## MOVIC 2014 Session Program (Tentative ver.2)

<table>
<thead>
<tr>
<th>Date / Time</th>
<th>Room A</th>
<th>Room B</th>
<th>Room C</th>
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<tr>
<td>3, Aug. (Sun.)</td>
<td>Welcome Reception</td>
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<td>4, Aug. (Mon.)</td>
<td>Welcome Reception</td>
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<td>9:00 - 9:15</td>
<td>Opening Ceremony</td>
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<td>9:15 - 10:00</td>
<td>Keynote Speech (I)</td>
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<td>10:00 - 10:20</td>
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<td>12:00 - 13:20</td>
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<td>13:20 – 15:20</td>
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<td>18:00 -</td>
<td>Evening Meeting</td>
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<td>5, Aug. (Tue.)</td>
<td>Welcome Reception</td>
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<td>19:00 -</td>
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<td>6, Aug. (Wed.)</td>
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<td>18:00 -</td>
<td>Farewell Reception</td>
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<td>7, Aug. (Thu.)</td>
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<td>Technical Tour</td>
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1A11 A bio-inspired bistable flapping thrust mechanism with flexible suspension
Ryan L Harne(University of Michigan), Kon-Well Wang(University of Michigan)

1A12 Noninterference Identification of Rotating Blade Vibration
Peng Wang(University of Connecticut), Robert X. Gao, Zhaoyan Fan(University of Connecticut), Donald Karg(University of Connecticut)

1A13 Robust Optimization Towards Reducing Response Variation By Efficient NURBS Finite Element Inverse Analysis
Kai Zhou(University of Connecticut), Jiong Tang(University of Connecticut)

1A14 Period-2 Motions of a Non-linear Rotating Beam
yuhui qu, fengxia wang

1A15 Feasibility Study of Langasite Wafer Active Sensors for High Temperature Structural Health Monitoring
Yuanye Bao(University of North Texas), Haifeng Zhang(University of North Texas)

1A21 Controller Design for Vibration Suppression of a Vacuum Wafer Handling Robot
Xiaowen Yu(University of California, Berkeley), Cong Wang(University of California, Berkeley), Yu Zhao(University of California, Berkeley), Masayoshi Tomizuka(University of California, Berkeley)

1A22 Experimental Investigation on Damping Analysis of Flexible Composite Cantilevers with Internal Vascular Constraints
Ya Wang(State University of New York), Mattias Gaucher-Petitdemange(University of Michigan)

1A23 Parameters optimization to dual-functional electromagnetic Tuned Mass Damper (TMD)
Yilun Liu(Stony Brook University), Chi-Chang Lin(National Chung Hsing University), Lei Zuo(Stony Brook University)

1A24 Vibration Control of Variable Stiffness Tuned Mass Damper with Consideration of Time Delay
Chi-Chang LIN(National Chung-Hsing University), Chang-Ching Chang(National Center for Research on Earthquake Engineering), Ging-Long LIN(National Chung-Hsing University), Hui-Wen SU(National Chung-Hsing University)

1A25 Wheel cylinder pressure estimation of EHB based brake-by-wire system
Ning Pan(Tsinghua University), Liangyao Yu(Tsinghua University), Yongsheng Zhang(China
1A31 Levitation-Induced Vibration Energy Harvesters  
Mr. Daniel Apo (Virginia Tech)

1A32 On the dynamics and design of a two body ocean wave energy converter  
Changwei Liang (Stony Brook University), Lei Zuo (Stony Brook University)

1A33 Improved Piezoelectric Energy Harvesting with Magnetically Enhanced Electro-Mechanical Coupling  
Jiawen Xu (University of Connecticut), Jiong Tang (University of Connecticut)

1A34 Energy Delivery from Piezoelectric Structure to Resistive Load  
Wanlu Zhou (Stony Brook University), Lei Zuo (Stony Brook University), Tian-Bing Xu (National Institute of Aerospace)

1A35 A piezoelectric laminated curved THUNDER model for energy harvesting  
Fengxia Wang, Xiaopeng Li, Wei Wu

1A36 Amplified energy harvesting from footsteps: design an experimental analysis  
Ya Wang (Stony Brook University), Wusi Chen (Stony Brook University), Lei Zuo (Stony Brook University)

1B11 Vehicle Stability Control System Design for a Micro Electric Vehicle with Four In-Wheel Motors Considering Energy Consumption Efficiency  
Sunkil YUN (Keio University), Hidekazu NISHIMURA (Keio University), Shintaroh MURAKAMI (Dassault Systems K.K.)

1B12 Vehicle velocity tracking control by switching controller according to change of driving situation  
Masato Furuyama (Shinshu University), Yuichi Ikeda (Shinshu University), Yuichi Chida (Shinshu University)

1B13 Experimental investigation on a controllable colloidal damper for vehicle suspension  
Barenten SUCIU (Fukuoka Institute of Technology)

1B14 Sensitivity Analysis of Natural Frequency of Tire Lateral Bending Mode  
Masami Matsubara (Doshisha University), Nobutaka Tsujiuchi (Doshisha University), Takayuki Koizumi (Doshisha University), Kensuke Bito (Toyo Tire & Rubber Co., Ltd.)
1B15 Path-generating regulator along a straight passage for car-like robots
Naohiko Hanajima(Muroran Institute of Technology), Bo Yang(Muroran Institute of Technology), Wei Luo(Muroran Institute of Technology), Jun Dai(Muroran Institute of Technology)

