

Program

Tuesday, August 4

10:00-11:30 Pre-meeting FPTCI

12:00 Lunch

13:30-15:30 Meeting of FPTCI

16:00-17:30 60 Anniversary of Fluid Control and Automation Department

18:30 Welcome and Celebration Party

Wednesday, August 5

8:30-9:30 Opening of FPM2015

9:30-9:50 Coffee break

9:50-12:00 Keynote speech 1

12:00 Lunch

13:00-14:40 Session A1 Session B1 Session C1 Session D1

14:40-15:00 Coffee break

15:00-16:40 Session A2 Session B2 Session C2 Session D2

18:30 Dinner

Thursday, August 6

8:30-10:10 Keynote speech 2

10:10-10:30 Coffee break

10:30-12:00 Keynote speech 3

12:00 Lunch

13:00-14:40 Session A3 Session B3 Session C3 Session D3

14:40-15:00 Coffee break

15:00-16:20 Session A4 Session B4 Session C4 Session D4

16:20-17:00 forum

18:30 Award Party

Friday, August 7

8:30-10:10 Session A5 Session B5 Session C5 Session D5

10:10-10:30 Coffee break

10:30-12:10 Session A6 Session B6 Session C6 Session D6

12:10 Lunch

13:00-14:30 Keynote speech 4

14:30-14:50 Coffee break

14:50-16:00 Keynote speech 5

16:00-16:30 Closure of FPM2015

18:30 Farewell Party

Tuesday, August 4, Auditorium	
10:00-11:30	Pre-meeting FPTCI -FPTCI head member only
12:00	Lunch
13:30-15:30	Meeting of FPTCI -FPTCI member only
16:00-17:30	60 Anniversary of Fluid Control and Automation Department -open to all participants
18:30	Welcome and Celebration Party Location: Restaurant -all participants
Wednesday, August 5, 2015, big Auditorium	
8:30-9:30	Opening of FPM2015
9:30-9:50	Coffee break
9:50-12:00	Keynote speech 1 Chair: Torben O. Andersen, Aalborg University, Denmark
9:50-10:30	Development of Hydro-viscous Clutch for the Hard Rock Tunnel Boring Machine - Huayong Yang, Zhejiang University, China
10:30-11:00	New concepts for parallel kinematic mechanisms using fluid actuation -Andrew Plummer, University of Bath, United Kingdom
11:00-11:30	Research Progress of Chinese Space Robotics -Hong Liu, State Key laboratory of Robotics and Systems, China
11:30-12:00	Automation and economy of working machines -Kalevi Huhtala, Tampere University of Technology, Finland
12:00	Lunch

Wednesday, August 5, 2015, Session A1, Auditorium A

13:00-14:40 Chair: Dacheng Cong, Harbin Institute of Technology, China

Experimental Validation of Modelled Fluid Forces in Fast Switching Hydraulic On/Off Valves

Christian Noergaard, Michael M. Bech, Daniel B. Roemer and Lasse Schmidt
Aalborg University, Denmark

Control system hydropneumatic of wheel machine with variable elastic characteristic

Maxim Andreev, Bauman Moscow State Technical University, Russia

Modeling and Analysis of the Electro-hydraulic Proportional Valve Controlled Motor System Supplied by Variable Pressure Accumulator

Bingbing Wang, Guanglin Shi, Licheng Yu, Shanghai Jiao Tong University, China

Research On Multi-degree Of Freedom Force Loading System Based On Parallel Mechanism

Qitao Huang, Peng Yin, Harbin Institute of Technology, China

A study on motion and energy absorption characteristics of raft-type wave energy converter

Qingjun Yang, Changhai Liu, Wei Feng, Gang Bao, Harbin Institute of Technology, China

Wednesday, August 5, 2015, Session A2, Auditorium A

15:00-16:40 Chair: Dianrong Gao, Yanshan University, China

A new approach based on Undulate Propulsion Theory for flapping wing analysis and design

Longfei Zhao, Yaoxing Shang, Zongxia Jiao, Beihang University, China

Modeling of Movement-Induced and Flow-Induced Fluid Forces in Fast Switching Valves

Roemer Daniel Beck, Johansen Per, Schmidt Lasse, Andersen Torben Ole
Aalborg University, Denmark

