Special Issue

Challenges and Opportunities of Microgrids

Message from the Guest Editors

The European Union has targeted a 55% cut in greenhouse gas emissions by 2030 towards the 2050 climate neutrality goal, and so there is an urgent need to adopt specific measures in order to pursue this objective. In this context, the inclusion of renewable energy sources plays a key role, especially the combination of them in microgrids. Microgrids enable the development of energy prosumers through hybrid renewable power generation systems, including off-grid and on-grid scenarios. Hence, the aim of this Special Issue is to cover promising, recent, and novel research trends concerning the challenges and opportunities of including renewable microgrids from the electrical point of view. Areas to be covered in this Special Topic may include, but are not limited to, the following:

- Hybrid renewable energy systems design.
- Energy prosumers.
- Microgrids design and modelling.
- Demand response in microgrids.
- Microgrids for electric vehicles recharge.
- Microgrids for islands electricity supply.
- Microgrids for developing countries.
- Economic analysis of microgrids.
- Energy communities.
- Storage systems in microgrids.
- Renewable energy sources inclusion in microgrids.

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Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal *Applied Sciences* has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Editor-in-Chief

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