1B21 Modeling and Robust Control of a High Speed Train Pantograph
Makoto Yokoyama(Niigata Univ.), Sho Yokoyama(Niigata Univ.), Hikaru Sakakibara(Niigata Univ.), Shigeyuki Kobayashi(Railway Technical Research Institute)

1B22 Application of Genetic Algorithm to Tune PID controller for Railway Vehicle Suspension
Mohd Azman Abdullah(Universiti Teknikal Malaysia Melaka), Mohd Hanif Harun(Universiti Teknikal Malaysia Melaka), Mohd Sazli Saad(Universiti Malaysia Perlis), Hishamuddin Jamaluddin(Universiti Teknologi Malaysia)

1B23 Verification and Optimization of Formula SAE Suspension Employing Inerter Mechanism
Thanh-Tung TRAN(Automotive Systems Engineering)

1B24 Robust Stabilization of Antilock Braking System with LQ Control
Hiroshi KATAOKA(Nanzan University), Tatsuya MIZUNO(Nanzan University), Hisatsugu YAMAZAKI(Nanzan University), Gan CHEN(Nanzan University)

1B25 Examination of Maneuverability of an Inverted Pendulum Vehicle according to the Steering Methods
Takuya Chikayama( Osaka Prefecture University), Chihiro Nakagawa( Osaka Prefecture University), Atsuhioko Shintani( Osaka Prefecture University), Tomohiro Ito( Osaka Prefecture University)

1B31 Optimal design and performance evaluation of active hood lift system for vehicle
Tae-Hoon Lee(Inha University), Gun-Ha Yoon(Inha University), Juncheol Jeon(Inha University), Seung-bok Choi(Inha University)

1B32 Basic research on semi-active child-car bed with joint application of regular and inverted pendulum mechanisms - Study on the control system -
Takeshi Kawashima(Kanagawa Institute of Technology)

1B33 Benchmark of Control Algorithm for Flywheel with Active Magnetic Bearing on Electric Vehicle
Fumiya SHIMIZU(Chiba University), Kenzo NONAMI(Chiba University)

1B34 Integral Sliding Mode Control for Active Suspension systems of Half-Vehicle Model
1B35 Identification of the yaw moment of inertia of vehicle in real-time using GPS sensor
Seungyong Lee(The University of Tokyo), Kimihiko Nakano(The University of Tokyo), Masanori Ohori(The University of Tokyo)

1C11 Amazing Ability of the Developed Seismometer-type Absolute Displacement Sensor for Measuring Earthquake Waves with Large Magnitude and Long Period
Kazuto Seto(Seto-Vibration Control Laboratory), Ryo Watanabe(Nihon University), Koji Ishikawa(Nihon University), Yuichi Iwasaki(Oiles CORPORATION)

1C12 Tracking Control of Mobile Harbor Crane to Moving Container Ship
Dongho Kim(KAIST), Youngjin Park(KAIST), Youn-sik Park(KAIST)

1C13 Active/Semi-active Hybrid Control Framework for Vibration Control of Mechanical Systems
Kazuhiko Hiramoto(Niigata University), Sho Saito(Graduate School of Niigata University)

1C14 Application of Fitz Hugh oscillator for semi-active control - Filtering of structure response and regulating of variable damper -
Kentaro SHINODA(Kyoto Institute of Technology), Daisuke IBA(Kyoto Institute of Technology), Junichi HONGU(Kyoto Institute of Technology), Morimasa NAKAMURA(Kyoto Institute of Technology)

1C15 Development of Full Active Seismic Isolator via Mechanical Control
Yasuo AOKI(Tokyo University of Agriculture and Technology), Akinori HIRAMATSU(Tokyo University of Agriculture and Technology), Tempei WACHI(Tokyo University of Agriculture and Technology), Kouichi KAJIWARA(Hyogo Earthquake Engineering Research Center)

1C21 Development and control of non-planar hexarotor helicopter
Katsuaki OKUMA(Chiba University), Daisuke IWAKURA(Chiba University), Kenzo NONAMI(Chiba University)

1C22 Flying Cargo System based on Multi Rotor Helicopter - Direct Touch Operation Method for Multi Rotor Helicopter -
Masafumi Miwa(The University of Tokushima)

1C23 Development of Autonomous Battery Exchange System for Multi-Rotor Helicopter
Takuya NEMOTO(Chiba University), Daisuke IWAKURA(Chiba University), Kenzo
 NONAMI(Chiba University)

1C24 Collision-free Guidance Control of Multiple UAVs with Restricted Communication Networks
Yoshihiko Aida(Shinshu University), Yohei Fujisawa(Shinshu University), Satoshi Suzuki(Shinshu University), Kojiro Iizuka(Shinshu University)

1C25 Parameter identification in dynamics model of a ground tethered satellite system with attitude motion
Dongping Jin(Nanjing University of Aeronautics and Astronautics), Hao Wen(Nanjing University of Aeronautics and Astronautics), Hui Chen(Nanjing University of Aeronautics and Astronautics), Bensong Yu(Nanjing University of Aeronautics and Astronautics)

1C26 Long-range navigation for resource-constrained planetary rovers using angle of arrival
Takayuki ISHIDA(Keio University), Hiroka INOUE(Keio University), Wataru MOGI(Keio University), Masaki TAKAHASHI(Keio University)

