Special Issue

Blood Rheology: Insights & Innovations

Message from the Guest Editor

Hemorheology is the science of the rheology of blood and its constituents under stress during blood flow in the cardiovascular system, causing it to strain and activate under physiological conditions. Erythrocytes. leukocytes, and platelets are subjected to mechanical stresses in the cardiovascular system during flow that cause their deformation and chemical activation within physiological limits and beyond these limits in pathological conditions. There are many methods for studying the rheological properties of blood and its constituents. Methods based on atomic force microscopy (AFM) have been introduced and applied to study the mechanical properties of the blood cell membrane and PLT activation. Microfluidics has become a prominent field for the study of blood microrheology and the mechanical properties of blood cells. This Special Issue aims to showcase research and review articles on clinical, applied, and basic chemorheological, micromechanical, and mechanobiological research, promising new therapeutic developments and research on the effects of mechanical forces on cells, tissues, and biological systems.

Guest Editor

Prof. Dr. Nadia Antonova

Institute of Mechanics, Bulgarian Academy of Sciences, 1113 Sofia, Bulgaria

Deadline for manuscript submissions

15 January 2026



Life

an Open Access Journal by MDPI

Impact Factor 3.4
CiteScore 6.0
Indexed in PubMed



mdpi.com/si/221689

Life
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
life@mdpi.com

mdpi.com/journal/ life





Life

an Open Access Journal by MDPI

Impact Factor 3.4 CiteScore 6.0 Indexed in PubMed



About the Journal

Message from the Editor-in-Chief

Life (ISSN 2075-1729) is an international, peer-reviewed open access journal that publishes scientific studies related to fundamental themes in life sciences. Some papers are published individually, while others are submitted for inclusion in special issues with guest editors. You are invited to contribute a research article, essay, or a review to be considered for publication.

Editor-in-Chief

Prof. Dr. Lluís Ribas de Pouplana

Institute for Research in Biomedicine (IRB Barcelona), The Barcelona Institute of Science and Technology, 08028 Barcelona, Spain

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), PubMed, PMC, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q1 (Biology) / CiteScore - Q1 (Paleontology)

