Special Issue

Vortex-Induced Vibration

Message from the Guest Editor

Vortex-induced vibrations (VIV) is a nonlinear flowstructure interaction phenomenon found in various civil, ocean, subsea, mechanical and aerospace engineering applications where the vortex-shedding hydrodynamic forces excite and interact with flexible structures. VIV is governed by several fluid-structure parameters entailing a variety of nonlinear dynamic scenarios. Over the past few decades, modelling, simulation, experiment and control of VIV have been advanced. Novel concepts of extracting energy from VIV have also been innovated. Despite such a great deal of research, several significant challenges and insights remain to be discovered and discussed from both theoretical and practical viewpoints. This Special Issue aims to collate the state-of-the-art research on VIV, highlighting the next-generation prediction models, numerical approaches, experiment studies and computational fluid dynamic simulations. Researchers are invited to submit original papers presenting new ideas, concepts, approaches and parametric findings. Topics to be covered include:

Guest Editor

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Deadline for manuscript submissions

closed (30 June 2020)



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About the Journal

Message from the Editor-in-Chief

Editor-in-Chief

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