
The 4th Japan-China Joint Workshop Program

- 12:50-13:00 Opening Address Prof. Tetsuhiro Tsukiji (Sophia University)
- 13:00-14:20 Session 1 “Energy-Saving and Hydraulic Pump Design”**
Chair: Prof. Kazuhisa Ito (Shibaura Institute of Technology)
- 13:00-13:20 Yaoxing Shang, Zongxia Jiao, Zhihui Li, Zengning Song, Longfei Zhao, Maolin Cai (Beihang University)
Active Load Sensing Electro-Hydrostatic Actuator for More Electrical Aircraft: Concept and Design
- 13:20-13:40 Pha Ngoc Pham, Kazuhisa Ito (Shibaura Institute of Technology), Shigeru Ikeo (Sophia University)
Energy Saving for Water Hydraulic Pushing Cylinder in Meat Slicer
- 13:40-14:00 Hongwei Cui, Zisheng Lian, Yuanyuan Deng, Qiliang Wang (Taiyuan University of Technology)
The Research on Characteristics of Flow Field and Shear Torque of Oil Film for Hydroviscous Drive
- 14:00-14:20 Toshiharu Kazama (Muroran Institute of Technology)
Numerical Simulation of A Slipper with Retainer for Axial Piston Pumps and Motors under Swashplate Vibration
- 14:20-14:35 Break
- 14:35-15:35 Session 2 “Hydraulics and Control”**
Chair: Prof. Bing Xu (Zhejiang University)
- 14:35-14:55 Jianfeng Tao, Xuan Wang, Zhilin Xiong, Chengliang Liu (Shanghai Jiao-tong University)
Modelling and Simulation of Unidirectional Proportional Pump - Controlled Asymmetric Cylinder Position Control System with Model Predictive Control Algorithm
- 14:55-15:15 Kazushi Sanada (Yokohama National University)
Speed Control of Marine Diesel Engine by DDVC Fuel Injection System
- 15:15-15:35 Bin Yu, Kaixian Ba, Chunhe Li, Qixin Zhu, Hualong Zhao, Xiangdong Kong (Yanshan Univeristy)
The Co-simulation Research of Single Leg Hydraulic Control System on Legged Robot
- 15:35-15:50 Break
- 15:50-16:50 Session 3 “Pneumatics and Functional fluids”**
Chair: Prof. Kenjiro Takemura (Keio University)
- 15:50-16:10 Joon-wan Kim, Kazuyoshi Kondo, Shinichi Yokota (Tokyo Institute of Technology), Kazuya Edamura (New Technology Management Co., Ltd.)
MEMS-Fabricated Needle & Ring Electrode Pair (NRE) and its Application to the Braille Cell
- 16:10-16:30 Xin Li, Xinzhe Wang (Zhejiang University)
Development and Analysis of Air Flotation Element with Additional Air-Intake Capacity
- 16:30-16:50 Tetsuya Akagi, Shujiro Dohta, Yasuko Matsui, Hiroaki Tamaki, Naoki Kato (Okayama University of Science)

Low-cost Portable Rehabilitation Devices Using Flexible Pneumatic
Cylinders with Built-in Pneumatic Driving System Controlled by
Embedded Controller

16:50-17:00

Closing Address Prof. Osamu Oyama (Meiji University)