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CFD Simulation of Multiphase Flow

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Message from the Guest Editors

Multiphase flow, such as gas-solid flow, systems are ubiquitous in the chemical, food, energy, and pharmaceutical industry. Experimental investigation of multiphase flows is vital but time-consuming and costly. With the development of advanced computer and numerical algorithms, multiscale computational fluid dynamics (CFD) of multiphase flows is becoming more and more popular and has seen noticeable progress in the modeling of various multiphase flows in recent years.

This Special Issue on '**CFD simulation of Multiphase Flow'** seeks high-quality research and review papers focusing on multiscale CFD simulation of different multiphase flow systems. Topics include but are not limited to:

- Development, verification, and validation of advanced CFD models such as particle-resolved direct numerical simulation, discrete element method/coarse grain discrete element method, two fluid model, MPPIC, etc.;
- CFD modeling of various multiphase flow systems for physical understanding, design, and optimization of reactors and operating conditions;
- High-performance computing using parallel computing, hybrid CPU–GPU computing, etc.

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Message from the Editor-in-Chief

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