



## Advanced 3D Cell Culture Techniques in Micro-Bioreactors

Guest Editors:

### Prof. Dr. Eric Gottwald

Institute of Functional Interfaces,  
Karlsruhe Institute of  
Technology, Karlsruhe 76021,  
Germany

[eric.gottwald@kit.edu](mailto:eric.gottwald@kit.edu)

### Dr. Brigitte Altmann

G.E.R.N. Center for Tissue  
Replacement, Regeneration and  
Neogenesis, Department of  
Prosthetic Dentistry, Medical  
Center - University of Freiburg,  
Freiburg 79108, Germany

[brigitte.altmann@uniklinik-freiburg.de](mailto:brigitte.altmann@uniklinik-freiburg.de)

Deadline for manuscript  
submissions:

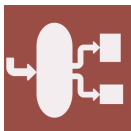
**30 July 2020**

### Message from the Guest Editors

With this Special Issue of *Processes*, we aim to give an overview of the current developments in 3D culture-based micro-bioreactor systems and their corresponding in vitro models, as well as their potential applications. Topics include, but are not limited to, the following:

- Transferring 2D-cultures into 3D;
- Applying an active flow;
- Combining different cell types for advanced 3D co-culture models;
- Miniaturization of cultures, e.g., for organ-on-a-chip devices;
- High-content-/high-throughput-capable micro-bioreactors;
- Micro-bioreactors in basic research;
- Micro-bioreactors as test beds in drug development;
- Micro-bioreactors for personalized medicine applications.





an Open Access Journal by MDPI

## Editor-in-Chief

### Prof. Dr. Michael A. Henson

Department of Chemical Engineering and the Institute for Applied Life Sciences, University of Massachusetts Amherst, N527 Life Sciences Laboratories, 240 Thatcher Way, Amherst, MA 01003, USA

## Message from the Editor-in-Chief

*Processes* (ISSN 2227-9717) provides an advanced forum for process/systems related research in chemistry, biology, materials and allied engineering fields. Our goals are to publish high impact articles of broad interest to the process systems community and to serve as a forum for major developments in process/systems research. The journal publishes regular research papers, communications, letters, short notes, and reviews. There are no restrictions on the length of published articles or on the use of color illustrations. All submitted manuscripts undergo rigorous peer review prior to publication.

## Author Benefits

**Open Access:** free for readers, with article processing charges (APC) paid by authors or their institutions.

**High visibility:** Indexed in the Science Citation Index Expanded (Web of Science) and Inspec (IET). Covered in *Scopus* from Vol. 5 (2017).

**CiteScore** (2018 Scopus data): 2.05.

## Contact Us

---

*Processes*  
MDPI, St. Alban-Anlage 66  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
Fax: +41 61 302 89 18  
www.mdpi.com

mdpi.com/journal/processes  
processes@mdpi.com  
@Processes\_MDPI