



an Open Access Journal by MDPI

Applications of Machine Learning and Soft Computing in Energy Use Forecasting

Guest Editors:

Prof. Dr. Elpiniki I. Papageorgiou

Department of Energy Systems, Faculty of Technology, University of Thessaly, Geopolis Campus, GR 41500 Larissa, Greece

Dr. Katarzyna Poczęta

Faculty of Electrical Engineering, Automatics and Computer Science, Department of Computer Science Applications, Kielce Univeristy of Technology, al. Tysiąclecia Państwa Polskiego 7, 25-314 Kielce, Poland

Deadline for manuscript submissions: closed (20 April 2023)



Message from the Guest Editors

Dear Colleagues,

The aim of this Special Issue is to present recent developments in the application of soft computing techniques using novel machine learning algorithms to forecast energy use.

The increasing economic and ecological energy costs raise the need to develop new techniques and novel tools which could help in better understanding energy use behavior and finding ways to reduce energy consumption. Nonetheless, there is the need to monitor various variables affecting energy consumption and accurately forecast energy use.

The Special Issue is devoted to original contributions in machine learning algorithms and soft computing techniques applied in energy use forecasting. We invite original papers that showcase innovative models and algorithms, deployed case studies, experimental research, or state-of-the-art reviews on this trajectory. Potential topics include but are not limited to supervised, evolutionary or hybrid learning algorithms, deployment of novel applications on energy use forecasting, explainability models for energy forecasting, comparative analysis of various soft computing, and artificial intelligence models, as well as decision support systems.







an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Enrico Sciubba

Department of Mechanical and Aerospace Engineering, University of Roma Sapienza, Via Eudossiana 18, 00184 Roma, Italy

Message from the Editor-in-Chief

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.

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, RePEc, Inspec, CAPlus / SciFinder, and other databases.

Journal Rank: CiteScore - Q1 (Engineering (miscellaneous))

Contact Us

Energies Editorial Office MDPI, St. Alban-Anlage 66 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/energies energies@mdpi.com X@energies_mdpi