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Additive Manufacturing for Bioseparation

Guest Editor:

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Deadline for manuscript submissions:
closed (1 April 2022)

Message from the Guest Editor

Dear Colleagues,

Emerging methods for additive manufacturing (3D printing) are an important driver for novel technological solutions for bioseparation, solving decade old problems that cannot be tackled by any conventional manufacturing techniques. Chromatography-based bioseparation requires homogenous column packing, but conventional technologies, like bead-based columns, fiber-based membranes, and phase-separated monolithic structures, rely on a stochastic process and cannot be fully homogenous in their design down to a µm level. Additive manufacturing offers complete freedom of geometry and potentially freedom of functionality for the generated structures. Those novel geometries, alongside novel methods for the functionalization and manufacturing of chromatographic devices, will expand the knowledge and capabilities of chromatography for biomolecules drastically, through the direct link of a digitally available structure for computational fluid dynamics and the physical object through 3D printing.[....]
For further reading, please follow the link to the Special Issue Website at:

https://www.mdpi.com/journal/separations/special_issues/3Dprinting_Bioseparation

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Message from the Editor-in-Chief

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