A Bio Inspired UAV Model Based on Corvus Splendens

Ahsan Jameel, Shahmeer Khalid, Muhammad Khan, Khurram Kamal, Anas Aqeel,
Senthana Mathavan, Talha Awais, Tayyab Zafar
National University of Sciences and Technology, Pakistan

Design and Fabrication of ER Braking Device for Micromouse

Xiangxiang Fan, Sayako Sakama, Takahiro Togawa, Yutaka Tanaka
Hosei University, Japan

Investigation on Sealing Gap between Ring Gear and Case in Internal Gear Machines

Ruilong Du, Yinglong Chen, Hua Zhou, Zhejiang University, China

Wednesday, August 5, 2015, Session B1, Auditorium B

13:00-14:40 Chair: Xin Fu, Zhejiang University,China

A Survey of Dynamic Robot Legged Locomotion

Jawaad Bhatti, Andrew Plummer, Pejman Iravani, Beichen Ding
University of Bath, United Kingdom

Numerical Study of Turbulent Drag Reduction over Non-smooth Surfaces of Rotating-stationary Disk System

Zhao Xiong, Shihua Yuan, Wei Wu, Jibin Hu, Beijing Institute of Technology, China

Displacement Estimation of Tap-Water Driven McKibben Muscles

Wataru Kobayashi, Kazuhisa Ito, Shibaura Institute of Technology, Japan

Adaptive backstepping design of electro-hydraulic actuator based on state feedback control

Qing Guo, Tian Yu, Dan Jiang, University of Electronic Science and Technology of China

Study on Energy Regeneration System for Hybrid Hydraulic Excavator

Kyoung Kwan Ahn, Ngoc Minh Truong Bui, Quang Truong Dinh, Quoc Thanh Truong, Se Young Lee, So Young Lee, University of Ulsan, Korea

Wednesday, August 5, 2015, Session B2, Auditorium B

15:00-16:40 Chair: Hua zhou, Zhejiang University,China

Space End Effector Capturing Hybrid Simulation System

Desheng Zeng, Yu Yang, Dacheng Cong, Chifu Yang
Harbin Institute of Technology, China

A new pressure impact method of closed hydraulic rotation system with large inertia in the process of rapid startup and stop: parallel valve controlled variable damping control

Haigang Ding, Guozhi Han, Zong Li, Jiyun Zhao
China University of Mining and Technology, China

Wiener recurrent neural network adaptive inverse controller of hydraulic flight motion simulator

Yifei Zhao, Zongxia Jiao, Shuai Wu, Beihang University, China

New approach for hydraulic force control based on hydraulic compliance

Job Angel Ledezma, Victor Juliano De Negri, Edson Roberto De Pieri
Federal University of Santa Catarina, Brazil

On the method of selecting the reference operating conditions for valve plates design in axial piston pumps

Jun kai, Ming Liu, Yongqiang Zhao, Harbin Institute of Technology, China

Wednesday, August 5, 2015, Session C1, Auditorium C

13:00-14:40 Chair: Bing Xu, Zhejiang University, China

Numerical investigation of turbulent flow in an open rotor-stator system

Chenhui Hu, Wei Wu, Jibin Hu, Shihua Yuan, Beijing Institute of Technology, China

Development of Seawater Hydraulic Pump Tester in Deep-sea Simulated Environment

Zhenhua Zhang, Songlin Nie, Limao Zhang, Shaohua Yuan
Beijing University of Technology, China

Rotational Speed Characteristic of Rotor Immersed in Oil Within an Electric Motor-pump

Jinlin Wang, Hong Ji, Wei Ren, Jiming Zhang
Lanzhou University of Technology, China

Pressure compensator (PC) pressure overshoot analysis and experimental research of an open circuit pump

Carsten Fiebing, Xiujuan Lu, Stanislav Smolka
High Power Open Circuit Danfoss Power Solutions, China

Morphological Topology Generation of a Digital Fluid Power Displacement Unit using Chebychev-Grübler-Kutzbach Constraint

Per Johansen, Daniel B. Roemer, Torben O. Andersen, Henrik C. Pedersen
Aalborg University, Denmark

Wednesday, August 5, 2015, Session C2, Auditorium C

15:00-16:40 Chair: Guanglin Shi, Shanghai Jiao Tong University, China

Direct Nonlinear Control for an Electro-hydraulic System

Xuan Ba Dang, Kyoung Kwan Ahn, University of Ulsan, Korea

A Low Order Adaptive Control Scheme For Hydraulic Servo Systems

Torben Andersen, Henrik Pedersen, Michael Bech, Lasse Schmidt
Aalborg University, Denmark

