



Preface

This special issue of the IJHFF is a collection of selected manuscripts that represent the broad cross-section of contributions to the Fifth International Symposium on Turbulence and Shear Flow Phenomena (TSFP5). The Symposium was held in Munich, Germany from 27 – 29 August, 2007 following successful symposia in Santa Barbara, USA in 1999, Stockholm, Sweden in 2001, Sendai, Japan in 2003, and Williamsburg, USA in 2005. TSFP5 had 268 participants from Asia, Europe, and the Americas with 178 oral presentations and 28 poster presentations selected from over 320 submitted abstracts.

The initial selection of manuscripts for this special issue was based on the quality and completeness of papers appearing in the symposium proceedings as well as the presentations at the Symposium. Authors, who wished to pursue this opportunity for publication, were invited to submit articles in conformity with the journal guidelines. The manuscripts received were then subjected to the same stringent review process as other IJHFF contributed manuscripts.

The papers included in this issue cover topics which have a long tradition in the turbulence community, but which still form a challenge for DNS, LES, turbulence modeling or experiment: pressure-gradient effects on wall-bounded turbulence, flow-separation induced by curvature or geometric constraints. Some papers focus on varied aspects of jet and wake dynamics, others on buoyancy effects in geophysical flows or on flow dynamics near free surfaces and solid wavy surfaces. Finally, this IJHFF issue also presents innovative turbulence-measurement techniques, ideas of transition control and a model for optimized drug delivery to the human blood-stream.

The editors wish to thank the funding agencies who made the TSFP-5 Symposium possible. They also express their gratitude to the members of the Scientific Programme and the Advisory Committees, to the reviewers who devoted time and effort to reviewing the selected papers and finally to the authors for their fine contributions.

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