

PROGRAM AT A GLANCE

Conference Date: April 15-16, 2026

Address: Hanoi University of Industry, No 298 Cau Dien Street, Tay Tuu, Hanoi, Vietnam

Day 1: 15/04/2026; Time: 8:00 – 16:30

Venue: Room 401, 4th floor, A1 building

Time	Contents	Responsible Person	Room
April 15, 2026			
8:00 - 8:30	Registration	Organizing committee	401-A1
8:30 - 8:35	Introduction	MC	
8:35 - 8:40	Welcome and Opening Speech SETSM 2026	Prof. Dr. Pham Van Dong, Vice Rector of HaUI –	
8:40 -8:45	Gift for Keynote and Keynote chair	Prof. Dr. Pham Van Dong	401-A1
8:45 - 10:05	Keynote Session	Chair: Prof. Dr. Bui Van Ga	401-A1
08:45 - 9:05	Keynote Speaker #1 “Integrating Biomass into Hybrid Renewable Energy Systems for Power Generation and E-Fuel Production”	Prof. Bui Van Ga, Department of Science and International Cooperation, The University of Da Nang	
9:05- 9:25	Keynote Speaker#2 “Machine Learning– Enhanced Certification of Metal Additive Manufacturing Parts: In-Situ Monitoring and Control with Deep Learning”	Assoc. Prof. Giulio Mattera, Research fellow at the University of Naples “Federico II”,	
9:25 – 9:45	Keynote Speaker #3 “Emerging technologies on Smart Manufacturing and Energy Harvesting for Sustainability Development”	Prof. Chen-Kuei Chung, Department of Mechanical Engineering, National Cheng Kung University, Tainan, Taiwan,	
9:45 – 10:05	Keynote Speaker #4 “Privacy-Enhancing Emerging Technologies for Sustainability: Digital Forensic Insights”	Assoc.Prof. Anchit Bijalwan, British University Vietnam,	
10:05 – 10:10	Group photo		401-A1
10:10 - 10:20	Coffee break		4th floor
10:20 – 12:00	Oral presentation	A1	401 -A1
		A2	402 -A1
		A3	1004-A1
		A4	603- A1
		A5	1205-A1
		A6	403-A1
12:00 -13:30	Lunch		2 nd Floor- A13
13:30-15:10	Oral presentation	B1	401 -A1
		B2	402 -A1
		B3	1004-A1
		B4	603- A1
		B5	1205-A1
		B6	403-A1
15:10-15:30	Coffee break		
15:30 – 16:30	Poster presentation	C1, C2, C3, C4	4th floor, A1 building

A1: Sustainable Design, Smart Manufacturing, Lean Manufacturing and Cloud Manufacturing

Wednesday, April 15th, 10:20-12:00

Room: 401, 4th floor, A1 building

Chairs: Assoc.Prof. Dr. Siniša Škrbić

Prof.Dr. Vu Ngoc Pi

Assistant: Dr. Nguyen Van Canh (SMAE-HaUI) Mobile No.: 0936636465

#	ID	Authors	Title
1	215	Quoc Trong Vu; Quang Thuan Nguyen, Ha Duyen Dang; Khanh Ly Pham; Mai Huong Nguyen; Minh Duc Nguyen; Minh Ngọc Phạm	A 3D Indoor Positioning Framework Based on Ultra-Wideband Technology
2	99	Duc Nguyen, Hieu Nguyen Minh, Khue Vo Thi Minh, Anh Nguyen Van, Duc Nguyen Ngo, Nhat Chu Van, Ha Manh Bui	Design and Validation of a Stabilized Wire-Feeding Mechanism for I-Mobile WAAM
3	106	Minh-Tuan Nguyen	Lite-CNN Models for Fault Detection in Air Compressors Through Sound Signals
4	217	Gia-Bao Hoang, Nhu-Tung Nguyen, Tien-Dung Nguyen, Duc-Dung Dang, Mai-Nga Phung	Developing an Intelligent Warehouse System for Mold Management, Maintenance, and Distribution in the Mold Manufacturing Industry
5	102	Trang Hoang, Anh Nguyen Van, Duc Nguyen Ngo, Manh Ngo Huu, Tu Ngo Quang, Ha Bui Manh, Duc Nguyen Trong	Melt pool and droplet in WAAM

