

## Special Issue

# Application of Systems Engineering Principles to Bioprocessing

### Message from the Guest Editors

This special issue on “Application of Systems Engineering Principles to Bioprocessing” aims to curate novel advances in the development and application of computational modeling and model-based applications to address longstanding challenges in Bioprocessing. Topics include, but are not limited to:

- Modelling (mechanistic and data-driven) and optimisation of upstream and downstream unit operations;
- Implementation of online control strategies;
- Model-driven process design;
- Whole process simulation and analysis, including flowsheeting of novel manufacturing processes for new modalities or modular production;
- Model-based approaches to enhance the understanding and performance of cellular behaviour under industrial bioprocessing conditions, such as design of genetic and metabolic engineering strategies, and/or enable the analysis of large datasets, such as systems biology, machine learning and artificial intelligence approaches.

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### Guest Editors

Dr. Cleo Kontoravdi

Department of Chemical Engineering, Imperial College London, South Kensington Campus, London SW7 2AZ, UK

Dr. Alexandros Kiparissides

Department of Chemical Engineering, Aristotle University of Thessaloniki, 54124 Thessaloniki, Greece

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### Deadline for manuscript submissions

closed (15 June 2020)



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Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[processes@mdpi.com](mailto:processes@mdpi.com)

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### Message from the Editor-in-Chief

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### Editor-in-Chief

Prof. Dr. Giancarlo Cravotto

Department of Drug Science and Technology, University of Turin, Via P. Giuria 9, 10125 Turin, Italy

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