Advances in Biological Systems with Mathematics

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Message from the Guest Editors

This Special Issue is dedicated to exploring the realm of numerical modeling in the complex domain of biomechanical and biomedical engineering. The topics to be covered include, but are not confined to, cardiovascular mechanics, musculoskeletal mechanics, the application of innovative numerical algorithms in biomedical engineering, advancements in constitutive modeling within biomechanics, diffusion models in tissue engineering, and cell mechanics.

Advancements in computational technology have paved the way for the integration of sophisticated numerical models and high-performance simulations across various engineering domains. One field that stands out is biomedical engineering, often considered a pivotal bridge between engineering and medicine. It combines expertise from both realms to address issues directly related to human health. Additionally, the scope of biomedical engineering extends to the study of natural processes and their impact on animals. Within this expansive field, there are specific applications that warrant attention.

Special Issue

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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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