Special Issue

CFD Simulation of Heat Transfer and Applications

Message from the Guest Editor

For decades, CFD simulations have been performed to understand physics, predict flow characteristics in different applications, and avoid expenses associated with the experimental setup. In subsonic turbulent flows, there are three main basic methods: Reynolds Averages Navier–Stokes Simulation, Direct Numerical Simulation, and Large Eddy Simulation. In more general cases such as in multiphase flows, these three methods are successfully applied. In this case, the particulate phase is usually taken as in a frame of the Eulerian–Eulerian or two-fluid approach, where both carrier fluid and particulate phase are considered as continuous phases, or/and in a frame of the Lagrangian–Eulerian approach, where one can deal with continued fluid phase by applying the Euler approach and the motion of single particles related to a discrete particulate phase, which is modeled by the Lagrangian approach. So in this Special Issue, we focus on subsonic single- and multiphase thermo-and fluid dynamics' applicability, which is frequently met in various industrial performances.

Guest Editor

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Message from the Editor-in-Chief

The journal *Mathematics* publishes high-quality, refereed papers that treat both pure and applied mathematics. The journal highlights articles devoted to the mathematical treatment of questions arising in physics, chemistry, biology, statistics, finance, computer science, engineering and sociology, particularly those that stress analytical/algebraic aspects and novel problems and their solutions. One of the missions of the journal is to serve mathematicians and scientists through the prompt publication of significant advances in any branch of science and technology, and to provide a forum for the discussion of new scientific developments.

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