1C31 Performance Evaluation of Whole-spacecraft Vibration Isolation
LIKUN LIU(York University), JINJUN SHAN(York University), GANGTIE ZHENG(Tsinghua University)

1C32 Delayed Feedback Control for Helicopter Slung Load System
Motomichi Sonobe(The University of Tokushima), Zhiao Chen(The University of Tokushima), Hiroki Nishimura(The University of Tokushima), Masafumi Miwa(The University of Tokushima)

1C33 Mechanical Parameter Optimization of Fixed-pitch Coaxial-rotor Helicopter
Masahiro Tatsuno(Shinshu University), Puneet Singh(Indian Institute of Technology Kanpur), Satoshi Suzuki(Shinshu University), Gennai Yanagisawa(GEN Corporation)

1C34 Hovering Test of Flapping Robot using Circular Flight Device
Koju Hiraki(Kyushu Institute of Technology), Nobuhiro Mie(Kyushu Institute of Technology), Keiichi Yoshino(Kitakyushu National College of Technology), Masanobu Inoue(Kitakyushu National College of Technology)

1C35 A Study of Adaptive Control for Multi-rotor Helicopter
Atsushi HORI(Chiba University), Tatsuya FURUI(Chiba University), Daisuke IWAKURA(Chiba University), Kenzo NONAMI(Chiba University)

1C36 Online mass estimation and autonomous control of multi-rotor helicopter
1D11 Gravitational Potential Considered Position and Attitude Control of a Grasp Object by Pneumatic Manipulator
Nobutaka Tsujiuchi(Doshisha University), Takayuki Koizumi(Doshisha University), Kou Yaegashi(Doshisha University)

1D12 Seismic Response Control of High-rise Buildings by Using TMD with Lever and Pendulum Mechanism
sunao kato(Kyoto Institute of Technology), akira sone(Kyoto Institute of Technology), shinichi ueyama(Kyoto Institute of Technology), arata masuda(Kyoto Institute of Technology)

1D13 Rotation Test of Tilt Controlling Axial Self-Bearing Motor with Superconducting Magnetic Bearing
Masayuki SUMINO(Ritsumeikan University), Satoshi UENO(Ritsumeikan University)

1D14 Steering law considering biased loads for control moment gyroscopes
Yasuyuki Nanamori(Keio University), Masaki Takahashi(Keio University)

1D15 REALIZATION OF DIAMAGNETIC LEVITATION OF COLUMN-SHAPED GRAPHITE
Keisuke Iida(Saitama University), Yoshinori Narisawa(Saitama University), Yuji Ishino(Saitama University), Masaya Takasaki(Saitama University)

1D21 The Evaluation of a Locking Function for a Vertical Stage Electrostatic Actuator
MARIAM MD GHAZALY(UNIVERSITI TEKNIKAL MALAYSIA MELAKA), KAIJI SATO(TOKYO INSTITUTE OF TECHNOLOGY)

1D22 Rotation Tests of 6 Salient-Pole Active Magnetic Bearings
Hiroyuki SAKAI(Ritsumeikan University), Satoshi UENO(Ritsumeikan University)

1D23 Gimbal Angle Feedback Steering Logic for Spacecraft with Control Moment Gyros considering Required Attitude Accuracy
Satoshi OBUSE(Keio University), Masaki TAKAHASHI(Keio University)

1D24 Basic Study on Magnetic Levitation System by Using Superconducting Coil
Singo TAKASE(Kyushu Institute of Technology), Mochimitsu KOMORI, Kaoru NEMOTO(Kyushu Institute of Technology), Yuta HANAZAWA(Kyushu Institute of Technology)
1D25 Mass Measurement Using the Fixed-Point of a Spring-Mass System with a Dynamic Vibration Absorber and an Inertial-Mass Vibrator
Tomoyuki Korikawa(Saitama University), Yuji Ishino(Saitama University), Masaya Takasaki(Saitama University), Takeshi Mizuno(Saitama University)

1D31 Smart-Servo Control by Rigid Body Physics Based Methods
Lionel Sobehart(Hokkaido University), Hiroyuki Harada(Hokkaido University)

1D32 Measurement of Step Length and Foot Clearance During Human Walking Using an Inertial Sensor Attached to the Foot
Naoki Kitagawa(Keio University), Shumpei Maeda(Keio University), Naomichi Ogihara(Keio University)

1D33 A Neural-Preisach Model for Hysteresis Control of Piezoelectric Actuators
Yuansheng Chen(Nanjing University), Jinhao Qiu(Nanjing University), Hongli Ji(Nanjing University)

1D34 NMPC Approach on Nonlinear Model Reduction Techniques - Application to an ultrasonic motor -
Ryutaro Miyauchi(Cybernet Systems Co.,Ltd.), Nami Matsunaga(Cybernet Systems Co.,Ltd.), Shinichi Ishizuka(Cybernet Systems Co.,Ltd.)

