





an Open Access Journal by MDPI

CFD Simulation in Energy Efficiency and Building Energy Saving

Guest Editors:

Dr. Darya Nemova

Institute of Civil Engineering, Peter the Great Saint Petersburg Polytechnic University, 195251 Saint Petersburg, Russia

Prof. Dr. Vitaly Sergeev

Institute of Energy and Transport Systems, Peter the Great Saint Petersburg Polytechnic University, 195251 Saint Petersburg, Russia

Deadline for manuscript submissions:

closed (10 November 2021)

Message from the Guest Editors

Dear Colleagues,

Improving the energy efficiency of buildings has great potential for reducing carbon emissions and the cost of building operations. It is necessary to look for reasoned decisions for the design and construction of energy-efficient buildings. From this point of view, the use, in this case, of the CFD approach is a good way to predict heat losses and get complete information on heat exchange in buildings. CFD modeling is an informative way to understand the properties of any new, different construction and technologies for energy savings.

Topics include but are not limited to the following:

- Simulation and experiments on building envelope for building energy efficiency
- Simulation and experiments on energy-efficient HVAC systems
- New construction materials and technologies in energy saving
- Modeling air flows in buildings and structures
- Building materials and products for energy efficiency
- Development of new perspective technological products
- Energy efficient and green buildings
- Heat and mass transfer in buildings
- Predictive analysis for energy saving
- Simulation and experiments for innovative heating and cooling sources.









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 (Control and Optimization)

Contact Us