A2: Mechatronics, Automatic Control, Electronic Communication Robotics and Digital twin

Wednesday, April 15th, 10:20 – 12:00

Room: 402, 4th floor, A1 building

Chairs: Assoc.Prof. MUHAMMAD JUHAIRI AZIZ BIN SAFAR

Assoc. Prof. Nguyen Quoc Chi

Assistant: Assoc.Prof. Hoang Tien Dat (SMAE-HaUI) Mobile No.: 0987.344.991

#	ID	Authors	Title
1	33	Pomytkin Aleksandr, Karpukhin Kirill and Tsipilev Alexander	Rational design for an urban environment mobile robot with electric drive system
2	40	Van-Tam Ngo, Minh-Phuong Pham and Minh-Tam Pham	Data-Driven Prediction and PID-Based Control of Fine Particulate Matter Concentration
3	46	Du Tri Kien, Trinh Thanh Ha, Luu Thanh Phong, Nguyen Hong Minh Trinh Thi Khanh Ly	Adaptive nonsingular terminal sliding mode control for finite time trajectory tracking of a differential drive mobile robot

#	ID	Authors	Title
4	213	Tien-Dat Hoang, Vu Manh Tuan, Tran Van Hoang, Tran Huy Long, Nguyen Xuan Hung	Design a 3D-printed bio-inspired drone for flight and wheeled ground movement
5	245	Muhammad Azri Aiman Azahari , Fathinul Syahir Ahmad Saad, Muhamad Khairul Ali Hassan, Sukhairi Sudin , Khairul Salleh Basaruddin Muhammad Juhairi Aziz Safar, Ruslizam Daud, and Muhammad Faiz Aiman Zaini	Shape Classification of Harumanis Mango Quality Using Support Vector Machine

A3: Mechanics, Materials Sciences, Advanced Materials Technology and Chip Design

Wednesday, April 15th, 10:20 – 12:00

Room: 1004, 10th floor, A1 building

Chairs: Assoc. Prof. KHAIRUL SALLEH BIN BASARUDDIN
Assoc. Prof. Nguyen Thanh Hai

Assistant: **Dr. Duong Van Thiet (SMAE-HaUI) Mobile No.: 0979406159**

#	ID	Authors	Title
1	31	Anurag Yadav, Avanish Kumar Dubey	Modelling and Optimization of Laser Beam Percussion Drilling of thick Al/SiC Composite
2	69	Van-Tuan Nguyen, Dong-Anh Nguyen; Bao-Long Tran; Anh-Tu Do; Trung-Nam Pham, Van-Hieu Dang	Non-classical free vibration of functionally graded porous microbeams using higher-order shear deformation beam theories
3	97	Huynh Cong Lon, Nguyen Thanh Hai Nguyen Thanh Hai	A Review on the Mechanisms and Performance Enhancement of Ultrasonic-Assisted Sheet Metal Rolling
4	114	Quang Nam Nguyen, Van Anh Nguyen, Manh Ngo Huu, Trong Duc Nguyen, Huy Hoang Tran, Thang Nguyen Anh, Ngo Duc Nguyen	Breakthrough Welding Technologies for Ultra-thin Sheets
5	196	Giang Quoc Khanh	Effect of hydraulic fluid temperature on power loss in the hydraulic drive system of a hydraulic excavator

A4: Automotive Engineering Technology, Internal Combustion Engine Technology, Autonomous vehicles and Intelligent Transportation System

