

Day 1: Monday, 24 November

Room 201-393

8:40 **Mihi (Opening Ceremony)**

9:00 **Keynote: *Removing unwanted accretions from structures using vibration.*
Prof. Tim Waters (University of Southampton, UK)**

Room 1 (201-311)

A-1:Vibration And Acoustical Analysis 1

Chair: An Kiyong (LG electronics Co.,Ltd)

10:30	26	Adli Hasan Bin Abu Bakar, Yiyi Zhang, Liangzhou Wang and Kian-Meng Lim	Experimental measurements of sound absorption by plants for urban noise mitigation
10:50	28	Kenta Hara and Junji Yoshida	6 DOF Contribution Analysis Method Utilizing Virtual Point Transformation
11:10	29	Takuma Kobatake and Junji Yoshida	Comprehensive Noise Factor Analysis Method for Drum Type Washing Machine Radiated Noise at Multiple Evaluation Points
11:30	86	Tao Han, Lishu Duan, Hanbo Jiang, D. Michael McFarland and Huancai Lu	Fusion of FEA and SEA for Increased Bandwidth in Acoustic Duct Analysis
11:50	31	Diego Martin Tuozzo and Nouredine Atalla	Assessment of Equivalent Plate Models for the Vibroacoustic Analysis of Multilayered and Heterogeneous Structures

A-1:Vibration And Acoustical Analysis 2

Chair: Tian Ran Lin (Qingdao University of Technology)

13:10	30	Maoto Gouda, Yuto Matsudashima and Junji Yoshida	Accuracy Evaluation and Improvement of Input Force Identification Method for Industrial Sewing Machine utilizing Component TPA
13:30	141	An Kiyong, Cho Junghoon and Kim Wonjin	A study on the prediction of dehydration vibration and noise of front load washers using FBS(FRF-Based Substructure) method
13:50	137	Ryoto Hori and Takuya Yoshimura	Operating Transfer Path Analysis using Virtual Force for the Principal Response
14:10	78	Shengkang Zong, Xiao Liang and Hui Zhang	A Novel Ultrasonic Guided Wave Excitation Method based on PSO-SAFE algorithm for Defect Detection in pipeline

A-1: Vibration And Acoustical Analysis 3

Chair: Junji Yoshida (Osaka Institute of Technology)

15:00	32	Yugang Chen, Weifeng Long and Hongkun Li	Model updating of the rotating mistuned bladed disk via BTT data and reduced order model
15:20	114	Kaspar Soltero and Stefanie Gutschmidt	Scalable Ecoacoustic Classification in Passive Acoustic Monitoring: A Multi-Stage, Multi-Sensor Approach
15:40	158	Xingxing Lin, Vladislav Sorokin, Andrew Hall and Xueyi Zhao	Modal and Forced Response Analysis of Beams with Embedded Acoustic Black Holes Under Distributed Loading
16:00	167	Andrew Hall, Yousif Badri, Gian Schmid, John Cater and George Dodd	Floor Play: Using Granular Materials to Reduce Impact Noise

Room 2 (201-326)

A-5: Vibration Applications 1

Chair: Vladislav Sorokin (The University of Auckland)

10:30	21	Yuriko Akamatsu, Hiroki Mori and Takumi Inoue	Effect of Parameters on Beam Amplitude and Stability of Self-Tuning Beam-Slider Structure
10:50	153	Guiqing Zhang, Yingli Li and Lihua Tang	A hybrid piezoelectric-triboelectric generator with inertial amplification for vibration energy harvesting
11:10	96	Guang-An Yu, Fangyang Dong, Chuanqing Zhu, Taili Du and Minyi Xu	Vibration Energy Harvesting for Intelligent Ships based on Bouncing Ball Triboelectric Nanogenerator
11:30	120	Hiroki Mori, Asato Goto, Yuriko Akamatsu and Takumi Inoue	Behavior of self-tuning beam-slider structure near second mode resonance
11:50	70	Minseok Kang, Byeongkeun Choi, Jeongjun Lee and Donghee Park	Verification of feature-based machine learning algorithm Using Simulation data set

A-5: Vibration Applications 2

Chair: Md Mahbub Alam (Harbin Institute of Technology (Shenzhen))

