applied sciences

IMPACT FACTOR 2.5

CITESCORE 5.3

an Open Access Journal by MDPI

Two-Phase Heat Transfer in Industrial Engineering

Guest Editors:

Dr. Andrea Diani
Department of Industrial Engineering, University of Padova, Via Venezia 1, 35131 Padova, Italy

Dr. Luca Viscito
Department of Industrial Engineering, University of Naples Federico II, 80138 Napoli, NA, Italy

Deadline for manuscript submissions:
closed (20 July 2022)

Message from the Guest Editors

Two-phase heat transfer inside tubes is involved in many different applications, among which evaporators and condensers for HVAC and refrigeration equipment. The industry is now facing with the growing number of HVAC and refrigeration systems worldwide, and, at the same time, must deal with the reduction of greenhouse gases, with the aim of controlling the global warming. New equipment involving lower Global Warming Potential refrigerants and highly efficient systems are in great demand nowadays. New experimental data are needed to better understand the behavior of new refrigerants during two-phase heat transfer. In this context, this Special Issue of Applied Sciences aims at collecting contributions related to (but not limited to) two-phase heat transfer of new lower GWP pure refrigerants or refrigerants mixtures inside/outside smooth and/or enhanced tubes. Experimental, numerical and/or modelling contributions are welcome in this Special Issue in order to give a deeper insight about the topic.

Keywords: flow boiling; evaporation; boiling; condensation; smooth tube; enhanced tube; dryout; heat transfer coefficient; pressure drop; empirical correlation.

applied sciences

IMPACT FACTOR 2.5

CITESCORE 5.3

an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo
Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32, 20133 Milano, Italy

Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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), Inspec, CAPlus / SciFinder, and other databases.
Journal Rank: JCR - Q1 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering)

Contact Us

Applied Sciences Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/applsci
applsci@mdpi.com
𝕏@Applsci