Special Issue

Multiphase Flow and Heat and Mass Transfer in Industrial Complex Processes and Reactors

Message from the Guest Editors

This Special Issue focuses on the critical aspects of multiphase flow and heat and mass transfer in complex industrial processes and reactors. Multiphase flow systems, where gases, liquids, and solids interact dynamically, are fundamental to a wide range of industries, including chemical processing, energy production, pharmaceuticals, food manufacturing, and environmental engineering. Understanding and optimizing these systems are essential for improving efficiency, product quality, and sustainability. The scope of this Special Issue encompasses both theoretical and experimental studies that provide insights into the mechanisms of multiphase flow and associated heat and mass transfer phenomena. We invite contributions that explore innovative methodologies, advanced modeling techniques, and cutting-edge technologies relevant to industrial applications. We are particularly interested in papers presenting advanced modeling and simulation techniques like computational fluid dynamics (CFD) and discrete element method (DEM), novel experimental methods, process optimization strategies, and real-world industrial case studies.

Guest Editors

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You are invited to contribute either a research article or a comprehensive review for consideration and publication in *Processes* (ISSN 2227-9717). *Processes* is published in open access format – research articles, reviews, and other content are released on the internet immediately after acceptance. The scientific community and the general public have unlimited, free access to the content. As an open access journal, *Processes* is supported by the authors and their institutes through the payment of article processing charges (APCs) for accepted papers. We would be pleased to welcome you as one of our authors.

Editor-in-Chief

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