



## Innovative MEthods of Separated Flow CONtrol in Aeronautics

### Opening Lecture Series – "Flow Control"<sup>1</sup>

23 - 24.04.2012

Instytut Maszyn Przepływowych PAN, Fiszera 14, Gdańsk, Auditorium

Day 1 – 23.04.2012		
11:20 – 13:00	L1-1. Flow control overview L1-2. Air Jet Vortex Generator simulation, optimization and application to flow control L1-3. Air Jet Vortex Generator application to shock induced separation control	P. Doerffer P. Flaszynski R. Szwaba
	Networking Break	
14:30 – 16:30	L2-1. An overview of Structural Health Monitoring L2-2. Non-contact measurements of vibrations L2-3. Investigation of piezoelectric actuator characteristics used for the synthetic jet flow control	W. Ostachowicz P. Malinowski R. Rimascauskiene
Discussion		
16:30	Visit to the laboratory of IMP PAN	

Day 2 – 24.04.2012		
09:00 – 11:00	L3-1. Introduction to Rotorcraft Flight: content, objectives, method of delivery, schedule, assessment, study material, textbooks L3-2. Broad introduction to rotorcraft L3-3. Rotorcraft configurations L3-4. Rotor in Hoover	G. Barakos G. Barakos G. Barakos G. Barakos
	Networking Break	
11:15 – 13:00	L4-1. Flow control - preliminary design of synthetic jet actuator L4-2. Numerical simulation and experimental validation of a synthetic jet actuator for active flow control L4-3. Multi-physics co-simulation platform	M. Matejka M. Kurowski D. Sabbatini
	Discussion	

<sup>1</sup> The event is organized by Instytut Maszyn Przepływowych Polskiej Akademii Nauk within the 7<sup>th</sup> Framework Programme PEOPLE 2010 Work Programme Marie Curie Actions - Initial Training Network, project acronym IMESCON