Wednesday, April 15th, 10:20 – 12:00

Room: 603, 6th floor, A1 building

Chairs: Prof. Akinari Hirao
Assoc. Prof. Trinh Minh Hoang

Assistant: **Dr. Nguyen Xuan Khoa (SMAE-HaUI), Mobile No.: 0973361368**

#	ID	Authors	Title
1	32	Alexey Terenchenko; Givi Nadareishvili; Evgeny Alikin; Andrey Porsin	On Relationship between Low-Temperature Oxygen Storage Capacity of Ceria-Containing Oxides and Efficiency of Three-Way Catalysts
2	18	Duc Hoang Nguyen; Thang Hoang; Trung Quan Doan; Quoc Huy Nguyen	Modeling and Simulation of a Parallel Hybrid Electric Vehicle Based on NEDC Cycle
3	56	Pomytkin Aleksandr; Karpukhin Kirill; Tsipilev; Alexander	Method for determining rational operating modes of a combined power plant of a series hybrid
4	50	Phuc Ngoc Nguyen; Quoc Cuong Phan; Van Du Phan	Investigation of Automotive Vibrations Using the Finite Element Method
5	155	Duong Tien Thanh, Nguyen Anh Ngoc, Tran Dinh Quyen, Vu Hai Quan, Nguyen Xuan Hien, Pham Tuan Quang, Nguyen Nhut Tan	Effect of Passenger Seating Distribution on Ride Comfort of a Bus

A5: Green Energy, Renewable Energy and Energy Conservation; Thermal Sciences

Wednesday, April 15th, 10:20 – 12:00

Room: 1205, 12th floor A1 building

Chairs: Assoc. Prof. Nguyen Duy Vinh
Assoc. Prof. Tran Dang Quoc

Assistant: **Dr. Pham Minh Hieu (SMAE-HaUI) Mobile No.: 0989946630**

#	ID	Authors	Title
1	180	Vu Minh Quan, Quentin MÉNARD, Hoang Thang Binh, Nguyen Thanh Tung	Optimizing aerodynamic downfront using diffusers with barriers for sports cars
2	54	Kirill Karpukhin	Using solar energy to extend electric vehicle cruising range. Experience of the Russian Federation and prospects of the Socialist Republic of Vietnam
3	203	Chien Vu-Van, Tuan Nguyen-Ngoc, Thanh Vo-Duy, and Vinh Nguyen-Van	A Bi-Level Optimization Approach for EV Charging Stations with Integrated Rooftop Solar Photovoltaic System
4	51	Chu Duc Hung, Do Quang Dai, Pham Minh Hieu, Nguyen Trung Kien, Do Ngoc Dinh, Nguyen Doan Hai Duong, Do Van Tuan	Evaluation of the Effect of Corrugated Structures on the Energy Absorption Efficiency of a Crash Box under Axial Compression
5	219	Quang Nguyen Tien, Duc Cao Van	Developed design a biomass continuous gasifier with small capacity by Aspen simulation of CO control in product syngas

