

IMPACT FACTOR 3.2



an Open Access Journal by MDPI

# **Energy Efficiency and Energy Consumption Modelling Using Artificial Neural Networks**

Guest Editors:

## Prof. Dr. María del Carmen Pegalajar Jiménez

Department of Computer Science and Artificial Intelligence, ETS de Ingenierías Informática y de Telecomunicación (ETSIIT), Universidad de Granada, 18010 Granada, Andalusia, Spain

#### Dr. Luis G. Baca Ruiz

Department of Software Engineering, Research Centre for Information and Communication Technologies (CITIC-UGR), University of Granada, Granada, Spain

Deadline for manuscript submissions:

closed (20 October 2022)

## **Message from the Guest Editors**

Dear Colleagues,

New technology and approaches are continuously and rapidly being introduced and implemented in today's energy systems. Machine Learning techniques play an increasingly important role in smart cities, ordinary buildings and renewable energy systems, amongst many others. As a consequence, assessing and modelling energy expenditure is a key task to improve energy efficiency in these systems. Recently, it has been noted that certain kinds of Machine Learning methods are growing in popularity when it comes to dealing with energy-related data for energy modelling and decision-making processes; these models are Artificial Neural Networks.

Traditionally, energy efficiency has mainly been handled using standard control methods in the energy industry. However, the application of intelligent techniques such as Artificial Neural Networks has led to new and sophisticated solutions for energy efficiency improvement. As a result, it is of paramount importance to develop and implement new intelligent techniques to address this problem.

This Special Issue aims to provide comprehensive coverage of energy efficiency and energy modelling using artificial neural networks









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**