

DAY 1 **Saturday, December 16, 2023**

08:00-08:50	Registration , Location: B4 Hall, B4 Building, Ho Chi Minh City University of Technology, VNU-HCM
08:50-09:00	Opening Musical Performance
09:00-09:10	Opening Speech for EAI ICRESM 2023 and Introducing the Invited Guests
09:10-09:45	Welcome Speech of Conference Delegates

Keynote Session.
 Time: 09:45 - 11:30
 Room: B4 Hall

09:45-10:30	<p>Chair: Prof. DSc. Banh Tien Long President of the National Council for the Professorship in the Interdisciplinary Mechanical Engineering HaNoi University of Science and Technology (HUST), Vietnam</p> <p>KEYNOTE 1. Enhancing Uniformity in Cylindrical Cup Wall Thickness during Deep Drawing of SPCC Sheet Materials at Elevated Temperatures</p>
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Coffee Break

10:45-11:30	<p>Chair: Prof. Dr. YAN Jiwang Keio University, Japan</p> <p>KEYNOTE 2. Sustainable ultraprecision manufacturing</p>
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Lunch (3rd Floor, B4 Canteen, Ho Chi Minh City University of Technology)

	Room No. 301, 3rd Floor, B4 Building	Room No. 302, 3rd Floor, B4 Building	Room No. 406, 3rd Floor, B4 Building	Room No. 402, 4th Floor, B4 Building	Room No. 403, 4th Floor, B4 Building	Room No. 405, 4th Floor, B4 Building
13:30-14:50	<p>Track 1.1: Energy Transition Chair: Prof. Dr. Goh Thian Lai (UKM, Malaysia), A. Prof. Dr. Nguyen Van Thinh (HUMG, Vietnam)</p> <p>Paper 1: Assessing the Fundamental Significance of the PKN Two Dimensional Model in Hydraulic Fracture Modeling (Paper ID: 340639)</p> <p>Paper 2: Plan of Development for Unlocking the Reserves of Energy Fossil Using Characteristic Potential Mapping (Paper ID: 341126)</p> <p>Paper 3: The European Union's green energy transition and its impact on Vietnam (Paper ID: 340715)</p> <p>Paper 4: Crack Analysis and Impedance Characterization in Ultrasonic Horn Welding of Aluminum 7075: A Comparative Study (Paper ID: 341394)</p>	<p>Track 1.2: Earth Resources for Sustainable Development Chair: Prof. Dr. Muslim Abdurrahman (Universitas Islam Riau, Indonesia), A. Prof. Dr. Hoang Thi Thanh Thuy (HCMUNRE, Vietnam), Dr. Ngo Tan Phong (HCMUT, Vietnam)</p> <p>Paper 1: Assessing Dike Sliding Risk due to Seasonal Water Level Changes (Paper ID: 341200)</p> <p>Paper 2: Design - Fabricate continuous extruder using chocolate materials for 3D Printers (Paper ID: 340643)</p> <p>Paper 3: Seasonal and spatial distribution of microplastics in surface water of the southern branch of the Mekong River in Vietnam (Paper ID: 341096)</p> <p>Paper 4: Analysis, numerical simulation of convective heat flow in the fabrication chamber of an open source FDM device (Paper ID: 340642)</p>	<p>Track 1.3: Sustainable Logistics Chair: Dr. Ivan Kristianto Singgih (UoS, Indonesia), Dr. Song Thanh Quynh Le (HCMUT, Vietnam)</p> <p>Paper 1: Application of mega-heuristic algorithm to solve a flow shop scheduling problem. A case study (Paper ID: 340905)</p> <p>Paper 2: The Influence of Cost Factors on Revenue – A Case Study on the Vietnamese Retail Store Chains (Paper ID: 340908)</p> <p>Paper 3: Design of container terminal: A case study in Thailand (Paper ID: 340693)</p> <p>Paper 4: Distribution Decision Model for Cross-Docking (Paper ID: 340695)</p>	<p>Track 1.4: Advanced Material Processing Chair: Prof. Dr. Duc Tuan Nguyen (HUST, Vietnam)</p> <p>Paper 1: Effect of Ultrasonic Vibration on Copper Particle Densification During Pressureless Sintering (Paper ID: 341393)</p> <p>Paper 2: The Future of Ultrasonic-Assisted Turning: Development Directions and Research Prospects (Paper ID: 341125)</p> <p>Paper 3: Vibration characteristic during machining various materials using a 4-axis milling machine (Paper ID: 341011)</p> <p>Paper 4: Optimizing Welding Processes: Impact of Laser Power and Gas Flow Rate on Deformation (Paper ID: 341197)</p>	<p>Track 1.5: Smart Mechatronics Chair: Dr. Duc Khai Lam (UIT-VNUHCM, Vietnam), Prof. Dr. Jin-Ho Shin (DEU, South Korea)</p> <p>Paper 1: Study on Design of Smart Water Purifier Monitoring Human's Health and Behavior (Paper ID: 340979)</p> <p>Paper 2: Dynamic modeling of nonlinear oscillation system (Paper ID: 340983)</p> <p>Paper 3: Research on Controlling the Side Brush Road Sweeper for Different Road Surfaces using PID-Sliding Mode Controller (Paper ID: 341118)</p> <p>Paper 4: A U-Net based Model with Attention Module and Contourlet Transform for Covid-19 Segmentation (Paper ID: 340388)</p>	<p>Track 1.6: Production and Sustainability Chair: A. Prof. Dr. Hung Nguyen (HUTECH, Vietnam), Dr. Le Nhat Binh (VAA, Vietnam)</p> <p>Paper 1: Efficient path planning with G2-smoothing for USV in presence of known obstacles (Paper ID: 340914)</p> <p>Paper 2: Preliminary Design and Fast Prototyping of The Automatic Brake Assist System for The Motorcycle (Paper ID: 340764)</p> <p>Paper 3: Implementation Of Smart Toilet Seats Testing Laboratory (Paper ID: 340918)</p> <p>Paper 4: Predicting Speeding Behavior in Hau Giang Province: Applying the Theory of Planned Behavior (Paper ID: 341069)</p>

