

Preface

The 14th International Conference on Fluid Control, Measurements and Visualization (FLUCOME 2017) was hosted by the Department of Aerospace and Mechanical Engineering on the campus of the University of Notre Dame, USA, in October 8-12, 2017. This well established Conference was collocated with the Notre Dame Workshop on Plasma-Based Flow Control.

The FLUCOME conference was contemplated as a continuation of the previous thirteen meetings. The 1st FLUCOME symposium was organized by Professor Yasuki Nakayama (1916-2016) in Tokyo, Japan (1985). The 2nd symposium was held in Sheffield, UK (1988), the 3rd in San Francisco, CA, USA (1991), the 4th in Toulouse, France (1994), the 5th in Hayama, Japan (1997), the 6th in Sherbrooke, Canada (2000), the 7th in Sorrento (2003), the 8th in Chengdu, China (2005), the 9th in Tallahassee, FL, USA (2007), the 10th in Moscow, Russia (2009); the 11th in Keelung/Kenting, Taiwan (2011); 12th in Nara, Japan (2013); and the 13th in Doha, Qatar (2015).

The scientific program covered a wide range of topics, including Flow/Fluid Control, Flow Measurements, Non-Intrusive Methods, Visualization, Multiphase Flows, etc. The Workshop on Plasma-Based Flow Control (Plasma Aerodynamics) was organized as an entirely invited one-day meeting. Three keynote, fourteen invited and over fifty oral papers were presented during four Conference days. A special session was dedicated to a memory of Professor Nakayama, the FLUCOME founder and an outstanding leader in the international visualization community, who passed away in 2016.

This volume of IOP Journal Conference Series: Material Science and Engineering includes 21 selected papers presented in sections “Flow/Fluid Control”, “Measurements”, “Visualization”, and “Multiphase Flow”. We believe these manuscripts well represent the Conference topics and will raise readers' interest to the area considered.

We would like to thank the members of both the International Steering Committee and the Local Organizing Committee, who greatly helped in a challenging process of the meeting organization. We are also pleased to thank the Academic Conferences Office in the University of Notre Dame and the Engineering Communications and Marketing Group in the College of Engineering for their everyday assistance in the Conference preparation. Finally, we are grateful to the College of Engineering and the Institute of Flow Physics and Control for the financial support of FLUCOME 2017.

Thomas Corke and Sergey Leonov, FLUCOME 2017 Chairs

