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CFD for Design and Optimization of Biopharmaceutical Processes

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Message from the Guest Editor

Dear Colleagues,

The fast-growing literature on the use of computational fluid dynamics (CFD) for process design and scale-up reflects the rapid growth of using this tool in the field of biopharmaceuticals. CFD enables scientists to generate a digital copy of the process and can potentially capture the interactions between biological and transport phenomena and the associated non-linearities across reactor scales. These in silico tools can provide new insights into process attributes, reduce the number of experiments, increase process robustness, reduce risks associated with scale-up, and, therefore, result in the faster and cheaper production of therapeutics.

This Special Issue will focus on recent advances in the application of CFD for the design and optimization of upstream, downstream, filling, and finishing unit operations in biopharmaceutical processes.



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Special Issue



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Message from the Editor-in-Chief

Processes (ISSN 2227-9717) provides an advanced forum for process/system-related research in chemistry, biology, material, energy, environment, food, pharmaceutical, manufacturing and allied engineering fields. The journal publishes regular research papers, communications, letters, short notes and reviews. Our aim is to encourage researchers to publish their experimental, theoretical and computational results in as much detail as necessary. There is no restriction on paper length or number of figures and tables.

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