Call for Papers

IEEE Open Journal of Instrumentation and Measurement (IEEE OJIM)
Special Section on

Nondestructive Testing & Evaluation (NDT&E)

Nondestructive testing and evaluation (NDT&E) is a diverse field that spans many areas of science and engineering disciplines, while also impacting many industries. The ever-increasing growth and development of complex materials and structures necessitates new and advanced NDT&E methods for manufacturing process control, and in-service flaw detection and evaluation.

This *Special Section* in the IEEE OJIM focuses on recent developments in NDT&E techniques. These include method and system development, advanced physics-based models and algorithms for detection and evaluation, and augmentation of AI/ML in data interpretation and decision-making processes specifically for NDT&E applications. The topics for this special section include but are not limited to the following:

- Transducer design and optimization
- NDT&E system development
- Data processing methods for NDT&E applications
- NDT&E for additive manufacturing
- NDT&E for Industry 4.0
- Comparison between different modalities
- Use of machine learning (ML) and artificial intelligence (AI) in NDT&E
- Materials characterization
- Automation/robotics for NDT&E
- Analysis of large datasets
- Modeling, simulation, and algorithm development for NDT&E
- Structural health monitoring (SHM)
- Prognostic and statistical methods including PoD
- NDT&E of advanced composites, ceramics, and multi-phase materials and structures

Each submitted paper will go through a rigorous review process consistent with the IEEE OJIM requirements. **Each accepted paper for this Special Section receives an <u>Open Access fee waiver</u>**; i.e., accepted papers when published will not be charged Open Access fee. Papers will be published as they are accepted, and the Special Section is intended to be published in the latter part of 2023, consistent with the following schedule:

Deadlines
Submission: June 1, 2023
First decision: July 1, 2023
Final decision: August 8, 2023
Publication Volume: 2023

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

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