

## 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.

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### Guest Editor

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### Deadline for manuscript submissions

closed (15 January 2026)



## Life

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### Message from the Editor-in-Chief

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### Editor-in-Chief

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