# Special Issue

# Design and Implementation of New Control Schemes for Renewable Energy Systems

## Message from the Guest Editor

The high penetration of distributed generators based upon renewable energy sources and new loads such as electric vehicles pose several challenges of stability and power quality to the power grid system. Furthermore, current power systems suffer from several limitations, such as the high cost of expansion and a high voltage alternating current (HVAC) transmission system. In contrast, renewable energy source based microgrids and high voltage direct current (HVDC) transmission systems can help significantly in the electrical power system by improving stability, reliability, and transmission capacity. The grid can be strengthened by reinforcing the renewable energy source control using efficient power-electronic converters. The performance of the power-electronic converter system depends mainly upon the quality of the applied control technique. Papers covering new topologies, control strategies, and analysis of existing and new emerging applications of grid integration of renewable energy systems are strongly welcomed. Contributions dealing with advancements made in the other areas of smart grids are also of interest.

## Guest Editor

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## Deadline for manuscript submissions

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*Energies* is an international, open access journal in energy engineering and research. The journal publishes original papers, review articles, technical notes, and letters. Authors are encouraged to submit manuscripts which bridge the gaps between research, development and implementation. The journal provides a forum for information on research, innovation, and demonstration in the areas of energy conversion and conservation, the optimal use of energy resources, optimization of energy processes, mitigation of environmental pollutants, and sustainable energy systems.

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