PROGRAM

November 11, 2023, Hanoi, Vietnam

08:00-08:30	**Registration at the Hall of E3 Building**			
08:30-09:15	**Opening Ceremony - Room 212 E3 Building** Opening speech of Professor Pham Manh Thang, the Chairman of the Organizing Committee Welcome speech of Professor Nguyen Dinh Duc, the Chairman of the University Council, VNU-UET Welcome speech of Dr. Tran Thanh Hai, the Director of the Institute of Mechanics, VAST Photo session			
	Keynote Speakers *Chaimen: Prof. Nguyen Dong Anh, Prof. Nguyen Dinh Duc*			
09:15-09:45	*Sang-Youn Kim.* Soft Haptic Actuators and Sensors for Human Robot Interaction			
09:45-10:15	*Khoa Viet Nguyen .* Damage detection of cables in cable-stayed bridges using vibration data measured from climbing robot			
10:15-10:30	**Tea Break**			
	Parallel Sessions			
	Room 212 - E3 Building	**Room 101 - G2 Building**	**Room 107 - G2 Building**	**Room 102 - E3 Building**
	Mechatronics and Automation	**Mechatronics and Automation**	**Fluid Mechanics**	**Solid Mechanics**
	Chairmen: Prof. Sang-Youn Kim and Assoc. Prof. Pham Manh Thang	*Chairmen: Dr. Tran Anh Quan and Dr. Seung Chul Jung*	*Chairmen: Assoc. Prof. Dinh Van Manh and Dr. Ha Truong Sang*	*Chairmen: Prof. Nguyen Viet Khoa and Assoc. Prof. Pham Hoang Anh*
10:30-10:50	ICEMA2023.002. *Hung Truong Xuan, Pham Manh Thang, Thuc Nguyen Van.* Digitizing Working Space of the Multi Mobile Robots System Using an Approximate Cell Decomposition Method	ICEMA2023.008. *Van-Tinh Nguyen, Tan-Hoang Nguyen, Ngoc-Kien Nguyen.* Development of Bidirectional Rotating Mechanism for Pineapple Fiber Extraction	ICEMA2023.028. *Huy Diep Do, The Ba Dang, Hoang Quan Nguyen.* Study drone aerodynamics taking into account the influence of angle of attack	ICEMA2023.004. *Thao Thi Bich Dao, Khoa Viet Nguyen, Quang Van Nguyen, Long Do Vu.* Theoretical and experimental studies on the receptance function of a nonuniform AFG beam
10:50-11:10	ICEMA2023.033. *Tran Dang Huy, Nguyen Hoang Quan.* Precision Landing Algorithm for Autonomous Drones Utilizing Marker Recognition	ICEMA2023.030. *Bui Huy Hoang, Tran Thanh Tung.* Optimization of Cutting Parameters for Milling Operation of Aluminum Alloy A6061 using Taguchi method	ICEMA2023.029. *Banh Duc Minh, Truong Ninh Thuan, Doan Viet Ha, Nguyen Thi Thu Phuong, Le Dinh Anh .* The influence of main blade length on the efficiency of the optimized multi-curve Savonius wind turbine	ICEMA2023.005. *Khoa Viet Nguyen, Thao Thi Bich Dao.* Exact receptance function of a cracked axially functionally graded beam
11:10-11:30	ICEMA2023.042. *Young-Lim Choi, Sang-Hyun Jeong, Jong-Wook Kim.* Ethical Analysis of Artificial Intelligence Systems for Performance Evaluation and Improvement Strategies: A Study	ICEMA2023.039. *Van-Tinh Nguyen.* Applying a Modified Differential Evolution for Solving Optimization Problem of Gear Transmission System	ICEMA2023.034. *Nguyen Hoang Quan, Tran Duc Anh, Le Huu Huy, Tran Dang Huy.* Effect of cross-sectional size on the load carrying capacity of Drone	ICEMA2023.007. *Hoang-Anh Pham, Ba-Duan Nguyen, Tien-Chuong Vu.* Fuzzy Uncertainty Propagation in FGM Beam using Taylor's Expansion
11:30-11:50	ICEMA2023.043. *Jin-Young Choi, Eun-Ju Ha, Jong-Wook Kim.* 3D Human Pose Estimation and Posture Correction Using Deep Learning and Optimization Methods	ICEMA2023.040. *Ngoc-Son Pham.* Optimization of Microarchitecture and Dataflow for Sparse Tensor CNN Accelerator	ICEMA2023.050. *Nguyen Hoang Quan, Nguyen Khanh Duy, Dang The Ba.* Analyzing Quadcopter Dynamic Response in Relation to Weight Variation	ICEMA2023.125. *Hieu Le Dinh, Dinh Le Quoc, Dat Pham Tien.* Structural Analysis and Design Investigation Of Missile Nose Cone
