Special Issue

Recent Developments and Emerging Trends in Computational Fluids Dynamics (CFD)

Message from the Guest Editors

In recent years, computational fluid dynamics (CFD) has played a crucial role in elucidating fluid dynamics problems. In particular, CFD allows us to obtain detailed information about turbulent flow, a ubiquitous phenomenon in many engineering applications. Turbulent flow governs the transport and mixing of momentum, heat, or matter and also leads to the large wall-shear stress near solid walls. Consequently, CFD has become an indispensable engineering tool in predicting turbulent flows and in designing engineering applications. Novel computational approaches, along with the rapid developments of computer power, can provide a new avenues for the understanding and controlling of turbulent phenomena.

For this Special Issue, we invite the submission of original manuscripts as well as review articles that report recent progress on the development and application of computational methods and modeling for fluid dynamics problems. We encourage you to present new techniques for the study of complex fluid flows and the analysis of multiscale and metaphysics turbulent flows.

Guest Editors

Prof. Dr. Warn-Gyu Park

School of Mechanical Engineering, Pusan National University, Busan 46241, Korea

Prof. Dr. Jinyul Hwang

School of Mechanical Engineering, Pusan National University, Busan 46241, Korea

Deadline for manuscript submissions

closed (20 May 2021)



Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 5.5



mdpi.com/si/50744

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

mdpi.com/journal/applsci





Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 5.5



About the Journal

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 multidimensional network.

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo

Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32, 20133 Milano, Italy

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, Inspec, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering)

