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Modeling of Multiphase Flow Phenomena

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Deadline for manuscript submissions:

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Message from the Guest Editors

Dear Colleagues,

Multiphase flow phenomena encompass a broad spectrum of physics and engineering sciences dealing with complex processes across a wide range of spatial and temporal scales, and whose elucidation relies on a multitude of analytical, numerical, and experimental methodologies.

This Special Issue invites original contributions related to the description of multiphase flow phenomena, with a special emphasis on recent theoretical and numerical modeling efforts. Prospective authors are invited to submit papers addressing multiphase flows, including liquid–gas and liquid–liquid flows; bubble and droplet dynamics; plasma in dielectrics; microfluidic devices; and others. Topics covered include, but are not limited to:

- Multiphase flow simulation;
- Interface dynamics;
- Atomization;
- Bubble and drop dynamics;
- Bubbly flows;
- Cavitation;
- Interaction of gas, liquids and solids;
- Flow in porous media;
- Microfluidic devices;
- Applications in biomedical and industrial fields.



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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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