

Special Issue

Biological Fluid Dynamics

Message from the Guest Editors

Biofluid dynamics is a wide topic that merges mechanical and biological engineering as well as several fields of science. It involves a range of issues from external to internal flows and from how birds fly and animals swim to internal blood and urinary flows. The complexities of such flows in terms of geometry, multi-scale effects, fluid–structure interaction, and, in many cases, non-Newtonian fluid properties impose significant challenges when it comes to studying these flows. For this Special Issue, we call for a wide range of papers, including those covering analytical, computational, and experimental studies of biofluids as they are related to humans and animals. Manuscripts can focus on fundamental research or applied research, e.g., the design of biofluid devices. Of particular interest are manuscripts looking at the blood, renal, and respiratory systems as well as at the external flows of swimmers, flying animals, and pathogens spreading through air/gas and water/liquid. Nonetheless, manuscripts dealing with any other field related to biofluid dynamics are welcome as well.

Guest Editors

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Deadline for manuscript submissions

closed (30 September 2023)



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