Editorial

Bruno Chanetz* and Jean Délery

Onera, 8 rue des Vertugadins, 92 190 Meudon, France Fax: +33-1-46-23-51-58 E-mail: chanetz@onera.fr E-mail: bchanetz@u-paris10.fr E-mail: jean.delery@free.fr

*Corresponding author

Abderrahmane Baïri

University Paris-Ouest, LTIE-GTE, EA 4415, 50 rue de Sèvres, 92410 Ville d'Avray, France

Fax: +33-1-40-97-48-73 E-mail: bairi.a@gmail.com E-mail: abairi@u-paris10.fr

Biographical notes: Bruno Chanetz graduated from the University Lyon I [PhD in Fluid Mechanics in 1986; Habilitation to Manage Research (HDR) in 1997]. He was a Research Engineer at Onera in 1983, the Head of Hypersonic Group in 1990, Head of Hypersonic Hyperenthalpic Project in 1997 and Head of Experimental Simulation and Physics of Fluid Unit in 1998. Since 2003, he is the Deputy Director of the Fundamental and Experimental Aerodynamic Department. Between 1996 and 2003, he was in charge of the 'boundary layer' course at 'Ecole Centrale de Paris', then an Associate Professor at the University of Versailles from 2003 to 2009. He is presently an Associate Professor at the University Paris-Ouest. He has published 40 papers in archival journals and 100 articles in international or national conferences.

Jean Délery has been the Director of the Fundamental and Experimental Aerodynamics Department of Onera until 2003. He is now an Emeritus Advisor for this department, Chairman of the Aerodynamics Commission of 3AF (French Aeronautics and Astronautics Society), Chairman of the Scientific Committee of the National Centre for Technological Research in the field of terrestrial vehicle aerodynamics and aeroacoustics. As a Professor of Aerodynamics, he gives lectures at the University of Paris and the University of Rome 'La Sapienza'.

Abderrahmane Baïri is a Professor at the University Paris-Ouest. His main teaching activity in the Thermal and Energy Engineering Department (GTE) is related to heat transfer and engineering numerical methods. His areas of research done in Laboratoire de Thermique, Interfaces, Environnement (LTIE-GTE EA 4415) are numerical and experimental natural convection, thermal characterisation of materials, heat transfer at solid-solid interfaces and renewable energy.

The Applied Aerodynamics Conference is organised yearly in France by the Aerodynamics Technical Commission of the Association Aéronautique et Astronautique de France (French Aeronautical and Space Society or 3AF). The symposium concentrates each year on a different topic pertinent to the present interest of the aerodynamics research community.

In 2010, the symposium was held in the *Ecole Polytechnique Universitaire de Marseille* (Polytech'Marseille) and devoted to Aerodynamics of high speed flows, from transonic to hypersonic. In the present special issue of *the International Journal of Engineering Systems Modelling and Simulation (IJESMS*), nine articles

covering the problem addressed by the conference are published. Two articles are concerned with numerical predictive methods, two deal with laminarity and transition, three with shock wave/boundary layer interaction and its control and the last two articles dealing with high Mach number flows.

The articles have been completed and peer-reviewed by experts in the field of aerodynamics.

The next symposium will be held in Orléans (France) from 28 March to 30 March 2011. It will be devoted to the research area of aerodynamics of rotating bodies. A special issue will be dedicated to this conference.