# **Special Issue**

# Modeling, Design, and Application of Hybrid Renewable Energy Systems

### Message from the Guest Editors

Hybrid renewable energy systems (HRES) are gaining importance in modern power generation systems as a sustainable and cost-effective solution for distributed generation sources and self-consumption. This Special Issue seeks to advance the field of HRES by encouraging original and novel contributions aimed at improving the sustainability, efficiency, reliability, flexibility, and profitability of HRES. Researchers working on microgrids are invited to contribute to this Special Issue, which focuses on the following topics:

- Sustainable power generation systems through renewable energy sources (PV, wind, biomass, water, among others);
- Storage systems (lead-acid batteries, Li-ion batteries, and others);
- HRES power electronics;
- HRES design;
- Off-grid and grid-tied HRES;
- Metaheuristic algorithms and methods applied to HRES (e.g., Artificial Neural Networks, Fuzzy Logic, Nature and Bio-inspired Optimization Algorithms, and others):
- HRES economic analysis;
- Energy Prosumers;
- HRES demand response;
- Power generation in developing countries through HRES.

# **Guest Editors**

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#### Deadline for manuscript submissions

closed (30 June 2024)



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## 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

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