A Research Proposal of the Optimization Strategy of Distribution Network

Rinat Kakimzhanov, Li Huang, Xu Zhang, Bowen Wang
Beijing Jiaotong University, China

Basic investigation of a contactless air conveyor for flat products using viscous traction

Wei Zhong, Zhiyuan Ge, Xin Li, Guoliang Tao, Toshiharu Kagawa
Jiangsu University of Science and Technology, China

Modelling and Simulation of a Novel Dual-Redundancy Electro-Hydrostatic Actuator

Haitao Qi, Yating Teng, Zilong Liu, Beihang University, China

Wednesday, August 5, 2015, Session D1, Auditorium D

13:00-14:40 Chair: Yinshui Liu, Huazhong University of Science & Technology, China

Research on the Performance of Hydraulic Excavator with Pump and Valve Combined Separate Meter In and Meter Out Circuits

Lei Ge, Zhixin Dong, Weinan Huang, Long Quan, Jing Yang, Wenyong Li
Taiyuan University of Technology, China

Modeling and Simulation of Hydraulic System for The Multi-DOF Hydraulic Arm

Yishan Zeng, Shengtao Geng, Lingqing Feng, Baogen Zhou
Hefei University of Technology, China

Research on Modeling and Simulation of a Hydraulic Cylinder with Special Buffer Structure

An He, Jian Shi, Shaoping Wang, Beijing University, China

The Steering Hydraulic Drives with Centralized or Independent Power Supplies for the Main Aircrafts

Igor Shumilov, Bauman Moscow State Technical University, Russia

Experimental Research on the Friction Force of Pneumatic Cushion Cylinder

Tianze Zhang, Haitao Wang, Luyao Wang, Dalian Maritime University, China

Wednesday, August 5, 2015, Session D2, Auditorium D

15:00-16:40 Chair: Wei Xiong, Dalian Maritime University, China

An intelligent secretion clearance system based on Pneumatics

Yan Shi, Shuai Ren, Jinglong Niu, Maolin Cai, Weiqing Xu
Beihang University, China

Design of a Novel Rotary-Linear Pneumatic Actuator Integrated with Ultrasonic Motion Control Mechanism

Liang Wang, Yingting Wang, Tinghai Cheng, Tuo Wang, Mengfei Yin
Changchun University of Technology, China

Development of Emotion Recognition Algorithm using Tactual Communication Tool

Yasuhiro Matsuda, Kanagawa Institute of Technology, Japan

Active Disturbance Rejection Trajectory Tracking Control for Two-Joint Driven by Pneumatic Artificial Muscles

Ling Zhao, Linlin Ge, Yafei Yang, Yanshan University, China

An Automatic Liquid-Filled Colour-Changing Glasses Based on Thermo-Pneumatic Technology

Min Zhang, Songjing Li, Harbin Institute of Technology, China

Thursday, August 6, 2015, big Auditorium

8:30-10:10	Keynote speech 2 Chair: Howard Zhang, Chief Engineer Parker Hannifin Hydraulics, USA
8:30-9:10	Connected Industry @ Bosch Rexroth - Lee Shun Kin, Bosch Rexroth China
9:10-9:40	Introduction to Research on Hydraulic Steering Unit for Heavy Track Vehicles -Guangming Zhou, Science and Technology on Vehicle Transmission Laboratory, China
9:40-10:10	Energy consideration and saving technology in pneumatic systems - Toshiharu Kagawa, Tokyo Institute of Technology, Japan
10:10-10:30	Coffee break
10:30-12:00	Keynote speech 3 Location: big Auditorium Chair: Long Quan, Taiyuan University of Technology, China
10:30-11:00	Rectangular Tabs for Elliptic Jet Control - E Rathakrishnan, Indian Institute of Technology Kanpur, India
11:00-11:30	Advantages and Challenges of Electro-Hydrostatic Linear Driven Actuators - Zongxia Jiao, Beihang University, China
11:30-12:00	Usge of Module-Element Method in Problems of Hydroelasticity for Composite Systems “Ship-Liquid” - Nicolai. A. Taranukha, Komsomolsk-na-Amure State Technical University,Russia
12:00	Lunch

Thursday, August 6, 2015, Session A3, Auditorium A

13:00-14:40 Chair: Wanqi Ma, Dalian Maritime University, China

On Orientation Control of Suspended Blade During Installation in Wind Turbines

Lasse Schmidt, Daniel B. Roemer, Henrik C. Pedersen, Torben O. Andersen
Aalborg University, Denmark

Optimal Design of a Small High Temperature and High Pressure Spool Valve for Oil Exploration

Mingxing Han, Yinshui Liu, Donglin Li, Yipan Deng, Jun Li
Huazhong University of Science & Technology, China

Comparative Analysis of Braking Performance for DualTorus Hydrodynamic Retarder with Bowed Blade and Straight Blade

Qingdong Yan, Hongbin Mu, Wei Wei, Beijing Institute of Technology, China

Multiple Damage Detection using Sparse Blind Source Separation in Composite Structures

Shaopeng Dong, Mei Yuan, Fukai Shang, Yuxuan Liang, Zongxia Jiao
Beihang University, China

A+D Combined Pump-controlled System for the Regular Forging Process of the Forging Press

Jing Yao, Bin Li, Xiaoming Cao, Yang Zhang, Yanshan University, China

Thursday, August 6, 2015, Session A4, Auditorium A

15:00-16:20 Chair: Daniel Beck Roemer, Aalborg University, Denmark

Research on natural vibration characteristic of metal pipelines with different length

Xiangdong Kong, Yuan Cao, Lingxiao Quan, Dong Li, Yanshan University, China

A Position Synchronization Control for HA/EHA System

Waheed UR Rehman, Shaoping Wang, Xingjian Wang, Ali Kamran
Beihang University, China

Simulation of Wet-Clutch Short-time Load end Speed Control System on Amesim

Di Wang, Bing Xu, Junhui Zhang, Song Zhang, Zhejiang University, China

Dynamics of Hydraulic Transformer Controlled Motor System

Chongfeng Di, Wei Wu, Jibin Hu, Shihua Yuan, Beijing Institute of Technology, China

Thursday, August 6, 2015, forum, Auditorium A

16:20-17:00 10000 Science Difficult Problems-Manufacturing Area
Chair: Bing Xu, Zhejiang University, China

Thursday, August 6, 2015, Session B3, Auditorium B

13:00-14:40 Chair: Kato Tomonori, Fukuoka Institute of Technology, Japan

Model Based System Engineering-Siemens Hydraulic Innovation Solution

Zhao Zhang, Siemens PLM Software, China

Mintai's Main Application in Hydraulics

Shuling zhang, Mintai Hydraulics Shanghai Co., Ltd.

Machine Regulation Volume Hydraulic Drive with Reciprocating Motion of Hydraulic Motors

Oleg Nikitin, Bauman Moscow State Technical University, Russia

Research on the Force Compensation Control Strategy of Machine Part Chamfering Robot

Lihua Yang, Guanglin Shi, Qinyang Guo, Shanghai Jiao Tong University, China

Analysis of Magnetic Force of Electromagnet Ball Valve During Pipeline Hydraulic Transients

Wenzhi Cao, Tianyang Zhao, Dan Jiang, Ping Yang

University of Electronic Science and Technology of China

Thursday, August 6, 2015, Session B4, Auditorium B

15:00-16:20 Chair: Hongzhou Jiang, Harbin Institute of Technology, China

Fault Diagnosis Method for Hydraulic Pump Based on Order Tracking

Wanlu Jiang, Yong Zhu, Meng Wang, Yanshan University, China

Modeling and unbalance force control of four-cylinders synchronization electro-hydraulic loading system in superplastic forming equipment

ZengHui Shi, Zongxia Jiao, Shuai Wu, Hong Xiao, Beihang University, China

Research on Multi-fault Identification Method of Axial Piston Pump Based on Correlation Dimension

Siyuan Liu, Mengxue Yang, Wenwen Zhang, Yanshan University, China

Design and Implement a Novel Embedded Servo Controller for 6-DOF Motion System

Shupeng Zheng, Changhong Gao, Zhongbao Luo, Junwei Han

Harbin Institute of Technology, China

Thursday, August 6, 2015, Session C3, Auditorium C

13:00-14:40 Chair: So-Nam Yun, Korea University of Science and Technology, Korea

Research on the Performance of Electro-hydraulic Proportional Flow Valve Controlled by Pilot Pump

Yunxiao Hao, Jiahai Huang, Wenyong Li, Long Quan, Bin Zhao
Taiyuan University of Technology, China

The Study on Sensibility of Self-elevating Unit Legs Strength to Different Bay Heights under Storm Environment Condition

Yazhou Zhu, Yansong Fan, Bin Jiang, Hongde Qin, Chengmeng Sun
Harbin Engineering University, China

A review of HPR and its applications -Control of air turbine spindle and hybrid electro-pneumatic ultra-precision vertical positioning stage

Kato Tomonori, Fukuoka Institute of Technology, Japan

Study on Generation Mechanism and Source of Aerodynamic Noise of High-Speed Train

Zhaojin Li, Jian Yang, Ruigang Song, Tianchen Yuan
Shanghai University of Engineering Science, China

Task allocation strategy of utility management system based on heuristic constrained optimal tree algorithm

Min Luo, Shaoping Wang, Jian Shi, Zongxia Jiao, Beihang University, China

Thursday, August 6, 2015, Session C4, Auditorium C

15:00-16:20 Chair: Qingjun Yang, Harbin Institute of Technology, China

Dynamics Modeling and Load Analysis of Linear Motor for LEHA System

Tianyi Wang, Huisheng Liang, Zongxia Jiao, Ping He, Liang Yan
Beihang University, China

Simulation of a Pilot Control Valve Using Pseudo Bond Graph Approach

Zhiwen Wang, Wei Xiong, Haitao Wang, Zuwen Wang
Dalian Maritime University, China

Numerical Simulation of Cavitation Washer in Pipe Cleaning

Wenqi Ma, Zhiyong Xiao, Meixia Zhang, Hongyi Sun
Dalian Maritime University, China

New Circuit Strategy of the Variable Ballast System for a Deep Sea Submersible

So-Nam Yun, Young-Bog Ham, Yoshito Tanaka, Pan-Mook Lee
Korea University of Science and Technology, Korea

Thursday, August 6, 2015, Session D3, Auditorium D

13:00-14:40 Chair: Wataru Kobayashi, Shibaura Institute of Technology, Japan

Electro-Hydraulic Drive with Separate Control of Piston Groups

Pavel Shcherbachev, Bauman Moscow State Technical University, Russia

The experience of creating compact energy efficiency hydrostatic servo drive

Oleg Tarasov, Bauman Moscow State Technical University, Russia

Modeling and Analysis of the Churning Losses Characteristics of Swash Plate Axial Piston Pump

Bing Xu, Ying Li, Junhui Zhang, Qun Chao, Zhejiang University, China

Investigation of Two-phase Flow in Axial-centrifugal Impeller by Hydrodynamic Modeling Methods

Lomakin Vladimir, Bauman Moscow State Technical University, Russia

A study on performance of electro-hydraulic load simulator based on pressure servo valve

Jianming Cui, Biao Zhang, Yanliang Dong, Harbin Institute of Technology, China

Thursday, August 6, 2015, Session D4, Auditorium D

15:00-16:20 Chair: Liang Ding, Harbin Institute of Technology, China

Study on Silt Contamination Properties of Natural Waters Used as Pressure Medium

Defa Wu, Yinshui Liu, Donglin Li, Yipan Deng, Yong Liu

Huazhong University of Science and Technology, China

Active Motion Compensation Control Test Bench For Off-highway Vehicle

Xu Zhu, Rachel Wang, Fei Wang, Jianying Zhao, Eaton Corporation, China

Design and experimental test of an on-line particle detection sensor based on symmetrical magnetic field

Haokuo Liu, Shaoping Wang, Wei Hong, Chao Zhang, Xingjian Wang

Beihang University, China

Stablization of an Aerial Robot for Indoor Environments Using a Vision-based Approach

Akash kumar, Khurram kamal, Tayyab Zafar, M Abbas Kararvi, Hassan Afzal,

Asad naseer, Senthana Mathavan,

National University of Sciences and Technology, Pakistan

Friday, August 7, 2015, Session A5, Auditorium A

8:30-10:10 Chair: Songlin Nie, Beijing University of Technology, China

A new design of the variable-pressure hydraulic pump

Xiaoyan Su, Zongxia Jiao, Yuanzhi Xu, Beihang University, China

Flow Pattern Evolution Analysis and Reduction Order Modeling for the Two-phase Flow in a Hydrodynamic Retarder