12:00-13:30	**Lunch Time**			

	Room 212 - E3 Building	Room 101 - G2 Building	Room 107 - G2 Building	Room 102 - E3 Building
	Mechatronics and Automation	**Mechatronics and Automation**	**Fluid Mechanics**	**Solid Mechanics**
	Chairmen: Prof. Sang-Youn Kim and Assoc. Prof. Pham Manh Thang	*Chairmen: Dr. Tran Anh Quan and Dr. Seung Chul Jung*	*Chairmen: Assoc. Prof. Dang The Ba and Assoc. Prof. Nguyen The Duc*	*Chairmen: Prof. Nguyen Dong Anh and Dr. Nguyen Truong Giang*
14:00-14:30	ICEMA2023.081. *AHyeon Kim, SuJin Baek, Jong-Wook Kim.* Monitoring of Gait Features Using TPU Based Pressure Sensors	ICEMA2023.048. *Truong-Son Nguyen, Cong-Hoang Quach, Minh-Trien Pham, Anh-Duc Nguyen.* Dragon Fruit Yield Estimation Based on RGB-D Image and Deep Learning in Low-cost Device	ICEMA2023.051. *Chinh Kien Nguyen, Hang Nguyen Thi, Thanh Huong Duong Thi, Thanh Hang Do.* Applying artificial neural network model in calculating rainfall rate from radar reflectivity at Hue, Dong Van meteorological station	ICEMA2023.001. *Hanh Vuong, Chinh Pham.* Upper and lower iteration boundaries on longitudinal-transverse elastic modulus of transversely isotropic unidirectional composites
14:30-14:50	ICEMA2023.109. *Nguyen Quang Nha, Anh Nguyen Pham Thuc, Hoang Van Manh, Do Nam, Pham Manh Thang.* Implementation of unmanned aerial vehicle swarm control alogorithm in search and rescue operations	ICEMA2023.058. *Ninh Thi Nhu Hoa, Le Viet Dat, Phan Hong Phuoc, Nguyen Ngoc Viet, Hoang Van Manh, Nguyen Van Hieu.* Integrating Multi-Sensor Chip and IoT Technology for Precise Monitoring of CO and NO2 Gas Levels in Garage Environment	ICEMA2023.052. *Chinh Kien Nguyen, Thanh Huong Duong Thi, Hang Nguyen Thi, Thanh Hang Do, Tuan Dung Nguyen.* Applying gridded rain data to calculate inflow discharge into Ban Chat basin	ICEMA2023.037. *Nguyen Ngoc Linh, Nguyen Dong Anh.* A Novel Configuration of Tuned Mass Damper With Energy Harvester of Piezoelectric Stack and Force Amplification Frame
14:50-15:10	ICEMA2023.110. *Nguyen Quang Nha, Pham Manh Thang, Anh Nguyen Pham Thuc, Hoang Van Manh, Do Nam.* Researching the design and construction of unmanned aerial vehicles (UAV) for specialized purposes	ICEMA2023.059. *Hai-Ninh Dang, Ngoc-Linh Nguyen.* WiLe: Fault Tolerance Mesh Network based on Bluetooth Low Energy for Reliable Wireless Sensor Networks	ICEMA2023.053. *Tuan Anh Nguyen, Chinh Kien Nguyen, Hang Nguyen Thi, Thanh Huong Duong Thi, Viet Duc Nguyen, Thanh Hang Do.* Optimized parameters for Tuyen Quang reservoir basin using HEC-HMS model	ICEMA2023.045. *Hoang Ngoc Quy, Haidang Phan, Truong Giang Nguyen, Phan Dinh Hau.* The influence of latent heat on the superelastic behavior Shape Memory Alloy
15:10-15:30	ICEMA2023.111. *Bui Thanh Lam, Pham Manh Thang, Vu Tuan Anh, Nguyen Duc Quang.* Mechanical design for seabed seismic measurements station system	ICEMA2023.061. *Hiep Dam Dinh, Linh Nguyen Ngoc.* Modeling and simulation of dual robot arm systems using Simscape and MATLAB/Simulink	ICEMA2023.091. *Application of hydraulic model for flow simulation of the Hong-Thai Binh River System.* Tran Thi Thanh Huyen, Nguyen Chinh Kien, Nguyen Thi Hang	ICEMA2023.099. *Hoang Ngoc Quy, Truong Giang Nguyen, Haidang Phan.* Analysis of guided wave propagation in tri-layered bone structures
