



## Call for Papers

**IEEE Open Journal of Instrumentation and Measurement (IEEE OJIM)**

**Special Section on**

### **Signal Processing and Machine Learning in Intelligent Instrumentation**

Signal processing is a mature area developed over decades in electrical and electronics engineering. In recent years, machine learning techniques are also being applied for improved performance in a variety of areas, including instrumentation and measurement systems. Their combination, signal processing and machine learning, is expected to dominate the next generation industrial developments in various areas, from power systems, transportation, biomedical and healthcare, industrial measurements, smart infrastructure and facility management to aerospace and navigation, internet of things, cyber-physical systems, and so on.

This special section focuses on recent developments in signal processing and machine learning techniques for intelligent instrumentation. The topics for this special section include new theoretical developments, systems, instruments, or applications of signal processing and machine learning in the following areas, but not limited to:

- Acoustic and vision-based sensing and systems
- Medical, biomedical and healthcare systems
- Instrumentation for robotics, mechatronics, and industrial automation
- Internet of things, industrial internet of things, and cyber-physical systems
- Smart agriculture applications
- Power system measurements and monitoring
- Condition monitoring and fault detection/analysis of large-scale systems
- Intelligent transportation systems and smart city applications
- Soft sensors, sensor data fusion and industrial measurement applications
- Renewable energy systems

**Each accepted paper for this Special Section will receive an Open Access fee waiver; i.e., accepted papers will not be charged Open Access fee.**

#### **Deadlines**

**Submission:** June 1, 2023  
**First decision:** June 30, 2023  
**Final decision:** August 5, 2023  
**Publication Volume:** 2023

For more info and submission instructions, please visit OJIM's official website: <http://ojim.ieee-ims.org/>

#### **Guest Editors:**

Anirban Mukherjee IIT Kharagpur, India  
Rajarshi Gupta University of Calcutta, India  
Amitava Chatterjee Jadavpur University, India

[anirban@ee.iitkgp.ac.in](mailto:anirban@ee.iitkgp.ac.in)  
[rgaphy@ieee.org](mailto:rgaphy@ieee.org)  
[amitava.chatterjee@jadavpuruniversity.in](mailto:amitava.chatterjee@jadavpuruniversity.in)