Special Issue

CFD Modeling in Multiphase Flow Transport/Separation Equipment

Message from the Guest Editors

In the operation of multiphase flow transport/separation equipment, due to the complex interaction between gas, liquid, bubbles, droplets, particles, and liquid film, the internal flow and separation processes are extremely complex. Scholars are increasingly employing CFD technology in order to carry out performance prediction, structure optimization, and flow and separation mechanism research.

The purpose of this Special Issue is to gather new research contributions on CFD calculation and the analysis of multiphase flow transport/separation equipment (in the form of research articles, review articles, and brief communications). We welcome submissions from various research fields, from science to engineering, addressing theory, simulation, and application. The topics of this Special Issue include, but are not limited to, the mechanism and process of oil–gas transport/separation, steam (air)–water transport/separation, liquid/gas–solid transport/separation, equipment design and optimization, and application expansion.

Guest Editors

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Deadline for manuscript submissions

closed (26 July 2024)

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Message from the Editor-in-Chief

Continued developments in instrumentation and modeling have driven atmospheric science to become increasingly more complex with a deeper understanding of concepts, mechanisms, and interactions. This is the field that innovation built and it has led to a better appreciation for the complexity with atmosphere. Human life is intertwined in this complexity as we strive to better understand our atmosphere. Climate change is constantly stretching the limits of our thinking and forcing new ideas and concepts to be played out. Welcome to the Anthropocene!

Editor-in-Chief

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