15:30-15:50			**Tea Break**	
	Mechatronics and Automation	**Mechatronics and Automation**	**Solid Mechanics**	**Solid Mechanics**
	Chairmen: Prof. Sang-Youn Kim and Assoc. Prof. Pham Manh Thang	*Chairmen: Dr. Tran Anh Quan and Dr. Seung Chul Jung*	*Chairmen: Prof. Nguyen Tien Khiem and Assoc. Prof. La Duc Viet*	*Chairmen: Prof. Tran Minh Tu and Prof. Nguyen Dinh Kien*
15:50-16:10	ICEMA2023.112. *Pham Manh Thang, Bui Thanh Lam, Nguyen Duc Quang.* Control System for Self-floating Seabed Seismic Measuring Station	ICEMA2023.062. *Thanh-Huong Tran, Nguyen Xuan Thang, Minh-Trien Pham.* A Low-cost Sleeping Mask of Early Screening OSA Support System based on Edge Computing in Smart Home	ICEMA2023.023. *Quyet Quang Ho, Lan Thi Nguyen, Toan Khanh Le, Khiem Tien Nguyen.* A method for crack detection in beam subjected to moving load using frequency response measured by distributed piezoelectric sensor	ICEMA2023.024. *Van-Chinh Nguyen, Huu-Quoc Tran.* Dynamic Response Analysis of Bi-directional Functionally Graded Plates Subjected to Moving Mass
16:10-16:30	ICEMA2023.128. *Linh Tao, Cong Tien Anh Ngo, Van Minh Hieu Tran.* Mobile robot localization using Hybrid Random Adaptive Differential Evolution Algorithm	ICEMA2023.093. *Hoang Phuc Chau, Tuan Minh Hoang, Vu Linh Nguyen.* A Reconfigurable Variable Stiffness Mechanism Based on Leaf Spring and Spiral Cam	ICEMA2023.056. *La Duc Viet, Phan Thi Tra My.* On the optimal passive and semi-active damping control in free vibration of a Single-degree-of-freedom system	ICEMA2023.025. *Van-Chinh Nguyen, Huu-Quoc Tran.* Vibration and Buckling Analysis of Bi-directional Functionally Graded Sandwich Beams with Three Phases of Materials
16:30-16:50	ICEMA2023.123. Tran Thang Do, Manh Thang Pham, Thanh Hai Tran. An integrating software solution in a cobot for education and research	ICEMA2023.103. *Hai Nguyen Ngoc, Hieu Le Minh, Nguyen Mai Thi Hong, Dam Le Van, Thien Nguyen Luong, Ngoc Pham Van Bach.* Study on the Control Method for Self-Driving Car Based on Kinematics and Dynamics Mathematics Model	ICEMA2023.057. *La Duc Viet, Phan Thi Tra My, Nguyen Tuan Ngoc.* On the optimal active and semi active stiffness control in free vibration of a Single-degree-of-freedom system	ICEMA2023.046. *Dao Minh Tien, Nguyen Thi Cam Nhung, Do Van Thom, Ta Duc Tam.* Thermal buckling of organic nanoplates
16:50-17:10			ICEMA2023.049. *Tien-Thinh Le, Johann Guilleminot.* Interphases in nano-reinforced polymers: stochastic multiscale modeling	ICEMA2023.055. *Nguyen Van Long, Tran Minh Tu, Dang Xuan Trung, Phan Xuan Thuc.* Nonlocal free vibration of FGM nanoplates with porosities considering surface effect

	Room 212 - E3 Building	Room 101 - G2 Building	Room 107 - G2 Building	Room 102 - E3 Building
	Mechatronics and Automation	**Mechatronics and Automation**	**Fluid Mechanics**	**Solid Mechanics**
17:10-17:30			ICEMA2023.127. *Van Hung Pham, Dinh Quoc Le, Xuan Tu Nguyen.* Optimized Control of Roll Stability of Missile Using Genetic Algorithm	ICEMA2023.094. *Vu Thi Thu Trang, Nguyen Van Long, Tran Minh Tu.* Deflection and natural frequency of FGM plates with porosities by using Quasi-3D seven-unknowns higher-order shear deformation theory
17:30-17:50				ICEMA2023.064. *Thi Thu Hoai Bui, Dinh Kien Nguyen.* Geometrically Nonlinear Behaviour Of FG CNRC Sandwich Beam Using A Co-Rotational Formulation
18:00 PM	**Closing Session at Room 212 - E3 Building**			