Special Issue

Applications of Continuum Mechanics in Biomedicine and Fluid Dynamics

Message from the Guest Editor

During the last few decades, continuum mechanics has been used to furnish several powerful instruments, which were then demonstrated to be useful for capturing the behavior of real physical phenomena involved, for example, in industry, dynamic populations, economics, biology and medicine. Biofluid mechanics is, in fact, an area of research that furnishes challenges such as in describing complex fluids, studying time dependent problems, modeling specific geometries and developing devices. Modeling the motion of biological fluids can be an important resource for understanding, simulating and exploring cardiovascular, renal, lymphatic and respiratory systems as well as of flying animals or flows of swimmers. The aim of this Special Issue is to collect manuscripts concerning analytical, experimental or computational studies related to continuum mechanical models of biofluids in humans and animals. We are looking at studies related to blood and lymph modelitation, simulation in pathological situations or the presence of medical devices. Moreover, papers dealing with any other field related to biological application are also welcome.

Guest Editor

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Message from the Editor-in-Chief

The journal *Mathematics* publishes high-quality, refereed papers that treat both pure and applied mathematics. The journal highlights articles devoted to the mathematical treatment of questions arising in physics, chemistry, biology, statistics, finance, computer science, engineering and sociology, particularly those that stress analytical/algebraic aspects and novel problems and their solutions. One of the missions of the journal is to serve mathematicians and scientists through the prompt publication of significant advances in any branch of science and technology, and to provide a forum for the discussion of new scientific developments.

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