

## Special Issue

# Multiphase Flows and Heat & Mass Transfer

### Message from the Guest Editors

Both multiphase flows and heat & mass transfer are ubiquitously observed in nature, daily life and engineering fields, such as rain droplet impact, water boiling, oil recovery, cooling of integrated chips, etc. It is a complex process coupled with multiple physical phenomena. Numerous studies have been conducted to improve our understanding of this area by means of theoretical, numerical and experimental approaches. This Special Issue summarizes the recent progresses on this topic. The interested research areas include but are not limited to:

- Droplet impact on liquid and solid surface with different microstructures;
- Liquid boiling of different regimes, with different microstructures;
- Evaporation of liquid under isothermal/non-isothermal conditions;
- Evaporation of colloidal suspension and nanoparticle transport;
- Vapor condensation of different types;
- Multiphase flows and phase change in porous media;
- Enhanced heat & mass transfer;
- Various applications in oil recovery, chip cooling, microfluidics, fuel cells, carbon capture, utilization and storage, etc.

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### Guest Editors

Dr. Feifei Qin

Dr. Jianlin Zhao

Prof. Dr. Li Chen

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### Deadline for manuscript submissions

closed (20 August 2024)



## Applied Sciences

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## About the Journal

### Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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### Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo  
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