A6: Additive Manufacturing, Rapid Manufacturing

Wednesday, April 15th, 10:20 – 12:00

Room: 403, 4th floor, A1 building

Chairs: Assoc. Prof. Giulio Mattera
Assist. Prof. Nguyen Van Anh

Assistant: **Dr. Trinh Van Long (SMAE-HaUI) Mobile No.: 0936.449.928**

#	ID	Authors	Title
1	11	Hao Dang Nguyen, Khoa Tat Doan, Thanh Nguyen Tai Hoai, Duy Han Le, Lap Tien Do, Tung Thanh Do, Chau Van Tran	Laser Directed Energy Deposition of Tungsten on SS304 Substrate
2	87	Thanh Tien Phan, Khoa Tat Doan, Toai Dinh Vu, Chau Van Tran	Residual Stress and Deformation Evolution in Laser Directed Energy Deposition with Substrate Preheating: A Numerical Study
3	94	Trong Hieu Bui, Van Vu Le, Chiet Quan Han, and Huu Nghi Huynh	Evaluation of Factors Affecting Dimensional Accuracy in Metal Filament Extrusion (MFE) Using Fuzzy Logic
4	227	Faris Ahmad Mizanus Sabril, Ruslizam Daud, Khairul Salleh Basaruddin, Mohd Afendi Rojan, Fathinul Syahir Ahmad Saad, Muhammad Juhairi Aziz Safar, Nurul Najwa Mansor, and Siti Noor Fazliah Mohd Noor	Dental Implant Coating-Anchoring Failure and Advanced Prototyping Technique: A Review
5	229	Khairul Salleh Basaruddin, Liyana Tajul, Nor Amalina Muhayudin, Mohd Afendi Rojan, Ruslizam Daud, Muhammad Juhairi Aziz Safar, and Tien-Dat Hoang	Emerging Technologies in Biomanufacturing: Digital Twin-Driven Design for 3D-Printed Bone Scaffolds

B1: Sustainable Design, Smart Manufacturing, Lean Manufacturing and Cloud Manufacturing

Wednesday, April 15th, 13:30 -15:10

Room: 401, 4th floor, A1 building

Chairs: Prof. Chen-Kuei Chung

Assoc.Prof. Le Van Tao

Assistant: **Dr. Nguyen Van Canh (SMAE-HaUI) Mobile No.: 0936636465**

#	ID	Authors	Title
1	64	Vu Truong Son, Le Van Tao, Nguyen Trung Thanh	Exploration on material removal rate of Ti-6Al-4V alloy during PMEDM using silver nanopowder
2	144	Thi Thuy Nguyen, Thi Minh Anh Nguyen, Phuong Ha Phan, Tuan Anh Tran, Van Trieu Pham	Investigating the Impact of Work Instruction Complexity on Cognitive Load and Memory: A Study Protocol for Industrial Task Execution
3	223	Nhu-Tung Nguyen, Thanh-Phuong Vu, Phuong-Anh Le, Thuy-Dieu Lai, Thi Phuong-Huyen Hoang, Thi Mai-Huong Nguyen	A Study on Less than Container Load Problem using Greedy Heuristics Methods
4	163	Quang Minh Bui, Thai Ha Pham, Thi Thu Phuong Nguyen, Thi Thu Hien Le, Ngoc Linh Pham, Van Trieu Pham, Van Tung Dam	Research and Development of a Warehouse Management System Applying Digital Twin Technology
5	252	Nguyen Quoc Tuan; Le My Linh	Feasibility study of a system for an industrial wood flooring manufacturing system

B2: Mechatronics, Automatic Control, Electronic Communication Robotics and Digital twin

Wednesday, April 15th, 13:30-15:10

Room: 402, 4th floor A1 building

Chairs: Assoc.Prof. MUHAMMAD JUHAIRI AZIZ BIN SAFAR
Assoc. Prof. Nguyen Quoc Chi**Assistant: Assoc.Prof. Hoang Tien Dat (SMAE-HaUI) Mobile No.: 0987.344.991**

#	ID	Authors	Title
1	100	Truong Hai Nam, Pham Van Trieu, Pham Minh Ngoc, Dam Van Tung, Vu Tuan Anh, Hoang Quoc Dong	Integrated Zig-Zag Tacking Planning and ILOS-PID Guidance for Autonomous Sail-Drones with No-Go-Zone and Obstacle Avoidance
2	101	Manh Ha Bui, Van Anh Nguyen, Trong Duc Nguyen, Minh Hieu Nguyen, and Van Ha Nguyen	Control System Architecture and Movement Control of an Innovative Wire-Arc Additive Manufacturing Machine
3	110	Hong Toan Dinh, Quy Tran, Van Xuan Nguyen, Ngoc Tuan Nguyen, Thanh Phu Phan and Van Nguyen Pham	Predefined-Time Integrated Guidance and Control for Maneuvering Targets under Uncertainties
4	226	Muhammad Juhairi Aziz Safar, Shafriza Nisha Basah, Khairul Salleh Basaruddin, Ruslizam Daud, and Muhamad Khairul Ali Hassan	A Comparative Analysis of Global Path Planning Algorithms
5	231	Hung Tien Pham, Dat Tien Hoang, Hieu Dinh Phan	Adaptive Mass Estimation for Trajectory Tracking of a Quadrotor UAV with Payload-Induced Parameter Mismatch

B3: Mechanics, Materials Sciences, Advanced Materials Technology and Chip Design

Wednesday, April 15th, 13:30 – 15:10

Room: 1004, 10th floor A1 building

Chairs: Assoc. Professor. KHAIRUL SALLEH BIN BASARUDDIN
Assoc. Prof. Luong Huu Bac**Assistant: Dr. Duong Van Thiet (SMAE-HaUI) Mobile No.: 0979406159**

#	ID	Authors	Title
1	30	Nguyen Thuy Van, Thi Kim Phuong Dinh	Tamm Plasmon Resonance Optical Sensor Using Porous Silicon One-Dimensional Photonic Crystals Coated with Gold
2	209	Duy Hai Nguyen, Xuan Thanh Pham, Thi Hanh Nguyen, A. L. A. K Ranaweera, Quang Minh Ngo, Thanh Son Pham	Plasmonic Metasurfaces Based on Metal-Insulator Metal Structures for Perfect Near-Infrared Absorption
3	210	Thi Mai Le, Xuan Hung Nguyen, Dinh Thong Tran, Ngoc Hung Phi and Thanh Son Pham	Design of an Asymmetric Magnetic-Resonance Wireless Power Transfer System Operating in Different Conductive Environments
4	235	Nguyen Van Tu, Nguyen Duc Chung, Ji-Yong Park, Vu Trung Kien	Scalable Synthesis of NH ₂ -Functionalized MoS ₂ Nanosheets for

#	ID	Authors	Title
			Efficient Visible-Light Photocatalytic Degradation of Methylene Blue
5	249	Ngoc Duy Hien Lai, Phi Thuc Duong	A 1-V 2.25- μ W, Low-Noise Neural Recording Front-End in 0.18- μ m CMOS

B4: Automotive Engineering Technology, Internal Combustion Engine Technology, Autonomous vehicles and Intelligent Transportation System

Wednesday, April 15th, 13:30 – 15:10

Room: 603, 6th floor A1 building

Chairs: Assoc. Prof. Karpukhin Kirill
Assoc. Professor. Le Van Quynh

Assistant: Dr. Nguyen Xuan Khoa (SMAE-HaUI) Mobile No.: 0973361368

#	ID	Authors	Title
1	42	Andrey Kozlov; Alexander Stryapunin; Alexey Terenchenko	Development of a multipurpose computer model of a single-cylinder research engine
2	184	Trung.Tran Anh, Truong.Le Quang; Huy.Bui Nhat, Long.Nguyen Manh	Design, Modeling, and Experimental Validation of a Low-Cost Electronic Throttle Control Testbench for Automotive Mechatronics Education and Research
3	208	Truong Dang Viet Thang, Nguyen Giang Nam, Nguyen Duc Giang, Nguyen Khoa Tai, Duong Xuan Tung, Nguyen Viet Anh, Vu Tuan Anh	A Parametric Study of Coupled Fabric-Fold Effects on Driver-Airbag Deployment using LS-DYNA
4	37	Sergei M. Zuev; Anatoly M. Ermoshin Artem A. Timoshenko; Dmitry A. Prokhorov; Rinat K. Kurmaev; Vu Hai Quan	Modeling and Optimization of EV Battery Parameters: Impact of Voltage Configuration on Performance Characteristics
5	161	Khoa Minh Tri, Phạm Quang Huy, Doan Anh Dung, Nguyen Đức An, Nguyen Thanh Tung	A Multimodal Driver Attentiveness Monitoring Framework via Scoring-based Fusion of Visual and Tactile Cues

B5: Green Energy, Renewable Energy and Energy Conservation; Thermal Sciences

Wednesday, April 15th, 13:30 – 15:10

Room: 1205, 12th floor A1 building

Chairs: Assoc. Prof. Tran Quang Vinh
Assoc. Prof. Tran Thi Thu Huong

Assistant: Dr. Pham Minh Hieu (SMAE-HaUI) Mobile No.: 0989946630

#	ID	Authors	Title
1	246	V. L. Trinh, X. C. Nguyen, T.S. Nguyen, V. H. Tran, V.N. Hoang, T. N. Nguyen	Triboelectric generator based on microstructured PDMS for energy conservation and renewable energy
2	68	Vien Van Ngoc, Nguyen Duy Vinh and Nguyen Nhu Thanh,	An Investigation of the Effects of Excess Air Ratio on Combustion Characteristics

#	ID	Authors	Title
			and Performance of a Small Hydrogen-Fueled Generator Engine
3	185	Nguyen Thi Le, Vu Minh Nguyet, Hoang Thi Van Anh, Dinh Thi Hanh, Pham Thi Khanh Huyen, Phan Hoai Thu, Do Thai Phuong	Determinants of Sustainable Fashion Consumption: The Roles of Environmental Social Influence, Market Awareness, and Fashion Orientation
4	182	Minhhieu Pham, Nguyen Huu Huy, Dinh Ngoc Anh, VanKha Trinh, Nguyen Hoang Vu, Nguyen Duc Trong	Numerical Optimization Of Liquid Cooling Plate Structures For Enhanced Thermal Management In Lithium-Ion Battery Modules
5	237	Minhhieu Pham, Anh Dinh Ngoc, Hieu Minh Pham, Kien Nguyen Trung, Trong Nguyen Duc	The effect of flaps on the aerodynamics of a vehicle's rear wing

B6: ICT & Core Fundamentals

Wednesday, April 15th, 13:30 – 15:10

Room: 403, 4th floor, A1 building

Chairs: Prof. Yamada Ko
Prof. Tran Duc Tan

Assistant: Dr. Bui Tien Son (HaUI) Mobile No.: 0911.515.355

#	ID	Authors	Title
1	59	Huy Q. Pham, Vu V. Nguyen, Nhung T. C. Nhung, and Duong T. Nguyen	High-Fidelity Automated Method for NACA Airfoil Aerodynamic Optimization under Subsonic Flow Conditions
2	189	Van Minh Duong, Duc An Tran, and Thi Phuong Nguyen	Design and Implementation of a Low-Cost PLL-Based Frequency Hopping Transmitter
3	198	Ngoc Anh Thi Phung, Tuan Duc Tran, Nghia Thi Mai, and Kou Yamada	Internet of Things Intrusion Detection System Using Particle Swarm Optimization and Ensemble Learning
4	244	Tuan Duc Tran, Nguyen Hong Tien, Nguyen Thi Thu Huong, Nguyen Van Tuan, Bui Tien Tai, Pham Ngoc Thanh, Le Dang Ha, Vu Van Khiem, and Nguyen Van Quyen	Quadrotors Formation Control Using Leader-Follower Approach
5	253	Van-Tinh Nguyen, Manh-Hieu Tran, Van-Tu Hoang, Dinh-Son Nguyen, Van-Tam Ngo, and Tien-Son Bui	Design and Experimental Validation of a Mobile Robot with Integrated Collision Avoidance and Synchronization Control for Blind Navigation Assistance

C1: Sustainable Design and Manufacturing + Additive Manufacturing – 3D Printing + Smart Manufacturing, Lean Manufacturing 4.0, Rapid Manufacturing and Cloud Manufacturing

Wednesday, April 15th, 15:30 – 16:30

Room: 4th floor, A1 building

Chairs: Assoc. Prof. Hoang Tien Dung
Dr. Nguyen Van Canh

#	ID	Authors	Title
1	49	Do Duc Trung, Aleksandar Ašonja, Siniša Škrbić, Hoang Xuan Thinh, Tran Van Dua	RAMCOSIN: A novel approach for ranking alternatives
2	75	Minh Tien Nguyen and Akinari Hirao	Influence of Surface Coefficient on Comfort Indicators of 3D-Printed Seat Foam
3	76	Nguyen A Chuc, Ngo N. My Duyen, Truong T. Tuan, Nguyen Thi Lan, Le Van Sy	An Energy-Optimized CO ₂ Capture Design for Coal-Fired Power: A Simulation Study Using MDEA/PZ Solvent
4	86	Truong Thi Thanh Hang, Hoang Luu Hong Anh, Nguyen Hong Phuc, Nguyen Van and Nguyen Thi Le Thu	Improving Precision Mechanical Processing To reduce the defective product rate: A case study
5	96	Van Canh Nguyen, Duc Manh Dinh, Van Chau Tran, Van Thao Le*, Manh Cuong Bui, Minh Tam Pham, Xuan Hung Le, Tat Khoa Doan	A Study on Thermo-mechanical Simulations in Cold Metal Transfer Additive Manufacturing of Inconel 625 Superalloy Rectangular Thin Walls
6	106	Minh-Tuan Nguyen	Lite-CNN Models for Fault Detection in Air Compressors Through Sound Signals
7	109	Hien Bui Minh, Doan Nguyen Cong	Air Plasma Cutting of Steel Sheets: Parameter Selection for Minimizing Dross and Bevel Angle
8	187	Du Thi Kieu Trinh, Nguyen Trong Mai, Tran Duc Quy, Pham Thi Thieu Thoa, Nguyen Truong Giang, Dongyi Lin	Optimization of Cutting Parameters in Wire Electrical Discharge Machining of SUS420J2 Steel for Minimizing White Layer Depth
9	199	Nguyen Danh Dao, Nguyen Thi Hong Nhung, Hoang Thi An, Manh-Ngo Huu, Ngo Thi Thao	Application on YOLOv11 Neural Network Testing and Detecting of the Weld Defects
10	212	Van Tuong, Tran, Nhu-Tung Nguyen, Van-Hai Nguyen, Nguyen Duc Loi, Dinh Toan, Vu	Study on Stability and Machining Characteristics in Milling Process of Aluminum Alloy Al7075
11	216	Thi Minh Anh Nguyen, Minh Ngoc Pham	Impact of Process Parameters on Machine Fault Diagnosis: An Explainable AI-Based Study
12	239	V. L. Trinh, C. K. Chung, D. Q. Tran, H. K. Nguyen, H. S. Nguyen, T. G. Nguyen, H. H. Nguyen	Injection molding for smart manufacturing and emerging technology

C2: Mechatronics, Automatic Control, Electronic Communication Robotics and Digital twin + Green Energy, Renewable Energy and Energy Conservation; Thermal Sciences + ICT - Information and Communications Technologies

Wednesday, April 15th, 15:30 – 16:30

Room: 4th floor, A1 building

Chairs: Assoc. Prof. Nguyen Anh Tu
Assoc. Prof. Hoang Tien Dat

#	ID	Authors	Title
1	28	Dau Van Anh, Nguyen Nhu Thanh, Nguyen Duy Vinh, Dinh Xuan Thanh, Pham Van Trong	Investigation of the Effects of Ethanol Fuel on the Performance and Emissions of a Small-Scale Generator Engine Using AVL BOOST
2	57	Le Danh Quang, Nguyen Huu Phu, Nguyen Van Be, Nguyen Duy Vinh, Nguyen Van Dien	Structural and Thermal Analysis of Lightweight Brake Disc Assemblies in Automotive Applications
3	55	Nguyen Thanh Trung, Luu Thanh Phong, Nguyen Minh Duc, Nguyen Hong Thai Phung Van Thom, Trinh Thi Khanh Ly	High-Accuracy Trajectory Tracking for a 4-DOF SCARA Robot Using an Optimal Dual Sliding Mode Controller Based on the SHO Algorithm
4	201	Quoc-Bao Tran and Tien-Dat Hoang	Design and Implementation of a YOLOv11-Based Drone Fire Extinguisher System for Fire Detection
5	206	Bui Thanh Lam, Phung Van Tu, Le Minh Thuan and Nguyen Duc Tien	Data-Driven Hybrid PID–ANFIS Control for Precise Trajectory Tracking of a Planar SCARA Robot
6	207	Tuan-Anh Vu, Quang-Dich Nguyen, Quang-Thong Trinh	Grey-box Dynamic Modeling and Parameter Identification for MP6 Piezoelectric Micropump: An Operating-Point Framework

C3: Automotive Engineering Technology; electric and hybrid vehicle technologies; Internal Combustion Engine Technology, Autonomous vehicles, connected vehicles, and Intelligent Transportation System

Tuesday, April 15th, 15:30 – 16:30

Room: 4th floor, A1 building

Chairs: Dr. Nguyen Anh Ngoc

Dr. Vu Hai Quan

#	ID	Authors	Title
1	21	Nguyen Xuan Tuan; Phan Thanh Hung; Tran Van Hieu	Optimization Study Of Energy Distribution In Hybrid Battery-Supercapacitor Systems In Electric Vehicles During Acceleration α -Sweep Based
2	80	Vu Hai Quan, Nguyen Duc Hai, Luong Binh Minh, Tran Trung Nghia, Nguyen Le Minh, Pham Duy An, Nguyen Trong Duc, Nguyen Xuan Hien, Kirill Evgenievich Karpukhin	Development of a Hybrid Control Strategy for Green Vehicles: Integration of Fuel Cell, Li-ion Battery, and Supercapacitor
3	168	Nong Quoc Quan, Nguyen Anh Ngoc, Lai Manh Hung, Vu Hai Quan, Do Van Cuong, Ho Van Vu	Research On The Design Of Engine Mounts On Buses Using Magnetorheological Fluid
4	72	Alexey Terenchenko; Sergey Anikeev Andrey Porsin	On Emission of Pollutants during Real Driving of a Vehicle with a Cold Start of an Internal Combustion Engine

#	ID	Authors	Title
5	89	Hoang Quang Tuan*, Pham Duy Dai, Do Duc Anh, Tran Quang Huy, Nguyen Xuan Quang, Vu Minh Duc	Transient Thermal Modeling And Heat Generation Anaysis of An Automotive Magnetorheological Mount Using Coupled Dynamic–Thermal simulation
6	61	Xuan-Hien Nguyen; Viet Dat Nguyen; Nhat Minh Bui; Nhat Minh Bui Khanh; Hung Nguyen; Muon Ha	Real-Time Driver Drowsiness Warning for Traffic Safety Using Dynamic Blink-Rate–Driven EAR Thresholding and Robust Facial Landmark Smoothing

C4: Mechanics and Materials Sciences

Tuesday, April 15th, 15:30 – 16:30

Room: 4th floor, A1 building

Chairs: Assoc. Prof. Nguyen Tuan Linh
Dr. Pham Minh Hieu

#	ID	Authors	Title
1	113	An Ngoc Thien, Nguyen, Hung Van Vu, Anh Duy Nguyen, Hieu Chi Phan, Thang Van Vu, Dinh Duy Ta, Dan Van Nguyen	Numerical Investigation into the Oblique Impact Dynamics of Fluid Droplets
2	230	Pham Van Bong, S.Sadhishkumar, M.Narasimharajan, L.Selvarajan4, A.Dominic, V.K.Krishnan, Shailesh Shirguppikar, Duc Duong Khuat, Manh Cuong Nguyen	Dynamic Mechanical Analysis of Acacia Nilotica Filler Blended PLA Based Bio Composite Using Bio/Medical Application