1D35 Measurement of one-leg standing for qualification test of rhythmic stepping exercise using laser range sensor
Ayanori Yorozu(Keio University), Toshiki Moriguchi(Murata Machinery), Hirofumi Namikawa(Murata Machinery), Masaki Takahashi(Keio University)

1D36 Proposal of a magnetically levitated shaded pole induction motor
Nobuyuki Kurita(Gunma University), Takeo Ishikawa(Gunma University), Genri Suzuki(Gunma University)

2A11 In-plane vibration of micro ring with irregular mass distribution
Jung-Hwan Kim(Seoul National University), Ji-Hwan Kim(Seoul National University)

2A12 Damping estimation of joined plate structures using static contact analysis
Takao Hirai(University of Fukui)

2A13 Experimental study on a nonlinear vibration isolator based on a post-buckled inverted L-shaped beam
2A14 Co-operative PID Tuning for Interference Systems using Simultaneous Perturbation Stochastic Approximation
Shinichi ISHIZUKA(Hokkaido University), Itsuro KAJWARA(Hokkaido University)

2A15 Decentralized Robust Optimal Control of Large Flexible Space Structures by Local Proper Controllers Using Displacement Output
Yohji KOBAYASHI(Kobe City College of Technology)

2A21 Evaluation of the energy harvestable from a non-pneumatic tire equipped with piezoelectric bimorphs on the lamellar spokes or on the tread supporting lamellar springs
Barenten SUCIU(Fukuoka Institute of Technology), Junya OHTSU(Fukuoka Institute of Technology), Keisuke KOYANAGI(Fukuoka Institute of Technology)

Daisuke Shigeta(Tohoku University), Yuta Yamamoto(Tohoku University), Kanjuro Makihara(Tohoku University)

2A23 Stiffness tunable nonlinear vibrational energy harvester with damping control
Dongxu SU(University of Tokyo), Kimihiko NAKANO(University of Tokyo), Rencheng ZHENG(University of Tokyo), Matthew CARTMELL(University of Sheffield)

2A24 Comprehensive assessment of smart energy-harvesting from multimodal vibrations
Yuta Yamamoto(Tohoku University), Kanjuro Makihara(Tohoku University)

2A25 Experimental Study on Harvesting Energy from a Parametrically Excited System
Bahareh Zaghari(University of Southampton), Emiliano Rustighi(University of Southampton), Maryam Ghandchi-Tehrani(University of Southampton)

2A26 A Bistable Mechanical Oscillator with Stoppers for Wideband Vibration Energy Harvesting
Arata MASUDA(Kyoto Institute of Technology), Koki YAMANE(Kyoto Institute of Technology), Akira SONE(Kyoto Institute of Technology)

2A31 Improvement of Magnetic Bearings equipment and its controller for a flexible rotor
Masamitsu Shiga(Nihon University)

2A32 Vibration Control Evaluation for Underwater Structures Using Non-contact Laser Excitation
Koh UMENAI(Shibaura Institute of Technology), Naoki HOSOYA(Shibaura Institute of Technology), Itsuro KAJIWARA(Hokkaido University)

2A33  Suppression Method for Rebound Amount of the Internal Mirror Model of SLR Camera  
Hiroki MATSUMOTO(Muroran Institute of Technology), Masaki HIRASHIMA(Muroran Institute of Technology)

2A34  Vibration Suppression Mechanism for Thin Steel Plate Using Rotary Permanent Magnet Array  
Koichi Oka(Kochi University of Technology), Nao Okada(Kochi University of Technology), Yoshio Inoue(Kochi University of Technology), Shin Nakayama(Kochi National College of Technology)

2A35  A study on dynamic behaviors of slider considering ramp disk contact during operational shock  
Geonyup Lim(Yonsei University), Kyoung-Su Park(Yonsei University), No-Cheol Park(Yonsei University), Young-Pil Park(Yonsei University)

2A36  Back EMF compensation of a linear motor stage with a passive reaction force compensation mechanism  
Duc Canh Nguyen(Soongsil University), Hyeong Joon Ahn(Soongsil University), Yo Han You(Soongsil University)

2B11  Evaluation of dynamic absorber to suppress sub-harmonic nonlinear vibration in car powertrain  
Sofian Rosbi(Oita University), Takahiro Ryu(Oita University), Takashi Nakae(Oita University), Kenichiro Matsuzaki(Kagoshima University)

2B12  Hazard-Anticipatory Collision Avoidance Braking Assistance System Based on Pedestrian Motion Prediction  
Kazuhiro Ezawa(Tokyo University of Agriculture and Technology), Pongsathorn Raksincharoensak(Tokyo University of Agriculture and Technology)

2B13  Adaptive control of a skid-steer mobile robot with uncertain cornering stiffness  
Makoto Yokoyama(Niigata Univ.), Jun Ikarashi(Niigata Univ.), Akinori Okawa(Niigata Univ.)

2B14  Stability Control with Gyro Moment to Improve Rollover Resistance of Narrow Tilting Vehicle  
Jeffrey Too Chuan Tan(University of Tokyo), Yitsao Huang(University of Tokyo), Yoshihiro
Control of the longitudinal vortex generated around the front pillar of vehicles, based on clarification of the vortex generation mechanism using a delta-wing
Shigeru Ogawa(Kure National College of Technology), Ye Li(Mazda Motor Corporation)

Detection of Adhesive Failures via Nonlinear Piezoelectric Impedance Modulation
Arata MASUDA(Kyoto Institute of Technology), Akane AKISADA(Kyoto Institute of Technology), Takashi TANAKA(Kyoto Institute of Technology), Akira SONE(Kyoto Institute of Technology)

Localization of Contact-type Failure in Beam Structure Based on Reflectivity Modulation
TAKASHI TANAKA(Kyoto Institute of Technology), ARATA MASUDA(Kyoto Institute of Technology), AKIRA SONE(Kyoto Institute of Technology)

