

Special Issue

Cavitation and Bubble Dynamics

Message from the Guest Editor

Cavitation and bubble dynamics play a crucial role in various fields and engineering applications. For instance, in marine engineering, ships and submarines encounter cavitation issues during underwater operations, making it essential to comprehend and control bubble dynamics in order to achieve enhanced navigation safety and performance. In energy engineering, the behavior of bubbles in turbine machinery and combustion processes directly influences efficiency and reliability. The medical field is also intimately associated with ultrasound therapy and imaging in relation to bubble dynamics. Thus, in-depth research on cavitation and bubble dynamics is crucial for advancements and innovation in these domains. In this Special Issue, our aim is to provide readers with comprehensive insights into the criticality, field applications, research methods, and recent advances in cavitation and bubble dynamics. We believe that through collaborative efforts and in-depth research, we can motivate the development of the cavitation and bubble dynamics field, bringing forth further innovation and discoveries in this engineering and scientific domain.

Guest Editor

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