

The 21st Century COE Program

**Center of Excellence for Research and Education on Complex
Functional Mechanical Systems**

**Asian Advanced Vibration and Control Forum
by and for Young Researchers**

October 22nd – 24th , 2007

**Kyoto University
(Room 211, Faculty of Engineering Department of Physics Building)**

First day (October 22nd)

Time (Chairperson)	Speaker	Title
9:00 – 9:10	Prof. Hiroshi Matsuhisa (Kyoto Univ.)	Opening.
9:10 – 10:10 (Prof. Matsuhisa)	Prof. Chong-Won Lee (KAIST)	Biologically Inspired Mechanisms Based on Resonant Vibration: Flying Insect Flapping and Fish Locomotion.
10:10 – 10:20	Break time	
10:20 – 11:20 (Prof. Matsuhisa)	Lect. Hiroaki Nakanishi (Kyoto Univ.)	Development of an Autonomous Unmanned Helicopter and Its Application to Disaster Prevention and Response.
11:20 – 11:30	Break time	
11:30 – 12:45 (Fumi Takeoka)	Mai Bando (Kyoto Univ.)	Adaptive Output Regulation of Nonlinear Systems described by Multiple Linear Models.
	Sang-Hyun Park (KAIST)	Control of a Three-Pole Hybrid Active Magnetic Bearing Using Redundant Coordinates.
	Sayaka Kanata (Kyoto Univ.)	Radio Wave Based Localization of a Rover for Small Planetary Bodies.
12:45 – 13:50	Lunch	
13:50 – 14:50 (Assoc. Prof. Utsuno)	Prof. Youngjin Park (KAIST)	Research Overview of SDAC: Control Applications to Various Dynamic Systems.
14:50 – 15:00	Break time	
15:00 – 17:30	Special seminar	
17:30 – 21:00	Banquet	

*50 minutes for presentation and 10 minutes for questions and comments for special lectures.

**20 minutes for presentation and 5 minutes for questions and comments for other speakers.

(If there are a lot of questions or comments, the time can be extended.)

Second day (October 23rd)

Time (Chairperson)	Speaker	Title
9:00 – 10:00 (Lect. Nakanishi)	Prof. Kwang-Joon Kim (KAIST)	A Method of Transmissibility Design for Double Chamber Pneumatic Vibration Isolation Table.
10:00 – 10:10	Break time	
10:10 – 11:10 (Lect. Nakanishi)	Assoc. Prof. Hideo Utsuno (Kyoto Univ.)	Interesting Examples of Wave Propagation.
11:10 – 11:20	Break time	
11:20 – 12:10 (Sang-Hyun Park)	Min-Geun Song (KAIST)	Design of Fusion Filter for Orientation Estimation Using Gyro and Vision Sensor.
	Daisuke Kono (Kyoto Univ.)	High-Precision Machining by Measurement and Compensation of Motion Error.
12:10 – 13:15	Lunch	
13:15 – 14:30 (Daisuke Kono)	Fumi Takeoka (Kyoto Univ.)	Analysis of Gear Measurement Using Virtual Gear Checker (VGC).
	Ki-Sun Kim (KAIST)	Nonlinear Modeling of Vibration Isolation Elements Based on Measurement Characteristics for Application to Transient Response Analysis.
	Keisuke Yamada (Kyoto Univ.)	Equivalent Mechanical and Electrical Models for Active and Passive Vibration Control Systems Using Piezoelectric Elements.
14:30 – 14:40	Break time	
14:40 – 16:40	Tour (Laboratories, Factory, etc)	
16:40 – 16:50	Prof. Tetsuo Sawaragi (Kyoto Univ.)	Closing remarks.

*50 minutes for presentation and 10 minutes for questions and comments for special lectures.

**20 minutes for presentation and 5 minutes for questions and comments for other speakers.

(If there are a lot of questions or comments, the time can be extended.)