A study on dynamic behaviors of integrated reactor internals about an earthquake
Youngin Choi(Yonsei University), Kyoung-Su Park(Yonsei University), No-Cheol Park(Yonsei University), Young-Pil Park(Yonsei University)

Application of Vibration Signal Processing for Gear Fault Detection
Woong-Yong Lee(Korea Railroad Research Institute), Hae-Young Ji(University of Science and Technology), Dong-Hyong Lee(Korea Railroad Research Institute), Jae-Chul Kim(Korea Railroad Research Institute)

Modal estimation of a cantilever using aliased video images
Jong Min Kim(University of Seoul), Il Kwang Kim(University of Seoul), Soo Il Lee(University of Seoul)

Steering Control without Using Measurement of Lateral Velocity of combination vehicle
Panfeng Shu(Kyushu Institute of Technology)

Adaptive Steering Control Scheme for Vehicles with the Saturated Lateral Tire Force
Jinxin Zhuo(Kyushu Institute of Technology)

PFC design method based on frequency response fitting - Assurance of minimum phase property by stability theorem of descriptor system -
Masaya TANEMURA(Shinshu University), Yuichi CHIDA(Shinshu University), Yuichi IKEDA(Shinshu University)

FRIT of ILQ Based Intergral Type Servo Controllers and Its Applications
Osamu Kaneko(Kanazawa University), Fumiaki Sawakawa(Kanazawa University), Shigeru Yamamoto(Kanazawa University)

2B35 Quaternion-based adaptive attitude control for a winged rocket
Kazuki Ueno(Kyushu Institute of Technology), Radzi Bin Ambar(Kyushu Institute of Technology), Shinichi Sagara(Kyushu Institute of Technology)

2B36 Closed-Loop System Identification of an Overhead Travelling Crane Using Evolutionary Computation
Kazuo Kawada(Hiroshima University), Toru Yamamoto(Hiroshima University)

2B37 Adaptive Control System Design of a Quadrotor by High Gain Based Feedback Control via Backstepping Strategy with an Inner-Loop PFC
Ikuro Mizumoto(Kumamoto University), Takuto Nakamura(Kumamoto University), Makoto Kumon(Kumamoto University)

2C11 Artificial Wrestling: A Dynamical Formulation of Autonomous Agents Fighting in a Coupled Inverted Pendula Framework
Katsutoshi Yoshida(Utsunomiya University), Shigeki Matsumoto(Utsunomiya University), Yoichi Matsue(Yuhara Mfg Co., Ltd)

2C12 Joint control of a lower-limb robot with musculoskeletal structure
Takuma Nakamura

2C13 Manual Motion Control for Connection and Cooperation of Plural Mechanical Systems
Takahito Yoshiura(Nagoya University), Susumu Hara(Nagoya University), Yoshifumi Morita(Nagoya Institute of Technology), Noritaka Sato(Nagoya Institute of Technology)

2C14 Level-Ground Walking Based on Passive Walk for a Simple Planar Biped with Torso and Flat Feet
Terumasa Narukawa(Saitama University), Hiroshi Yamamoto(Saitama University)

2C15 Dynamics and Control of Reconfigurable Multi-body Systems - Control Utilizing Embedded Dynamics Models in Modules -
Tempei WACHI(Tokyo University of Agriculture and Technology), Seiya OGAWA(Tokyo University of Agriculture and Technology), Yasutaka TAGAWA(Tokyo University of Agriculture and Technology), Gentiane VENTURE(Tokyo University of Agriculture and Technology)

2C21 Integral-Proportional Sliding-Mode Controller for a Power-Factor-Corrected SEPIC
2C22 Robust stabilizing simple repetitive controllers for multiple-input/multiple-output time-delay plants with specified input-output characteristic
Tatsuya Sakanushi(Gunma University), Kou Yamada(Gunma University)

2C23 Control system to attenuate periodic state disturbances using disturbance observers for time-delay plants
Jie Hu(Gunma University), Kou Yamada(Gunma University), Tatsuya Sakanushi(Gunma University), Tomohisa Maruyama

2C24 Optimal sampled-data control by vibration manipulation function for one mass-spring system obtained from three vibro-impact oscillators under Grover algorithm
Shigeo KOTAKE(Mie University), Kazunori YAGI(Mie University), Soichiro TAKATA(Mie University)

2C25 Application of sampled-data control by using vibration manipulation function to suppress residual vibration of travelling crane
Shigeo KOTAKE(Mie University), Kazunori YAGI(Mie University)

2C26 Positioning control of an XY table based on practical NCTF control
Shin_horng CHONG(Center of Excellence of Robotics and Automation), Wai-Keat HEE(Center of Excellence of Robotics and Automation), Kajii SATO(Tokyo Institute of Technology)

2C31 Bilateral Tele-robot control based on Scattering and virtual damping
THUAN XUAN NGUYEN(Hanoi university), NAM DUC DO(Hanoi university), HUNG CHI NGUYEN(Hanoi university), AKIRA SONE(Kyoto Institute of Technology)

2C32 Grasping Strategy of Industrial Robot with Pneumatic Robot Arm
Nobutaka Tsujiuchi(Doshisha University), Takayuki Koizumi(Doshisha University), Daisuke Kuse(Doshisha University), Mitsumasa Sugiura(SQUSE Inc)

2C33 Motion Control and Optimization of a Ball Throwing Robot with a Flexible Arm
YIZHI GAI(Hokkaido University), YUKINORI KOBAYASHI(Hokkaido University), TAKANORI EMARU(Hokkaido University)

2C34 Proposal of a multistage Tensegric robot arm and its motion control
2C35 Null Space Motion Control of a Redundant Robot Arm Using Matrix Augmentation and Saturation Method

Hyun-Cheol Cho(Korea University), Jae-Bok Song(Korea University)

2C36 Drawing operation taking into account the stiffness of controlled object by dual-arm robot

Kentaro Kasuya(Chiba University), Kota Nakamizo(Chiba University), Zunzun Hu(Chiba University), Kenzo Nonami(Chiba University)

2D11 Technique for Discrimination between Seven Motions Using Real-Time EMG Signals

Nobutaka TSUJIUCHI(Doshisha University), Takayuki KOIZUMI(Doshisha University), Tetsushi YAMAMOTO(Doshisha University)

2D12 Motion Control of Simplified Human Trunk Seated in a Vehicle

Fumiya TAKAHASHI(Sophia Univ.), Shoichiro TAKEHARA(Sophia Univ.), Yoshiaki TERUMICHI(Sophia Univ.), Kazunori HASE(Tokyo Metropolitan Univ.)

2D13 Development of an isokinetic exercise equipment for the lower limb: ERIK

Ken'ichi KOYANAGI(Toyama Prefectural University), Yoshinori KIMURA(Osaka University), Maki KOYANAGI(Osaka Electro-Communication University), Akio INOUE(ER-tec Co.)

2D14 A Method to Convey Relative Velocity Information by Vibration Alert Interface

Zhantao Lai(Hokkaido University), Takayuki Tanaka(Hokkaido University), Yuki Sampei(Hokkaido University), Yuki Mori(RIKEN Innovation Center)

2D15 Evaluation of Driver Characteristics Using Steering Torque Simulator with Multibody Vehicle Model

Takehito KANO(Meiji University), Toshimasa TAKOUDA(Meiji University), Ryuta ISHIZAKI(Meiji University), Kazuhiro MORIHARA(Meiji University)

2D21 Control schemes for an overlap type proportional directional control valve

Ill-yeong Lee(Pukyong National University)

2D22 Experimental investigation of effective bulk modulus of oil with entrained air bubbles

Yutaka Tanaka(Hosei University), Sayako Sakama(Hosei University), Hiroyuki Goto(Japan Society for the Promotion of Machine Industry)

2D23 Effect of a DLC-thin film on improving the piston shoe's power losses under mixed friction
operating conditions
Yeh-Sun Hong(Korea Aerospace University), Seong-Ryeol LEE(Korea Aerospace University), Chong-Hyeok KIM(Korea Aerospace University), Sang-Yul LEE(Korea Aerospace University)

2D24 Investigation of pressure control in balancing cylinder for hybrid electric-pneumatic ultra-precision vertical positioning device
Tomonori Kato(Fukuoka Institute of Technology), Tetsuma Hirakawa(Fukuoka Institute of Technology), Shunta Honda(Fukuoka Institute of Technology), Hiromi Masuda(Fukuoka Institute of Technology)

2D31 On thermal lubrication characteristics of hydraulic pumps - (Comparison among piston, vane, and gear types) -
Toshiharu Kazama(Muroran Institute of Technology)

2D32 Study on High-Performance Shoes for Walking Training
Kazuma Kanezaki(Nara National College of Technology), Yasuhiri Hayakawa(Nara National College of Technology), Shogo Kawanaka(Nara National College of Technology), Shigeki Doi(Nara National College of Technology)

2D33 A method for measuring frequency series wave speed in viscoelastic pipes
Ill-Yeong Lee(Pukyong National University)

2D34 Torque observer and decoupling control of automatic transmission
Kazushi SANADA(Yokohama National University), Kazuki KISHI(Yokohama National University), Hideki TAKAMATSU(TOYOTA MOTOR CORPORATION), Kazufumi TORIYA(TOYOTA MOTOR CORPORATION)

3A11 Vibration and Control of Active Isolator taking Dynamical Property of Elastic Load into Account
Hazime SHIRAISHI(University), Kazuya SHIOBARA(University), Toru WATANABE(University), Kazuto SETO(SETO Vibration Control Lab)

3A12 Effectiveness of TPA based on change in mode shape
Nobutaka TSUJIUCHI(Doshisha University), Takayuki KOIZUMI(Doshisha University), Akifumi YOSHIMURA(Doshisha University), Kimihisa TANAKA(Doshisha University)

3A13 Trajectory planning method with obstacle avoidance and vibration suppression for 2-D transfer machine
Junichi Nakajima(University of Yamanashi), Yoshiyuki Noda(University of Yamanashi)
3A14 Study on Wired Tuned Mass Damper Using Wires and Suspended Weights to Obtain Restoring Force
Yusuke Kuwano(Nihon University)

3A15 Vibration localization of a multi-packet blade system
Seungmin Kwon(Hanyang University), Hong Hee Yoo(Hanyang University)

3A21 Synchronization Error Suppression Control for Twin-drive Table System
Tetsuya Ojiro(Kyushu Institute of Technology), Kazuhiro Tsuruta(Kyushu Sangyo University), Hideki Honda(Kyushu Institute of Technology)

