# **Special Issue**

# Technology and Applications of Power Electronics and Dispatch Strategy with Optimization and Power System Analysis in Renewable Energy Systems: Current Perspectives, Future Needs and Challenges

### Message from the Guest Editors

The escalation of power-electronic-based renewable energy sources into the grid has led to stability and dynamic response concern. Power-electronic-based resources can render various ancillary services with advanced control strategies. To fully utilize the capability of power conversion, a comprehensive modeling and integration of a large-scale system is essential to understand and maintain a stable operation of power grids with the penetration of power-electronic-based renewable resources. Efficient generation of green energy is the prime challenge for researchers in this field. Due to the rapid industrialization, energy demand is increasing drastically, whereas the natural sources of energy, such as coal, oil, and natural gas, are limited. Hence, the only way to overcome the challenge is the development of renewable and inexhaustible energy...

We encourage the submission of both original research and review-type papers.

### **Guest Editors**

Dr. Arefin Shezan

Dr. Hasan Mahamudul

Dr. Datta Ujjwal

### Deadline for manuscript submissions

closed (1 January 2022)



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I encourage you to contribute a research or comprehensive review article for consideration for publication in Sustainability, an international open access journal which provides an advanced forum for research findings in areas related to sustainability and sustainable development. The journal publishes original research articles, reviews, conference proceedings (peer reviewed full articles) and communications. I am confident you will find the journal contributes to enhancing understanding of sustainability and fostering initiatives and applications of sustainability-based measures and activities.

#### Editor-in-Chief

Prof. Dr. Steve W. Lyon

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