

**Japan-China Joint Workshop on Bio, Material and Flow Dynamics**

Date : 22 - 23 February, 2012

Place : 3rd floor, COE building, Institute of Fluid Science, Tohoku University

**22 Feb., 2012**

<b>Opening</b>			
08:30 - 08:40	Prof. Shigenao Maruyama	Tohoku Univ.	Welcome speech from Tohoku University
<b>Session 1 Material Science Chair : Toshiyuki Takagi</b>			
08:40 - 09:00	Dr. Xiang Li	Shanghai Jiao Tong Univ.	Development of hybrid scaffold with tailored mechanical properties and porous structures for bone replacement
09:00 - 09:20	Dr. Noriko Tomita	Tohoku Univ.	Membrane protein for preparation of application for nano-micro channel
09:20 - 09:40	Prof. Yun Luo	Shanghai Jiao Tong Univ.	Design approaches of high performance cardiovascular stents to prevent restenosis
09:40 - 10:00	Prof. Hiroyuki Miki	Tohoku Univ.	Development of an artificial esophagus with peristaltic motion using TiNi shape memory alloy
10:00 - 10:20	Break		
<b>Session 2 Flow Dynamics Chair : Xingang Liang</b>			
10:20 - 10:40	Prof. Yingzheng Liu	Shanghai Jiao Tong Univ.	Vortex dynamics behind bluff body: experimental measurements
10:40 - 11:00	Dr. Weixi Huang	Tsinghua Univ.	Simulation of the fluid-flexible body interaction by the immersed boundary method
11:00 - 11:20	Mr. Kai Chen	Tsinghua Univ.	Wake flow model of wind turbine using particle simulation
11:20 - 11:40	Mr. Qingshan Zhang	Shanghai Jiao Tong Univ.	Separated flow past a finite blunt plate subjected to the incident vortex street
11:40 - 12:00	Ms. Jie Liu	Tsinghua Univ.	Numerical simulation of flow fields around the flanged diffuser
12:00 - 13:00	Photo & Lunch		
<b>Session 3 Heat Transfer &amp; Thermodynamics 1 Chair : Atsuki Komiya</b>			
13:00 - 13:20	Mr. Hiroki Gonome	Tohoku Univ.	Controlling the radiative properties of coatings pigmented with submicroparticles
13:20 - 13:40	Mr. Zhongyang He	Tsinghua Univ.	Numerical simulation of data center cooling
13:40 - 14:00	Prof. Taku Ohara	Tohoku Univ.	Thermophysical Phenomena in Soft Matters
14:00 - 14:20	Ms. Guojie Hu	Tsinghua Univ.	Molecular dynamics simulation on the non-Newtonian behaviors of ideal gases
14:20 - 14:40	Break		
<b>Session 4 Heat Transfer &amp; Thermodynamics 2 Chair : Junnosuke Okajima</b>			
14:40 - 15:00	Dr. Xuetao Cheng	Tsinghua Univ.	Entransy loss in thermodynamic processes and its application
15:00 - 15:20	Prof. Xingang Liang	Tsinghua Univ.	Analyses of entropy generation and entransy loss in heat transfer and heat-work conversion
15:20 - 15:40	Mr. Takahiro Okabe	Tohoku Univ.	A Measurement Method of Thermophysical Properties of Soft Materials and Liquids by Using the Inverse Analysis
15:40 - 16:00	Break		
<b>Session 5 Life Science Chair : Yun Luo</b>			
16:00 - 16:20	Mr. Yuxing Hu	Tsinghua Univ.	Wireless communication of implantable devices
16:20 - 16:40	Prof. Luming Li	Tsinghua Univ.	R&D activities on neuromodulation engineering
16:40 - 17:00	Prof. Hiroyasu Kanetaka	Tohoku Univ.	Development of a new rehabilitation equipment for paralyzed patients using a repetitive magnetic pulse
17:00 - 17:20	Prof. Xiangyang Zhu	Shanghai Jiao Tong Univ.	EMG pattern recognition: algorithms and applications
17:20 - 17:40	Prof. Atsushi Shirai	Tohoku Univ.	Observation of motion of HL60 cells on HUVEC using the inclined centrifuge microscope
17:40 - 18:00	Mr. Shunchong Li	Shanghai Jiao Tong Univ.	EMG-based anthropopathic robotic hand

**23 Feb., 2012**

<b>Excursion</b>			
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