

Editorial Preface

This special issue is the first of a series devoted to flow-induced vibrations, related to the 8th International Conference on Flow-Induced Vibrations (FIV 2004) which was held in July 2004, in École Polytechnique, Palaiseau, France.

The Conference was a continuation of a very successful series, the first six of which were held in England (most at Keswick in the Lake District) and the seventh, in 2000, in Lucerne, Switzerland. The 9th conference is already in the planning phase and will be held in Prague in 2008. Since the first conference, held in Keswick in 1973, focused on the needs of the nuclear industry, the scope of papers has become progressively broader, addressing a wide range of practical applications and technical domains, ranging from civil engineering and marine structures to aeroelasticity and biomechanics. In this 8th conference, 160 papers were presented, with 210 participants from 30 countries. The breadth of applications is exemplified by the major headings of the topics covered, which included: Fluid-structure interaction theory, Axial flow and thin walls, Tube arrays, Piping, gates and turbines, Flow-acoustic coupling, Two-phase flow, Computational methods, Biomechanics, Ship and offshore applications, Vortex induced vibration, Wings aeroelasticity, Wind-induced vibration, and Bluff bodies. All papers have been published in the Proceedings available during the conference (E. de Langre and F. Axisa (editors) 2004, *Flow-Induced Vibrations* École Polytechnique), and many shall appear, in up-dated and expanded versions, in the forthcoming series of special issues in this journal.

The ten papers presented in this special issue have in common the topic of coupling between flow and bluff bodies: this includes problems related to vortex-induced vibrations of cylinders (the first four papers), to the interaction of several cylinders (papers 5 and 6), two phase flow (paper 7), non-cylindrical bodies (paper 8), and three-dimensional effects (papers 9 and 10). These papers convey the diversity of the conference, with experimental, numerical and analytical aspects, and exemplify the very high quality of the presentations at the conference. We would like to thank all authors for taking time to up-date and expand their papers and submit them for this special issue.

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