

Special Issue

Future Distribution Network Solutions

Message from the Guest Editor

In the future, utilization of distribution network (MV and LV) connected controllable and flexible distributed energy resources (DER), i.e., flexibilities is needed to improve local and systemwide grid resiliency, maximize integration of renewable energy resources (RES) and electric vehicles (EVs), and minimize the whole-system costs and customer electricity prices. However, this requires new management and protection solutions for future resilient distribution networks enabled by digitalization and advanced ICT technologies. In addition, there is a need for new distribution network operation and planning principles based on active utilization of flexibilities. Further, new, compatible, distribution network market schemes, business models and regulation structures need to permit active utilization of flexibilities to provide different services and also take strongly into account the role of customers with different needs.

Guest Editor

Prof. Dr. Hannu Laaksonen

School of Technology and Innovations, University of Vaasa, PB 700,
65101 Vaasa, Finland

Deadline for manuscript submissions

closed (20 March 2021)



Applied Sciences

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 5.3



mdpi.com/si/36110

Applied Sciences
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
appls@mdpi.com

mdpi.com/journal/

[appls](https://appls.mdpi.com)





Applied Sciences

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 5.3



[mdpi.com/journal/
applsci](https://mdpi.com/journal/applsci)



About the Journal

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

Prof. Dr. Giulio Nicola Cerullo
Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32,
20133 Milano, Italy

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE (Web of Science), Ei Compendex, Inspec, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q1 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering)