

2012 International Conference on Advanced Mechatronic Systems (ICAMechS 2012)

Special Session on  
**Motion Control**

**Special Session Organizer:**

Yukinori Nakamura\*

\*Tokyo University of Agriculture and Technology, Japan

**Session Theme and Objective:**

Motion control plays an important role in mechatronic systems. For instance, the technique of precision positioning is essential for the manufacture of multifunctional/miniature electronic equipment. This session is aimed at presenting the control methodology and recent results of the motion control.

Topics covered by this session include but are not limited to:

- Robotics
- Vehicles
- Stage Positioning
- Tele-Operation
- Visual Servo System
- Human-Machine Collaborative Systems
- Observer and Sensorless Method
- Actuators and Sensors for Motion Control
- Modelling and System Identification for Motion Control

This special session includes the following papers:

**Paper #1**

Paper title: Verification of the Damping effect of Base Plate Jerk Feedback Scheme on the Self-oscillation of a Pneumatic Positioning Stage

Authors: Mohebullah Wali\*, Yukinori Nakamura\*, and Shinji Wakui\*

Affiliation: \*Tokyo University of Agriculture and Technology, Japan

**Paper #2**

Paper title: Position Control of a Vacuum Gate Valve and Its Evaluation

Authors: Yusuke Imai\*, Yukinori Nakamura\*, and Shinji Wakui\*

Affiliation: \*Tokyo University of Agriculture and Technology, Japan

**Paper #3**

Paper title: Implementation of Dual Disturbance Observer for Pneumatic Stage

Authors: Yoshiki Santo\*, Yukinori Nakamura\*, and Shinji Wakui\*

Affiliation: \*Tokyo University of Agriculture and Technology, Japan

**Paper #4**

Paper title: Termination Test of Feedback Error Learning for Automation of Learning and Positioning

Authors: Kazuki Morimoto\*, Yukinori Nakamura\*, and Shinji Wakui\*

Affiliation: \*Tokyo University of Agriculture and Technology, Japan