13:10	143	Surawut Thanachartwet, Mohammad Fard, John Davy, Stephen Robinson and Kazuhito Kato	Combined Effect of Music and Applied Low-Frequency Vibration on Drivers of Semi-Autonomous Vehicles
13:30	90	Shotaro Sasano, Masahito Fujii, Shingo Maeda and Naoki Hosoya	Soft actuators for vibrating cheese
13:50	157	Mohamed Salman, Vladislav Sorokin and Kean Aw	Open Channel Liquid-Solid Triboelectric Nanogenerator for Wave Energy Harvesting
14:10	123	Sachito Nakano, Takashi Masutani, Sunao Tomita and Haruki Sato	Vibration control of multiple dynamic absorbers by applying a particle damper manufactured by selective laser melting

A-6: Flow induced vibrations

Chair: Naoki Hosoya (Shibaura Institute of Technology)

15:00	17	Hiroki Matsumoto and Yuya Kusumi	Pronounced Aerodynamic Noise Peaks in a Compact Heat Sink and Louver Cooling System
15:20	37	Md Mahbub Alam	A review of blockage and wall effects on flow-induced vibrations of bluff bodies
15:40	144	Jingwei Zhang and Xiaojun Wei	Prediction of vortex-induced vibrations using complex nonlinear modal analysis
16:00	47	Tianxin Fang, Jinchen Ji and Zhen Luo	Bio-inspired Innovative Design of Wind Turbine Blades

Room 3 (201-334)

A-8: Dynamics Modelling and Analysis 1

Chair: Qian Ding (Tianjin university)

10:30	5	Katsuhide Fujita, Takuma Suzuki, Toshihiko Okano and Kensuke Sasaki	Study on cleat ride-over characteristics of airless tire
10:50	18	Xin Chen, Guo-Kang Er and Chi Chiu Lam	A New Method for Analyzing the Dynamical Systems under both Random Excitation and Random System Parameters
11:10	57	Hiraku Takisawa, Ryota Ogushi, Shinya Honda, Katsuhiko Sasaki and Ryo Takeda	Optimization of fiber paths in composite laminates for enhanced vibration characteristics and material efficiency
11:30	36	Turky Aboqasirh, A.Prof. Jc Ji and Ahmed Al-Zubaydi	Dynamic Analysis of Gearless Offshore Wind Turbine Drivetrain System Under Variable Load Conditions
11:50	166	M Salman Leong, Norhisham Bakhary and Kong Chen Yon	Experimental and Computational Modal Analysis for Railway Signaling & Communication Equipment Vibration Mitigation

A-8: Dynamics Modelling and Analysis 2

Chair

13:10	38	Le Chang and Li Cheng	Wave parameters of an acoustic black hole beam from exact wave-like solutions
13:30	51	Mohamed Elsaroukh and Motomichi Sonobe	Identification of Seated Postural Control System During Horizontal Seat Sway
13:50	33	Qian Ding, Xu-Sheng Liu and Meng-Xin He	MULTI-OBJECTIVE TOPOLOGY OPTIMIZATION OF SANDWICH LATTICE STRUCTURES FOR VIBRATION SUPPRESSION
14:10	59	Xin Wang, Shinya Honda, Katsuhiko Sasaki and Ryo Takeda	ANN-SAO Optimization of Fiber Orientation to Enhance Fundamental Frequency of a Perforated Composite Laminate Plate

A-8: Dynamics Modelling and Analysis 3

Chair: Shinya Honda (Hokkaido University)

15:00	12	Seongsik Yoo, Kwihyun Kang and Howon Lee	Sensor placement optimization for enhanced reliability in blocked force evaluation and component-based transfer path analysis of automotive parts
15:20	14	Kazuhito Kato and Kousuke Suzuki	Modeling of Occupant Behavior Due to Vehicle Body Pitch Motion in Passenger Cars
15:40	91	Vladimir Yotov and Guglielmo Aglietti	Towards frequency domain system identification for dynamic substructuring applications
16:00	102	Takahiro Tsuchida and Koji Kimura	Reliability analysis for a nonlinear oscillator excited by Gaussian and Poisson white noises