# **Special Issue**

# Recent Advancements in Renewable Energy and Electrical Power Engineering Technology

# Message from the Guest Editors

The integration of renewable energy resources in energy systems has become an apparent necessity for the minimization of environmental risks as well as for national development and security improvements. To this end, challenging tasks have appeared, ranging from fundamental research to novel energy systems design and operability advancements. The proposed Special Issue aims to collect articles that highlight the challenges, advancements and novel solutions in electrical power technology for sustainable renewable energy systems:

- -Advancements in renewable energy and storage technologies such solar cells, wind turbines, batteries, hydrogen, heat pumps and others;
- Advancements in power electronics for integrating distributed energy resources;
- -Control, operation, optimization and planning of renewable-energy-based electrical systems;
- -Artificial intelligence for large-scale integration of renewables in smart electricity grids;
- -Systems digitalization and data analytics in smart electricity grids;
- -Multicarrier energy systems comprising renewable energy;
- -Economics and business models for sustainability and lifecycle assessment in renewable energy based build environment and systems.

#### **Guest Editors**

Dr. Andreas Theocharis

Department of Engineering and Physics, Karlstad University, 65188 Karlstad, Sweden

Dr. Panos Kotsampopoulos

School of Electrical and Computer Engineering, National Technical University of Athens, 15780 Zografou, Greece

## Deadline for manuscript submissions

closed (30 November 2023)



# Sustainability

an Open Access Journal by MDPI

Impact Factor 3.3 CiteScore 7.7



mdpi.com/si/116585

Sustainability Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 sustainability@mdpi.com

mdpi.com/journal/ sustainability





# Sustainability

an Open Access Journal by MDPI

Impact Factor 3.3 CiteScore 7.7



# **About the Journal**

## Message from the Editor-in-Chief

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. *Sustainability* publishes original research articles, review 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. Marc A. Rosen

Faculty of Engineering and Applied Science, University of Ontario Institute of Technology, Oshawa, ON L1G OC5, Canada

### **Author Benefits**

### **Open Access:**

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

### **High Visibility:**

indexed within Scopus, SCIE and SSCI (Web of Science), GEOBASE, GeoRef, Inspec, RePEc, CAPlus / SciFinder, and other databases.

### **Journal Rank:**

JCR - Q2 (Environmental Studies) / CiteScore - Q1 (Geography, Planning and Development)

