session, students were taught about BIOPAC, research application software, which is an open source. The acquisition and analysis of ECG, EDA (GSR), EEG, EGG, EMG, EOG and physiological measurements were discussed and demonstrated. BIOPAC is a full range of system that supports a wide range of experiment protocols and is engineered to allow researchers of varying experience levels the ability to acquire, analyze and interpret scientific data.

Also, a Bluetooth connectivity prototype for the signal acquisition was demonstrated. A live demonstration with student volunteers was explained for the acquisition parameters of various physiological signals. The acquired signals were plotted in MATLAB. Various parameters for analysis of biosignals were discussed. The sessions were interactive and effective for project purposes. The workshop was organized and coordinated by Ms.C.L.Annapoorani, Assistant Professor.

Our sincere thanks were deliberated to the management for their constant support to us.

#### **Enclosures:**

Poster copy Sample Photos

HOD/BME

PRINCIPAL



#### JERUSALEM COLLEGE OF ENGINEERING

(An AUTONOMOUS INSTITUTION)

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## Department of Biomedical Engineering

#### **BIOMEDICAL ENGINEERS' ASSOCIATION**

Organizes

Workshop and Hands-on Training on

Real time Data Acquisition and Ergonomic Analysis





Dr. K. Baskaran ME, PhD, MISTE., Bio Medical Engineer & South Regional Manager Gentech Marketing and Distribution Pvt. Ltd.,





Ms.C.L.Annapoorani Dr J Sofia Bobby Coordinator

Convener

Dr Ramesh S Principal

Prof.Dr M Mala Chairperson



#### Resource person delivering fundamentals of physiological signals:





### Student volunteers involved in acquiring physiological signals





#### Analysis of acquired signals were demonstrated:



