

## Special Issue

# Discrete Multiphysics: Modelling Complex Systems with Particle Methods

### Message from the Guest Editor

Particle methods have proven their versatility and effectiveness in a variety of applications, ranging from modelling of molecules to the simulation of galaxies. Their power is even amplified when they are coupled together within a discrete multiphysics framework. Moreover, particle methods also couple extremely well (better than mesh-based algorithms) with artificial neural networks, as recent studies on deep multiphysics show. In this Special Issue, we would very much appreciate contributions that show the power of particle methods in addressing multiphysics problems (including multiphase and complex flows). We specifically target methods such as smoothed particle hydrodynamics (SPH), the lattice spring model (LSM), peridynamics (PD) and the discrete element method (DEM) but other 'members of the family' such as Brownian dynamics (BD), dissipative particle dynamics (DPD), and molecular dynamics (MD) are welcome as well.

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### Guest Editor

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### Deadline for manuscript submissions

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### Message from the Editor-in-Chief

*ChemEngineering* is to consolidate its position as a high-quality, open access journal that not only disseminates excellent research but also sets the agenda for future directions in chemical engineering. We will continue to highlight core areas such as catalysis, process intensification, and the circular economy, while also opening the door to emerging topics such as multi-energy systems that integrate light, heat, and electricity, etc., as well as digital tools, modelling, and artificial intelligence applied to chemical engineering.

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### Editor-in-Chief

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