3A22 Experimental investigation of sound insulation property of active acoustic enclosure
Akira Sanada(Industrial technology center of OKAYAMA prefecture), Kouji Higashiyama(Kurashiki kako Co., Ltd)

3A23 Relationship between oscillator's natural frequency and amplitude map - Matsuoka neural oscillators having same limit cycles -
Junichi Hongu(Kyoto institute of technology), Daisuke Iba(Kyoto institute of technology), Morimasa Nakamura(Kyoto institute of technology), Ichiro Moriwaki(Kyoto institute of technology)

3A24 Levitation of a Flexible Rotor Supported by Hybrid Magnetic Bearings
Nozomu ISHIKAWA(Ritsumeikan University), Tomohiro NEZU(Ritsumeikan University), Satoshi UENO(Ritsumeikan University)

3A25 Vibro-Acoustic Behaviour of a Non-Uniform Beam Traversed by a Moving Point Load
Sudheesh Kumar C.P.(Indian Institute of Technology Madras), Sujatha C(Indian Institute of Technology Madras), Shankar Krishnapillai(Indian Institute of Technology Madras)

3A31 Investigation on a colloidal damper rendered controllable under electric and magnetic fields
Barenten SUCIU(Fukuoka Institute of Technology)

3A32 Vibration analysis of a rotating gas turbine blade made-up of functionally graded materials considering operating temperatures and its ceramic particle size
Kibok Lee(Hanyang University), Yutaek Oh(Hanyang University), Hong Hee Yoo(Hanyang University)

3A33 Development of an active isolation system using the reference mass of a two DOF system
Ryo Nawata( Canon Inc.), Katsumi Asada( Canon Inc.), Wataru Tamura( Canon Inc.), Naoki
Development of a Vibration Control System using Variable-Pitch Propeller for Life-Size Suspended Load
Julie Sugimoto(Nihon University), Kouta Kuriki(Nihon University), Toru Watanabe(Nihon University), Kazuto Seto(Nihon University)

Concurrent Command and Mechanical System Design to Limit Transient and Residual Vibration
Ali Baheri(University of Louisiana at Lafayette), Joshua Vaughan(University of Louisiana at Lafayette)

Adaptive vibration control using self-organizing map
Naohiro KIDA(Hokkaido University), Shinya HONDA, Yoshihiro NARITA

Model predictive controllers for energy regenerative active vibration control systems using piezoelectric actuators and class D amplifiers
Takeshi NAKAHARA(Kyushu Sangyo University), Takashi FUJIMOTO(Kyushu Sangyo University)

Control of the Direct Drive Valve System Actuated by Piezostack Actuator
Juncheol Jeon(Inha University), Chulhee Han(Inha University), Seung-Bok Choi(Inha University)

Active piezoelectric noise control of a car engine
Ulrich Gabbert(University of Guericke University), Fabian Duvigneau(University of Guericke University), Stefan Ringwelski(University of Guericke University), Jinjun Shan(University of York University)

A study on introduction of gas engine to micro-grid with genetic algorithm
Yugo YAMAGUCHI(The University of Tokyo), Riku MACHIDA(The University of Tokyo), Shigehiko KANEKO(The University of Tokyo), Yudai YAMASAKI(The University of Tokyo)

Vibration Control of Washing Machine with MR Damper Using Direct Adaptive Fuzzy Controller
Do Xuan PHU(Inha University), Seung-Hyun Choi(Inha University), Nguyen Quoc HUNG(Inha University), Seung Bok CHO(Kinh University)

Dynamic Modeling and Control System Design of Stewart Platform for Vibration Isolation
Jinjun SHAN(York University), Ziliang KANG(York University), Ulrich Gabbert(University
3B23 Pole tuning of model-based controller using simultaneous perturbation stochastic approximation
Keiichiro Furuya(Hokkaido University), Shinichi Ishizuka(Hokkaido University), Itsuro Kajiwara(Hokkaido University), Yuelin Zhang(Hokkaido University)

3B24 Preliminary study of developing vibration condition monitoring system driven by piezocomposite vibration energy harvester
Kazuhiko ADACHI(Kobe University), Masahiro YAMAGUCHI(Kobe University), Ryota SHIMIZU(Kobe University)

3B25 The Use of Degenerate Mode Shapes in Piezoelectric Variable Friction Tactile Displays
Kwon Joong Son(American University in Dubai), Keehoon Kim(Korea Institute of Technology (KIST))

3B26 Vibration Analysis of Rectangular Plates with Piezoelectric Film Actuators
Tsutomu Nishigaki(Kinki University), Izumi Umakoshi(Kinki University)

3B31 Multi-objective optimization for vibration suppression of smart laminated composites
Shinya Honda(Hokkaido University), Kazuki Watanabe(Hokkaido University), Yoshihiro Narita(Hokkaido University), Itsuro Kajiwara(Hokkaido University)

3B32 repulsive torque control of MR haptic master in virtual environment
Seung-Hyun Choi(Inha University), Jong-Seok Oh(Inha University), Sang-Rock Lee(Inha University), Seung-Bok Choi(Inha University)

3B33 A Viscoelastic Adaptive Tuned Vibration Absorber
Emiliano Rustighi(University of Southampton), Matthieu Beaugrand(University of Southampton)

