



Vibration Problems in Engineering Science

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Message from the Guest Editor

The generalization of the dynamic approach to design, calculation, and certification has radically changed the representation of structures. Indeed, for the last thirty years, mathematical models have enabled the universal use of operational modal diagnosis and generalized predictive control, making structures more observable and controllable. Fatigue, aging, and damage can now be directly linked to vibration modeling, with possibilities for control and a significant reduction in the number of tests. Finally, structure–fluid vibration interactions, environmental representation, and stochastic vibration models are now fully integrated into certification tools. The stakes are huge, for aerospace structures, civil engineering, and light systems.

This Special Issue of *Applied Sciences* is of remarkable importance in this period of change in structural mathematics and certification and will bring together first-rate articles at the cutting edge of science in this field. It is also a very topical Special Issue, as it significant developments in the field of structural models and tests are anticipated.





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Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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