



Indian Institute of Space Science and Technology
Valiamala, Thiruvananthapuram - 695 547, Kerala

One-day workshop on “Signal Processing for Biomedical Signals”

Organized by

Department of Avionics

Indian Institute of Space Science and Technology

(as part of the SERB Scientific Social Responsibility (SSR))



09:30 AM
TO
05:00 PM



21
FEBRUARY **2026**



D3 Building
Swayam Prabha Hall

About the workshop

This workshop will provide participants with essential knowledge of signal acquisition, processing, and analysis of physiological signals. The sessions covered fundamental concepts along with practical insights into signals such as ECG, EEG, and EMG. Experts will highlight the importance of signal processing techniques in healthcare diagnostics and research applications. Hands-on demonstrations would help participants understand noise removal, feature extraction, and interpretation of biomedical data. The workshop will encourage active interaction and discussion among faculty, research scholars and industry professionals. Overall, the programme would enhance participants' technical competence and awareness of recent trends in biomedical signal processing.

Key Topics

- Biomedical Signals Overview
- Noise & Artifact Removal
- Time & Frequency Domain Analysis
- Digital Filtering Techniques
- Wavelet & Time-Frequency Analysis
- Case Studies in Healthcare

Hands-On Sessions

- ECG / EEG Signal Analysis using MATLAB / Python
- Filtering and Feature Extraction

Target Audience

UG / PG Students | Research Scholars | Faculty | Industry Professionals

How to apply



Registration for the workshop can be done using the google form link as mentioned below:

<https://forms.gle/HtCxWzvjDaB7bVXd6>

Participation is limited to 50 seats to ensure high-quality interaction and hands-on learning. Priority will be given to researchers, faculty, and industry professional in this field. The registration will be closed on 18th February 2026

Resource Persons

The sessions will be handled by IIST faculty and eminent personalities with expertise in this field which includes,

Prof. Ramakrishnan S

Professor, Bio Medical Engineering,
Department of Applied Mechanics & Biomedical Engineering,
IIT Madras.

Dr. Jayaraj Joseph

Associate Professor,
Department of Electrical Engineering,
IIT Madras.

Coordinator

Prof.N.Selvaganesan and
Dr.Chris Prema S

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