



## Preface

This special issue is the first of a series mostly based on improved, expanded and up-dated papers originally presented at the *5th International Symposium on Fluid-Structure Interaction, Aeroelasticity, Flow-Induced Vibration and Noise*, held in November 2002 in New-Orleans, USA. This symposium gathered about 140 papers and even more participants. It took place within the ASME IMECE meeting. This Issue is devoted to structures coupled to stagnant fluid or to axial external or internal flow. At the symposium there was a relatively large group of 30 papers in Sessions on Internal, Axial & Leakage Flows or Sloshing. These papers originated from 13 different countries. They addressed a very large scope of applications ranging from vocal-fold dynamics to optical fiber coating instability and from reactor internals to collapsible tubes and Coriolis flowmeters. More fundamental issues were also considered, such as wave propagation on flexible walls or absolute instabilities. Some of the best of these papers in up-dated and extended form may be found in this Special Issue.

The seven papers in this Issue can be grouped as follows: (i) three papers are related to vibrations of pipes; (ii) two papers on sloshing; (iii) one paper on reduced-order nonlinear models for large-amplitude vibrations of fluid-filled shells; (iv) one paper on waves in a flexible wall immersed in axial flow.

We would like to thank the authors for taking the time to up-date and extend their papers, for the benefit of all the readers of the *Journal of Fluids and Structures*.

Marco Amabili  
*Dipartimento di Ingegneria Industriale,  
Università di Parma, Parco Area delle Scienze 181/A,  
Parma 43100, Italy*  
*E-mail address: marco@me.unipr.it*

Emmanuel de Langre  
*Department of Mechanics,  
LadHyX, Ecole Polytechnique,  
91128 Palaiseau, France*  
*E-mail address: delangre@ladhyx.polytechnique.fr*