acoustics

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# Acoustics in Biomedical Engineering

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Deadline for manuscript submissions:
**closed (31 May 2022)**

## Message from the Guest Editors

Dear Colleagues,

There are cases in biomedical applications like listening to the blood flow through patients' heart valves from the chest/skin, or listening to the air flow in patients' lung airways. In these cases, air and blood turbulent flows exist in a flow-bounded domain which interact with solid rigid/elastic/moving bodies like mechanical heart valves or tumors in lung airways.

Our aim is to publish studies that reveal how mechanical vibration and sound impact the design and performance of engineered medical devices and improve non-invasive monitoring, analysis and diagnostic techniques of biological systems. The topics including, but not limited to:

Cardiovascular and respiratory biomechanics
Computational methods for analyzing the performance of medical devices, artificial organs, and prostheses
Bioacoustics and sound in biological systems
Biomedical signal processing and medical device development
Structural acoustics and vibration
Engineering acoustics, sound transducers and measurements
Fluid-structure Interactions and Flow-induced vibration
Acoustic Signal Processing

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