Special Issue

Thermal Performance Improvement of Solar Air Heater

Message from the Guest Editors

Renewable energy plays an important role in the current continuous increasing energy demand and in attempts to mitigate issues around the many emissions and greenhouse problems. Solar energy utilization is a basic weapon for facing energy problems, giving efficient, clean, and financially viable solutions. For its sustainable development, there is a need to overcome a few technical obstacles. Therefore, this Special Issue aims to encourage researchers to share recent advances in the development and application of solar air heaters using experimental and computational techniques. Both experimental and numerical studies, cross-disciplinary research and development studies are welcomed.

solar air heater
solar dryer
CFD analysis
heat transfer augmentation
thermal entry length concepts
turbulence modeling
vortex generators
laminar and transitional flow
ANN and machine learning techniques
optimization

Guest Editors

Dr. Suvanjan Bhattacharyya

Department of Mechanical Engineering, Birla Institute of Technology and Science, Pilani, Pilani Campus, Rajasthan 333 031, India

Dr. Varun Goel

Department of Mechanical Engineering, National Institute of Technology Hamirpur, Hamirpur, Himachal Pradesh 177005, India

Deadline for manuscript submissions

closed (31 March 2022)



Sustainability

an Open Access Journal by MDPI

Impact Factor 3.3 CiteScore 7.7



mdpi.com/si/81527

Sustainability Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 sustainability@mdpi.com

mdpi.com/journal/ sustainability





Sustainability

an Open Access Journal by MDPI

Impact Factor 3.3 CiteScore 7.7



About the Journal

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. The journal publishes original research articles, reviews, conference proceedings (peer reviewed full articles) and communications. I am confident you will find the journal contributes to enhancing understanding of sustainability and fostering initiatives and applications of sustainability-based measures and activities.

Editor-in-Chief

Prof. Dr. Steve W. Lyon

School of Environment and Natural Resources, Ohio State University, Columbus, OH 43210, USA

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, RePEc, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Environmental Studies) / CiteScore - Q1 (Geography, Planning and Development)