3B34 Self-identification method of arrangement and effective pressure areas for a vibration-isolation table supported with a redundant number of pneumatic actuators
Yohei Hoshino(Kitami Institute of Technology), Soichiro Suzuki(Kitami Institute of Technology), Kenji Takagi(Kitami Institute of Technology), Yukinori Kobayashi(Hokkaido University)

3B35 Application of Magnetorheological Grease to a Shear Type Controllable Damper
Toshihiko Shiraishi(Yokohama National University), Takashi Sugiyama(Yokohama National University)
3C11 Touchdown dynamics simulation of a novel pulley suspension mechanism for a movable lander
Tomohiro OYA(The University of Tokyo), Takao MAEDA(The University of Tokyo), Masatsugu OTSUKI(JAXA), Takashi KUBOTA(JAXA)

3C12 Motion Analysis of the Root-Cutting Blade for the Automatic Spinach Harvester
Akihiro Fujisawa(Shinshu University), Yuichi Chida(Shinshu University), Yuta Nakamura(Shinshu University), Kosuke Hirano(Shinshu University)

3C13 Study on Mobility Mechanism using Earth Pressure to traverse Loose soil with Steep Slope for Lunar Exploration Robot
Kojiro Iizuka(Shinshu University), Atumu Oki(Shinshu University), Satoshi Suzuki(Shinshu University), Takashi Kawamura(Shinshu University)

3C14 Development of a gravity compensation system for the prototype test of space crafts by using modular robots
Hiroki Shigematsu(Osaka Institute of Technology), Katsuyoshi Tsujita(Osaka Institute of Technology), Naoko Kishimoto(Setsunan University)

3C15 Limiting Rocking Oscillation of Cable-Riding Robots Subject to Wind Disturbances
Ninad Dhundur(University of Louisiana at Lafayette), Joshua Vaughan(University of Louisiana at Lafayette), Michele Guarnieri(HiBot, Corp.), Paulo Debenest(HiBot, Corp.)

3C21 Phase Control for Moving Body in Narrow Passage
Akio YAMANO(Osaka Prefecture University), Atsuhiko SHINTANI(Osaka Prefecture University), Tomohiro ITO(Osaka Prefecture University), Chihiro NAKAGAWA(Osaka Prefecture University)

3C22 Simulation and Experimental Validation on Touchdown Dynamics of Lunar-Planetary Lander with Controllable Landing Gear
Takao Maeda(The University of Tokyo), Masatsugu Otsuki(JAXA), Tatsuaki Hashimoto(JAXA)

3C23 Synchronous Motion of Gantry Robot using Neural Network Compensator
Chin-Sheng Chen(National Taipei University of Technology), Kun-Zhang Wu(National Taipei University of Technology)

3C24 Novel Landmark based Navigation for Autonomous Mobile Robot
Nobuya Okada(Shinshu University), Daichi Abe(Shinshu University), Satoshi
Development of sewer pipe inspection vehicle using integrated sensing system
Fujio Ikeda(Nagaoka National College of Technology), Shigehiro Toyama(Nagaoka National College of Technology), Toshio Kumota(Kumota Incorporated Company), Takashi Yanagisawa(Kumota Incorporated Company)

A comparison of hybrid and DSS schemes for substructured system testing
David Paul Stoten(University of Bristol)

Substructurability analysis for dynamically substructured systems
Jia-Ying Tu(National Tsing Hua University), Chen-Yu Chen(National Tsing Hua University)

Actuator control for a rapid prototyping railway bogie, using a dynamically substructured systems approach
Nobuyuki Watanabe(Railway Technical Research Institute), David Paul Stoten(University of Bristol)

Frequency- range expansion into elastic vibration on the system of hardware in the loop simulation for railway vehicle
Reiko KOGANEI(Railway Technical Research Institute), Nobuyuki WATANABE(Railway Technical Research Institute)

Comparative results for DSS and hybrid testing for a base isolated structure with rubber bearings
Ryuta Enokida(Kyoto University), David Stoten(University of Bristol)

Model-based tracking control framework for real-time hybrid simulation
Pei-Ching Chen(National Center for Research on Earthquake Engineering), Chia-Ming Chang(Guangzhou University), Billie F. Spencer Jr.(University of Illinois at Urbana-Champaign), Keh-Chyuan Tsai(National Taiwan University)

Dynamically substructured testing for mechanical system incorporating inerter devices
Jason Zheng Jiang(University of Bristol), Jinrong Yang(University of Bristol), David P Stoten(University of Bristol)

Acceleration control of 3DOF shaking table which can suppress reaction force from test models
Mineki Okamoto(Kisarazu National College of Technology), Yasutaka Tagawa(Tokyo University of Agriculture and Technology)
3D24  Development of a multiple seismic shaking table test system  
Pei-Ching Chen(National Center for Research on Earthquake Engineering), Pei-Yang Lin(National Center for Research on Earthquake Engineering), Hung-Wei Chiang(National Center for Research on Earthquake Engineering)

3D25  Modeling of Shaking Table Systems Aided by Multi-Body Dynamics Software  
Kenta Seki(Nagoya Institute of Technology), Makoto Iwasaki(Nagoya Institute of Technology)

3D26  A Unified Approach for Composite Filter and Controller Fusion  
Keisuke Shimono(Tokyo University of Agriculture and Technology), David Stoten(University of Bristol), Yasutaka Tagawa(Tokyo University of Agriculture and Technology)

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