



Date: May 12, 2012

Venue: 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:

10:45 Opening Address
by Haruo HOUJOH, President of Jc-IFTOMM (Tokyo Tech.)

Session 1: Mechanism and Kinematics

Chair Nobuyuki IWATSUKI (Tokyo Tech.)

- 10:50 Development of a Complex Three Dimensional Pipe Bender Using 3-RPSR Parallel Mechanism - Manufacturing of Helix Pipes -
Satoshi INADA (Tokyo Tech.), Yukio TAKEDA, Daisuke MATSUURA, *Shohei KAWASUMI, Ken ICHIRYU (Kikuchi Seisakusho Co., Ltd.), Kazuya HIROSE
- 11:10 Development of the Flexible Ciliary Robot Using Hydrostatic Skeleton
*Takuya HIGASHI (Tokyo Tech.), Hitoshi KIMURA, Norio INOU
- 11:30 The effectiveness of the higher order spectra in the non-linear vibration system
*Hiroyuki MATSUMOTO (Institute of Technologists), Koji TAKEUCHI (Kogakuin Univ.), Hisanori OISHI, Shinji YAMAKAWA
- 11:50 Lunch Break

Session 2: Understanding of creatures and its application

Chair Masafumi OKADA (Tokyo Tech.)

- 13:20 Study on Robot That Can Grow Like Humans - Reappearance of Human Grows up Height, Weight, and Walking -
*Keisuke SUZUKI (Kogakuin Univ.), Hideaki TAKANOBU, Kenji SUZUKI, Hirofumi MIURA
- 13:40 Quadruped Robot Mechanism by the Mechanical Function of Vertebrate Muscular Arrangement
*Yuki WASHIDUKA (Toyama Prefectural Univ.), Toru OSHIMA, Ken'ichi KOYANAGI, Tatsuro MOTOYOSHI
- 14:00 Active Joint Visco-elasticity Estimation of the Human Knee Using FES
*Seiya SAKAGUCHI (Tokyo Univ. of Agriculture and Technology), Gentiane VENTURE, Mitsuhiro HAYASHIBE (INRIA), Christine AZEVEDO
- 14:20 Gait Analysis for Robot Foot Development
*Yusuke OGAWA (Tokyo Univ. of Agriculture and Technology), Gentiane VENTURE

Special Lecture

15:00 The Great East Japan Earthquake and Robots - What the robots should be -

Professor Shigeo Hirose (Tokyo Tech.)

Session 3: Medical and bioengineering apparatus

Chair Gentine VENTURE (Tokyo Univ. of Agriculture and Technology)

16:10 Noncontact Micro Probe Manipulation System Having 3D Magnetic Tweezer and 3-DOF Flexure Stage

*Daisuke MATSUURA (Tokyo Tech.), Zhipeng ZHANG (GE Global Research Center), Chia-Hsian MEN (The Ohio State Univ.)

16:30 Space Securing in Minimally Invasive Surgery - Development of Master System Considering Maneuverability -

*Shingo IZUMI (Kogakuin Univ.), Hideaki TAKANOBU, Kenji SUZUKI, Hirofumi MIURA, Masakatsu FUJIE (Waseda Univ.), Hiroshi ISEKI (Tokyo Women's Medical Univ.)

16:50 Motion Instruction and Evaluation for Chest Compression using Enhanced Motion

*Shun KAYASHIMA (Tokyo Tech), Masfumi OKADA

17:10 Closing Address

by Yoshihiko NAKAMURA, President of IFToMM (Univ. of Tokyo)

17:20 2012 Annual Meeting of Jc-IFTToMM

Address from President by Haruo HOUJOH (Tokyo Tech.)

Moderator Yukio TAKEDA (Tokyo Tech.)

18:30 Technical Networking Event

Venue: Room 305, 3rd Floor, Ishikawadai 3 Bldg., Tokyo Institute of Technology

Fee: 5,000JPY (students won't be charged)