The 15th Symposium on Theory of Machines and Mechanisms

Date: July 11, 2008
Place: Conference Room 304, 3rd Floor, Ishikawadai 3 Bldg., Tokyo Institute of Technology (Ohokayama Campus)
2-12-1 Ohokayama, Meguro-ku, Tokyo 152-8552
(8 min. walk from Ohokayama Station, Tokyu Meguro-line and Ohimachi-line)

Program:
13:05 Opening Address by Yoshihiko NAKAMURA
President, Jc-IFToMM ( Univ. of Tokyo)

Session 1 : Robotics
Chair: Masafumi OKADA (Tokyo Tech.)
13:10 Development of 3-URU Pure Rotational Parallel Mechanism with Error Compensation Devices
*Soichiro MATSUDA (Graduate Student, Tokyo Tech), Yukio TAKEDA (Tokyo Tech) and Masaru HIGUCHI
13:30 Study on Designing a Biped Robot with Bi-articular Muscle Type Bi-lateral Servo System
*Kotaro FUJIMOTO (Graduate Student, Tokyo Denki Univ.), Yukio SAITO (Tokyo Denki Univ.) and Atsushi UMEMURA
13:50 Switching Control and Quick Stepping Motion for Falling Avoidance of Humanoid Robot
*Kou YAMAMOTO (Graduate Student, Univ. of Tokyo) and Yoshihiko NAKAMURA (Univ. of Tokyo)

Session 2 : Dynamics and Accuracy
Chair: Nobuyuki IWATSUKI (Tokyo Tech.)
14:30 Analysis of Nonlinear Vibration System by Higher Order Spectra
*Hiroyuki MATSUMOTO (Institute of Technologists), Yuuto ONODERA (MAKITA Corp.),
Hisami OHISHI (Kogakuin Univ.) and Shinji YAMAKAWA
14:50 Design of Leg Mechanism for Impact Absorption Based on Kineto-static Mechanical Synthesis of Closed
Kinematic Chain
*Jun TAKEISHI (Graduate Student, Tokyo Tech) and Masafumi OKADA (Tokyo Tech)
15:10 Friction Control Based on Ultrasonic Oscillation for Rolling-element Linear-motion Guide (4th Report)
*Takaaki OIWA (Shizuoka Univ.) and Aizat
15:30 Evaluation Method of Gear Measuring Instrument Using Wedge Artifact
*Masaharu KOMORI (Kyoto Univ.), Fumi TAKEOKA, Kazuhiko OKAMOTO, Aizoh KUBO,
Sonko OSAWA (AIST) Osamu SATO and Toshiyuki TAKATSUJI

Session 3 : Application of Robots
Chair: Yukio TAKEDA (Tokyo Tech.)
16:10 Motion Control of an In-pipe Mobile Robot Based on Position Estimation by Only Posture Sensing
Savaruj NARAMONTHON (Nissan Motor) and *Nobuyuki IWATSUKI (Tokyo Institute of Technology)
16:30 Space Securing in Minimally Invasive Brain Surgery
- Development of Master System Considering Maneuverability –
*Yosuke AKABANE (Kogakuin Univ.), Hideki TAKANOBU, Kenji SUZUKI, Hirofumi MIURA,
Shuta MATSUMURA, Haruka KAWAMITSU, Jun OKAMOTO (Waseda Univ.), Masakatsu G. FUJIE
and Hiroshi ISEKI (Women’s Medical Univ.)
16:50 Development of the Anthropomorphic Saxophonist Robot WAS-2
- Improvement of the Lip’s Mechanisms and Mechanism Designing of an Anthropomorphic Hand –
*Shimpei ISHIKAWA (Graduate Student, Waseda Univ.), Tetsuro YAMAMOTO, Masaaki TAKEUCHI,
Petersen KLAUS, Solis JORGE (Waseda Univ.) and Atsuo TAKANISHI
17:10 Closing Address by Haruo HOUJOH
Vice President, Jc-IFToMM(Tokyo Tech.)

17:20 Annual Meeting 2009
Address from president:
Yoshihiko NAKAMURA(Univ. of Tokyo)
Chair: Nobuyuki IWATSUKI (Tokyo Tech.)

18:10 Wine party
at Room 305, 3rd Floor, Ishikawadai 3 Bldg.
The fee is 5,000 Jpn yen and free for students.