





an Open Access Journal by MDPI

# **Challenge and Research Trends of Artificial Neural Network**

Guest Editor:

### Dr. Konrad Zajkowski

Department of Energy, Faculty of Mechanical Engineering, Technical University of Koszalin, Koszalin, Poland

Deadline for manuscript submissions:

closed (30 April 2022)

## Message from the Guest Editor

Currently, artificial neural networks are used in many fields of technology. This is due to the need to optimize energy consumption in the design, production and operation process. Importantly, the use of autonomy in these processes leads to a reduction in operating costs. Performing technical diagnostics of the condition of the device leads to earlier detection of failures. As a result, failure-free operation time is extended, which reduces production costs. It also becomes easier to ensure continuity of product supply.

The background and aims of this Special Issue focus on the research challenges and trends that are commonly presented in *Energies*, as well as aspects relating to artificial neural networks. Therefore, articles discussing the above problems concerning all stages of production and operation of technological devices will be welcome. For the reader, the materials describing completed concepts that have already been implemented, or that are on the verge of implementation, will undoubtedly be of particular value.

## Keywords:

- neural network:
- artificial intelligence;
- energy systems;
- technical diagnostics;
- energy saving.











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**