



Microsystems for Cell Cultures

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Message from the Collection Editors

Dear Colleagues,

Microsystems are being increasingly utilized in biotechnological, biomedical, and pharmaceutical research and development as a replacement for in vitro cell cultures and animal experiments. Platforms such as organ-on-chip (OoC) can be designed to recapitulate biochemical and biophysical conditions and replicate the natural microenvironment of living cells and tissues. In addition to OoC platforms, microbioreactors have become versatile bioprocess engineering tools used for microbial and mammalian cell cultivation. Such cell culture technologies are often equipped with miniaturized sensors that provide feedback, allow process monitoring and control, and ensure the necessary cell culture conditions are maintained. This Special Issue aims to assemble a collection of novel microsystems for cell cultivation. Advances in the areas of system design, sensor integration, as well as target applications are welcome.





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Message from the Editor-in-Chief

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