

# Special Issue

## Modeling and Simulation in Process Engineering

### Message from the Guest Editors

The development of computational technologies accelerates the study of process engineering and supports its evolution from fundamental studies to industrial strategy research. Thermodynamic and kinetic modelling clarifies the fundamental mechanisms of chemical reactions in different processes. These models can be integrated into CFD simulations using a numerical approach. Whilst CFD simulation solves chemical reaction processes involving fluid flows, CFD-DEM provides the increased possibility of simulating processes that involve discrete solids in a reactor system. Process simulation helps engineers with the optimization and analysis of chemical processes. These mathematical and numerical studies provide the possibility of understanding engineering processes from various angles. This Special Issue will include, but is not limited to, research work in the fields of thermodynamic modelling, kinetic modelling, CFD simulation, DEM simulation, and process simulation. We invite scholars and researchers from academic and industrial circles around the world to contribute to this Special Issue.

### Guest Editors

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### Deadline for manuscript submissions

closed (31 May 2024)



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### Message from the Editor-in-Chief

The journal *Mathematics* publishes high-quality, refereed papers that treat both pure and applied mathematics. The journal highlights articles devoted to the mathematical treatment of questions arising in physics, chemistry, biology, statistics, finance, computer science, engineering and sociology, particularly those that stress analytical/algebraic aspects and novel problems and their solutions. One of the missions of the journal is to serve mathematicians and scientists through the prompt publication of significant advances in any branch of science and technology, and to provide a forum for the discussion of new scientific developments.

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### Editor-in-Chief

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