





an Open Access Journal by MDPI

Advances in Ground Source Heat Pumps for Sustainable and Low Carbon Buildings

Guest Editors:

Dr. Yongqiang Luo

Department of Building Environment and Energy Application Engineering, Huazhong University of Science and Technology, Wuhan 430074, China

Prof. Dr. Pingfang Hu

School of Environmental Science and Engineering, Huazhong Universtiy of Science and Technology, Wuhan 430074, China

Prof. Dr. Weibo Yang

College of Electrical, Energy and Power Engineer, Yangzhou University, Yangzhou 225009, China

Deadline for manuscript submissions:

closed (24 September 2023)

Message from the Guest Editors

Dear Colleagues,

The building sector consumes about 30% of total energy, most of which is used for heating or cooling in all types of buildings in different climate zones. By making full use of thermal energy underground and the feature of underground thermal energy storage, the ground source heat pump and its related technologies are continuously contributing toward a cleaner, sustainable, low carbon, and more efficient solution for building energy demand

The original intention of this Special Issue is to explore new systems, materials, models, and applications of technologies related to ground source heat pumps that can serve as novel concepts, new designs and controls, as well as energetic, economic, environmental analyses through experiments or simulations, aiming to further promote the development of ground source heat pump techniques for building energy supply and correspondingly facilitating the goal of carbon neutrality in the building sector.

Dr. Yongqiang Luo

Prof. Dr. Pingfang Hu

Prof. Dr. Weibo Yang

Guest Editors









an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Marc A. Rosen

Faculty of Engineering and Applied Science, University of Ontario Institute of Technology, Oshawa, ON L1G 0C5, Canada

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 and applications of sustainability-based measures and activities.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE and SSCI (Web of Science), GEOBASE, GeoRef, Inspec, AGRIS, RePEc, CAPlus / SciFinder, and other databases.

Journal Rank: JCR - Q2 (*Environmental Studies*) / CiteScore - Q1 (Geography, Planning and Development)

Contact Us