Special Issue

3D Printing in Separation and Reaction Processes

Message from the Guest Editors

The market of 3D printing has been experiencing impressive growth with application in areas. Three-dimensional printing has crucial benefits over conventional manufacturing processes. Separation and reaction units are at the core of many industries. In this context, the combination of proper modeling approaches with the flexibility of 3D printing can have an important and disruptive role on how these units are designed. This Special Issue on “3D Printing in Separation and Reaction Processes” aims to address the recent developments achieved by the application of 3D printing to separation and reaction units/systems. We welcome review articles and original research papers. Topics include but are not limited to:

- Membrane separation modules
- Adsorption processes
- Chromatography
- Crystallization
- Extraction processes
- Multiphase catalytic reactors
- 3D printing of structures for catalysis and adsorption
- Reactor intensification
- Flow hydrodynamics in process units
- Scale-up strategies
- Bubble removal
- Rheology in 3D printing
- Microstructured reactors
- Microfluidic devices
- 3D printing and organs on chip
- New emulsification devices
- Cell enrichment

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Deadline for manuscript submissions

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Message from the Editor-in-Chief

Separations offers the scientific community a high-quality, open-access journal option with rapid time-to-publication without any sacrifice of a rigorous peer-review process. We invite contributions ranging from fundamental characterization and instrumentation development through application of techniques to shed light on a broad spectrum of separation science needs. Since inception, *Separations*, has become unique in its combination of rapid publication and thorough scientific content. We invite you to consider us for your next contribution.

Editor-in-Chief

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