Special Issue

Numerical Methods in Multiphase Flow with Heat and Mass Transfer

Message from the Guest Editor

The numerical method is now one of the most scientific methods successfully applied to heat and mass transfer in single- and multi-phase flow systems. This Special Issue focuses on the topics of multiphase flow heat and mass transfer through the development of the numerical methods or the application of existing computational fluid dynamics (CFD) tools to solve existing problems in academic or industrial applications. Research or review papers focused on the following topics are welcome, but not limited to: (a) the application of CFD tools (e.g., finite difference, finite volume, finite element, lattice Boltzmann method, gas kinetic scheme, and smoothed hydrodynamics particle method); (b) the new development of the CFD method; (c) mathematical modeling of multiphase fluid dynamics; (d) fluid–solid interactions; (e) gas–liquid/liquid–liquid flows; (f) miscible and immiscible multicomponent flows; and (g) thermo/thermosolutal capillary convection.

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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