# Special Issue

# Application of Artificial Intelligence and Optimization Algorithms in Power Systems and Energy Storage

## Message from the Guest Editors

This Special Issue explores recent advances in the use of artificial intelligence (AI) and optimization algorithms to solve complex challenges in power systems and energy storage. As modern energy systems become increasingly integrated with renewable energy sources and smart grid technologies, intelligent algorithms play a crucial role in enhancing efficiency, reliability, and sustainability. In addition, with the increasing complexity of power grids, driven by the integration of renewable energy, decentralized generation, and real-time demand fluctuations, there is a pressing need for intelligent, adaptive, and efficient solutions. We invite original research and review articles focused on AI-based control strategies that address power system stability, load forecasting, grid resilience, fault detection, control strategies, and optimization techniques in energy storage systems. Contributions addressing practical implementations, hybrid AI models, and multi-objective optimization in power grid operations are also encouraged.

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## Deadline for manuscript submissions

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