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Bluff-Body Flow and Fluid-Structure Interactions

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Message from the Guest Editors

Energy can be harnessed continuously from horizontal currents by employing alternating lift force technologies. Fluid flow over structures (e.g., foils, circular, square, rectangular cylinders) produces an alternating lift force due to complex fluid–structure interactions. The lift force generates vibration of the structure, while flow-induced vibration involves different phenomena such as vortex-induced and galloping vibrations. The kinetic energy of a violently vibrating structure can be converted into electricity, which can help to run a generator.

This Special Issue encompasses advances in bluff-body flow, fluid-structure interactions, heat transfer from bluff bodies, and wind/ocean energy in the fields of mechanical, civil, aerospace, ocean, chemical, energy, physics, and mathematics research. Research articles, review articles, and short communications are welcomed. Research techniques can be experimental, theoretical, computational, or a combination thereof. Papers should be academically excellent and original and include novel applications, approaches, and fundamental outcomes.











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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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