Wei Wei, Xueyong Han, Hongbin Mu, Qingdong Yan
Beijing Institute of Technology, China

Dynamic Characteristic Analysis of Monostable Torque Motor Valve of Bipropellant Thrusters

Changbin Guan, Jun Chen, Zongxia Jiao
Beijing Institute of Control Engineering, China

Transient Flow Field Characteristic Analysis of Poppet Valve Based on Dynamic Mesh 6DOF Technique

Xiaoxia Guo, Jiahai Huang, Long Quan, Shengguo Wang
Taiyuan University of Technology, China

Friday, August 7, 2015, Session A6, Auditorium A

10:30-12:10 Chair: Yasuhiro Matsuda, Kanagawa Institute of Technology, Japan

Theoretical Study and Optimization of a CNG Fueling Sub-station Compressor Driven by Linear Motor

Xufeng Zhao, Xiaohui Li, Chao Li, Weicai Quan, Yinshui Liu
Huazhong University of Science & Technology, China

Computational Fluid Dynamics Analysis of Hydrodynamic Bearing Clearances on Hemolysis in a Centrifugal Blood Pump

Qing Han, Hongwei Li, Xiuhua Men, Xiaohui Wang, Honghua Zhao
University of Jinan, China

Fluid Effects on the Pipe's Isolation Plugging Tool by Large-eddy Simulation

Hong Zhao, Lihao Yang, Xiaoli Jia, China University of Petroleum, China

Thermal Modeling of Axial Piston Pump and Application

Di Wu, Shaoping Wang, Jian Shi, Beihang University, China

Friday, August 7, 2015, Session B5, Auditorium B

8:30-10:10 Chair: Chifu Yang, Harbin Institute of Technology, China

An Integrated Model of Hydrodynamic Lubricating for Piston/Cylinder Interface

Jihai Jiang, Kelong Wang, Harbin Institute of Technology, China

On the Application of Reynolds Theory to Thermo-piezo-viscous Lubrication in Oil Hydraulics

Per Johansen, Daniel B. Roemer, Torben O. Andersen, Henrik C. Pedersen
Aalborg University, Denmark

The Study of Normal Force Model for the Flow of Lunar Dust Particles

Wanjing Pan, Xuyan Hou, Dewei Tang, Tianxiang Ding, Qiquan Quan, Zongquan Deng, Lixia Sun, Harbin Institute of Technology, China

Application of Hydraulic Energy Storage Technology for Urban Rail Transit Systems

Liuyang Zhang, Shihua Yuan, Wei Wu, Jibin Hu
Beijing Institute of Technology, China

Friday, August 7, 2015, Session B6, Auditorium B

10:30-12:10 Chair: Liang Yan, Beihang University, China

Static stress and modal analysis of water hydraulic reciprocating piston pump driven by the linear motor

Yeqing Huang, Songlin Nie, Kai Ma, Fan Liu, Lei Li
Beijing University of Technology, China

Characteristics of a Piloted Digital Flow Valve Based on Flow Amplifier

Taotao Li, Jiahai Huang, Yanhong Bai, Long Quan, Shengguo Wang
Taiyuan University of Technology, China

Design and Analysis of a Direct Load Sensing Electro-Hydrostatic Actuator

Zengning Song, Zongxia Jiao, Yaoxing Shang, Shuai Wu, Wunong Hu
Beihang University, China

Research on the Effect Law of Damping Orifice on Flow Characteristics of Proportional Multi-way Valve

Chao AI, Juan WANG, Xiangdong Kong, Jiacheng Lin, Xiaolong Zhao
Yanshan University, China

Friday, August 7, 2015, Session C5, Auditorium C

8:30-10:10 Chair: Yaobao Yin, Tongji University, China

Position Control Research Based on Wire Rope Connected Twin Direct Drive Motor System

Quan Guo and Zongxia Jiao, Beihang University, China

Aircraft anti-skid braking control with flow servo-valve

Xiaochao Liu, Yaoxing Shang, Zongxia Jiao, Hong Tang
Beihang University, China

Non-linear Stiffness Analyzing of a Hydraulic Assisted Turning System in Low-Floor Trams

