

# Preface

Fluid-related structural vibration and noise are phenomena frequently encountered in many engineering applications, causing increasingly severe concerns. Turbulence clearly has a significant impact on these problems. However, there is cause for optimism as new capabilities emerge with the advent of various new techniques such as signal processing, flow visualization and diagnostics, functional materials, sensors and actuators, and control methods that are revitalizing research activities in an interdisciplinary area and constantly generating interesting new experimental and numerical findings. Within this context, the Fluid-Structure-Sound Interactions and Control (FSSIC) conference series was launched, jointly hosted by the China Aerodynamics Research and Development Center and The Hong Kong Polytechnic University, and held in Yinchuan City, China, in 2011. The series was internationalized in its second meeting held at The Hong Kong Polytechnic University in Hong Kong and Macau in 2013. This conference series aims to provide a forum for academics, scientists, and engineers working in the interconnected branches of research within FSSIC to exchange and share the latest progress, ideas and advances in these branches, bringing them together to chart and push forward the frontiers of FSSIC.

The meeting held during 5–9 July 2015 in Perth was the third of this conference series, attracting participants from all over the world and featuring prominent keynote speakers such as Profs. John Kim, Nigel Peake, Colin Hansen and Song Fu. A broad range of talks was presented covering topics such as turbulence, unsteady fluid dynamics, fluid-structure interaction, fluid-related noise and the control/management aspects of these research areas. This book contains a selection of the papers presented. We trust that it will be of interest to a broad spectrum of the engineering community.

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