



The Application of Cutting Edge Technology of Microfluidics in the Mechanical Behavior of Blood

Guest Editors:

Dr. Elissaveta Zvetkova

Bulgarian Society of Biorheology,
1113 Sofia, Bulgaria

Dr. Ivan Ivanov

National Sports Academy "Vassil
Levski", 1700 Sofia, Bulgaria

Deadline for manuscript
submissions:

30 October 2024

Message from the Guest Editors

The application of the cutting-edge technology of microfluidics related to the origin, development, and future of microfluidics in the history of science, and this topic first appeared in the journal *Nature* in 2006 (Whitesides G M., 2006). The new biotechnology for the advancement of toxicology and drug production, "Microfluidic organ-on-a-chip", was independently developed in 2015 by two scientific groups (of Kaplon J. D. et al., and of Esch E.W. et al.). Major advances in the field of sensors are the result of the integration of "Tissue engineering" with "Microfluidics", "Microelectronics", and "Microfabrication".

Now, when biomolecules such as peptides, proteins, nucleic acids, etc., are analyzed and controlled in "Tissue engineering", "Biosensors" provide insights into the cells, monitoring signals which can be adapted to a 3D level. The "Body on a chip" could predict precise "cell-cell" and "cell-drug" responses.

In this Special Issue, original research articles and reviews are welcome. Research areas may include (but are not limited to) the following:

1. Microfluid;
2. Hematology;
3. Cutting-Edge Technology;
4. Mechanical Behavior of Blood;
5. Blood





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo

Dipartimento di Fisica,
Politecnico di Milano, Piazza L.
da Vinci 32, 20133 Milano, Italy

Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Author Benefits

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

High Visibility: indexed within Scopus, SCIE (Web of Science), Inspec, CAPlus / SciFinder, and other databases.

Journal Rank: JCR - Q2 (*Engineering, Multidisciplinary*) / CiteScore - Q1 (*General Engineering*)

Contact Us

Applied Sciences Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/applsci
applsci@mdpi.com
[X@Applsci](https://twitter.com/Applsci)