

The 2nd Aerospace Innovation Workshop incorporating Tri-University Joint Workshop on Aerospace Engineering 2009

Program Overview

February 1, Monday, 2010

Opening Addresses

9:00-9:20

Mamoru Mitsuishi, Program Leader, The University of Tokyo, Japan
Toshinori Watanabe, Head of the Department of Aeronautics and Astronautics,
The University of Tokyo, Japan

Guidance and Control 1 (Aircraft)

9:20-9:50 (GC-1)

Neural Network Analysis and Control for Improving Air Safety
Shinji Suzuki, The University of Tokyo, Japan

9:50-10:20 (GC-2)

Visual Servoing for Unmanned Air Vehicles
Hyoun Jin Kim, Seoul National University, Korea

10:20-10:40 Coffee Break

10:40-11:10 (GC-3)

AIR: Center of Aero Innovation & Realization for Students
Chunhua Hu, Tsinghua University, China

11:10-11:40 (GC-4)

Dynamics and Control of a Ducted-Fan Unmanned Air Vehicle
Cees Bil, RMIT University, Australia

11:40-13:00 Lunch

Aerospace Innovation 1

13:00-13:30 (AI-1)

Fatigue and Crack Growth Analysis of Spacecraft Shell
Zhuo Zhuang, Tsinghua University, China

13:30-14:00 (AI-2)

Design and Fabrication of a Micro Flying Insect

Kyu-Jin Cho, Seoul National University, Korea

14:00-14:20 (AI-3)

Flow Simulations around a Two-wheel Main Landing Gear

Taro Imamura, The University of Tokyo, Japan

14:20-14:40 (AI-4)

System Identification of Small UAVs with Time-Frequency Information

Masaru Naruoka, The University of Tokyo, Japan

14:40-15:00

Coffee Break

Guidance and Control 2 (Spacecraft)

15:00-15:30 (GC-5)

Recent Research Activities of SNU Guidance, Navigation, and Control Group

Youdan Kim, Seoul National University, Korea

15:30-16:00 (GC-6)

Shape-Based Approach to Low-Thrust Interplanetary Trajectory Design

Hexi Baoyin, Tsinghua University, China

16:00-16:30 (GC-7)

University Nano-Satellite Program and Its Control Aspects

Shinichi Nakasuka, The University of Tokyo, Japan

16:30-16:50 (GC-8)

Attitude Determination and Control System in Nano-JASMINE Mission

Takaya Inamori, The University of Tokyo, Japan

16:50-18:00

Lab. Tour to Department of Aeronautics & Astronautics

18:00-20:00

Reception (Matsumoto-ro Restaurant, Bldg. No.2, 1st floor)

February 2, Tuesday, 2010

Aerospace Innovation 2

10:00-10:30 (AI-5)

3D Virtual technology supporting 21st century aviation world

Mahesh Deshpande, Dassault Systems K.K. Japan

10:30-11:00 (AI-6)

Self-Explosion of High-Mach Hydrogen Fuel Jet Spouting out from Hypersonic Aircraft

In-Seuck Jeung, Seoul National University, Korea

11:00-11:30 (AI-7)

Studies on High-Performance Low-Power Arcjet at Tsinghua

Lingyun Hou, Tsinghua University, China

11:30-11:50 (AI-8)

Numerical Investigation on the Violent Sloshing in Propellant Tanks

Takehiro Himeno, The University of Tokyo, Japan

11:50-13:10 Lunch

Short Oral and Poster Presentation

13:10-14:40 **Short Oral Presentation** (Two minutes per person)

14:40-15:50 **Poster Session** (Coffee and Refreshment)
See List of Poster Papers

15:50-16:00 **Closing**