Jing Li, Xianliang Zhu, Corentin Robineau, Tongji University, China

Analysis of the flow ripple stochastic characteristics in dual-pump converging system

Jing Li, Pan Liao, Mu Li, Tongji University, China

Friday, August 7, 2015, Session C6, Auditorium C

10:30-12:10 Chair: Christian Noergaard, Aalborg University, Denmark

Research on Mechanism of Drag Reduction and Efficiency Improvement of Hydrodynamic Torque Converter with Bionic Non-smooth Surfaces

Chunbao Liu, Bosen Chai, Changsuo Liu, Wenxing Ma, Jilin University, China

Simulation and indirect verification of an over flow protection valve under shock condition

Zuyao Yu, Zhuang Chen, Yuedong Zou, Shupeng Chen
Huazhong University of Science & Technology, China

Power Flow Analysis Using PowerWorld: a Comprehensive Testing Report

Chao Zuo, Bowen Wang, Min Zhang, Mustafa A. Khanwala, Shuping Dang
Beijing Jiaotong University, China

Pressure Distribution Analysis of Elastohydrodynamic Journal Bearing Under Grease Lubrication

Chao Zhang, Shaoping Wang, Yanwei Zhang, Beihang University, China

Friday, August 7, 2015, Session D5, Auditorium D

8:30-10:10 Chair: Maolin Cai, Beihang University, China

Research on zero-finding method for the incremental encoder of hydraulic position servo motor

Fan Yuan, Xuyong Wang, Jianfeng Tao, Baoying Luo, Yong Dai, Zhonghua Miao
Shanghai Jiao Tong University, China

Fatigue Analysis of the Cylinder in The Axial Piston Pump

Lingxiao Quan, Yuan Cao, Hongliang Luo, Rui Guo, Haixin Guo
Yanshan University, China

Driving Solution Study of a Turbine Flowmeter Dynamic Calibration System

Xin Jin, Bin Wang, Zhifeng Ye
Nanjing University of Aeronautics and Astronautics, China

Study on Factors of Control Characteristics of Forging Manipulator Continuous Complex Movement Based on Virtual Prototyping

Fugang Zhai, Xiangdong Kong, Qilei Wu, Hanyin Zhu, Yanshan University, China

Friday, August 7, 2015, Session D6, Auditorium D

10:30-12:10 Chair: Hao Liu, Keimyung University, Korea

An Investigation on the Nonlinear Adaptive Servo Control of an Electrohydraulic System

Hao Liu, Jae-Cheon Lee, Keimyung University, Korea

Algorithm research for increasing accuracy of rolling mill servo system under the condition of state feedback

Gang Chen, Sai Cao, Xintian Jiang, Yiqun Wang, Ru Chang,
Yanshan University, China

Direct Load Sensitive Electro-Hydrostatic Force control Actuator for Asymmetric Cylinder with Switch Valve : Design and Simulation

Yaoping Shang, Weiyi Hao, Zongxiao Jiao, Zengning Song
Beihang University, China

Research on the Primary Energy Conversion Efficiency of Pendulum Wave Energy Converter

Yang Zhang, Yaobao Yin, Tongji University, China

Fridar, August 7, 2015, big Auditorium

13:00-14:30	Keynote speech 4 Chair: Yutaka Tanaka, Hosei University, Japan
13:00-13:30	Design and Testing of Fluid Power Driven Mechatronic Machines in Immersive Virtual Environments - Heikki Handroos, Lappeenranta University of Technology, Finland
13:30-14:00	Mathematical Modeling of the Electro-hydraulic Actuation Systems of the Machines with Tree-like Kinematic Structure - Stanislav E. Semenov, Bauman Moscow State Technical University
14:00-14:30	Hydraulic and Pneumatic Systems for Hydroelectric and Wind Power Plants - Victor Juliano De Negri, Federal University of Santa Catarina, Brazil
14:30-14:50	Coffee break
14:50-16:00	Keynote speech 5 Chair: Baoren Li, Huazhong University of Science & Technology, China
14:50-15:20	Research of Multi-function Testing Systems - Junwei Han, Harbin Institute of Technology, China
15:20-16:00	The Sensitivity Analysis and Control Method of Hydraulic Drive Unit for Quadraped Robot - Xiangdong Kong, Yanshan University, China
16:00-16:30	Closure of FPM2015
18:30	Farewell Party Locate: Songhua river tour