



Call for Papers

IEEE Open Journal of Instrumentation and Measurement (IEEE OJIM)

Special Section on

Biomedical Instrumentation for Sensing and Measurement

Biomedical instrumentation is a diverse field that spans many areas of science and engineering disciplines, while also impacting many industries. Measurements are also fundamental to medical research and clinical practice. The increasing demands of newer measuring technologies, algorithms, image analysis for biomedical sensing and measurement can greatly impact healthcare monitoring, disease diagnosis and treatment plan.

This *Special Section*, in the IEEE OJIM focuses on recent developments in biomedical instrumentation for sensing and measurement. These include methods and instrument/device development, advances in models and algorithms for measurement, imaging, and augmentation of AI/ML in signal and image processing for decision-making specifically for biomedical applications. The topics for this special section include, but are not limited to, the following:

- Sensors and devices for biomedical measurements
- Data processing method for biomedical signal/image analysis
- Use of machine learning (ML) and artificial intelligence (AI) for sensing and measurement
- Ultrasound/optical/photoacoustic/magnetic resonance (MR)/X-ray based instrumentation and analysis for biomedical measurements
- Pre-clinical/clinical technology for disease diagnosis
- Modeling, simulation, and algorithm development for biosensing and measurement
- Health monitoring system
- Automation/robotics for biosensing and measurement

Each Submitted paper will go through a rigorous review process consistent with the IEEE OJIM requirements. The Open-Access [Article Processing Charge](#) (APC) of \$2,075 (in 2025) will be *waived* for accepted papers. Please note that the [Overlength Page Charge](#) fee will still be charged for papers longer than eight pages. Papers will be published as they are accepted, and the Special Section is intended to be published in the latter part of 2025, consistent with the following Schedule:

Deadlines

Submission: April 30, 2025

First Decision: June 15, 2025

Final Decision: August 15, 2025

Publication Volume: Volume #4, 2025

For more information and submission instructions, please visit OJIM's website:

<https://ieee-ims.org/publication/ieee-ojim/about>

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