

Special Issue

Measurement Framework for Low-Inertia Power Systems

Message from the Guest Editor

This Special Issue invites contributions that advance the “Measurement Framework for Low-Inertia Power Systems”. We seek original research on innovative sensing technologies, advanced signal processing techniques, robust data analytics, and metrological principles tailored to the unique characteristics of IBR-dominated grids. Topics include, but are not limited to, high-fidelity phasor measurement (PMU/ μ PMU), point-on-wave analysis, wide-area monitoring systems (WAMSs), synchronization strategies, uncertainty quantification in dynamic measurements, AI/ML applications for state estimation and event detection, and the development of standards for characterizing and validating IBR performance. The aim is to foster a comprehensive understanding and establish best practices for ensuring the observability, stability, and reliability of future power grids. We encourage submissions that bridge the gap between theoretical advancements and practical metrological solutions.

Guest Editor

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Metrology draws together researchers from diverse areas of metrology or measurement technology in a wide variety of applications. I encourage you to submit your manuscripts for consideration or publication in the area of measurement engineering, according to the scope of the journal. *Metrology* is supported by our authors and their institutes through low article processing charges (APC) for accepted papers. We hope you will support the journal by becoming one of our authors.

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