Coffee Break

	Room No. 301, 3rd Floor, B4 Building	Room No. 302, 3rd Floor, B4 Building	Room No. 406, 3rd Floor, B4 Building	Room No. 402, 4th Floor, B4 Building	Room No. 403, 4th Floor, B4 Building	Room No. 405, 4th Floor, B4 Building
15:30-16:50	<p>Track 2.1: Low Carbon Technology Chair: Prof. Dr. Goh Thian Lai (UKM, Malaysia), A. Prof. Dr. Nguyen Van Thinh (HUMG, Vietnam)</p> <p>Paper 1: Geological CO2 Sequestration in Vietnam: Overcoming Technical and Socio-economic Challenges for Effective Climate Change Mitigation (Paper ID: 340666)</p> <p>Paper 2: High-Speed Traffic Infrastructure Conjunction with Renewable Energy along Shoreline of Vietnam (Paper ID: 341526)</p> <p>Paper 3: 3D Modelling of Geospatial Data Using PyVista – A Free and Open Source Framework (Paper ID: 341220)</p>	<p>Track 2.2: Supply Chain and Sustainable Techniques Chair: Dr. Nguyen Thi Cam Le (VAA, Vietnam), Dr. Vang Phuc Nguyen (HCMUT, Vietnam)</p> <p>Paper 1: Sustainable cold storage warehouse site selection in 2 Vietnam: A TOPSIS approach (Paper ID: 340728)</p> <p>Paper 2: Application of the Activity-based Costing model for Cost Planning in Reverse Logistics: A Case Study in Vietnam (Paper ID: 340907)</p> <p>Paper 3: Comprehensive Six Sigma application: A case study of cold-rolled steel manufacturing company in Vietnam (Paper ID: 340694)</p> <p>Paper 4: Investigation on Monitoring Personal Health via Internet-of-Things-based Wearable Device (Paper ID: 341113)</p>	<p>Track 2.3: Sustainable Logistics Chair: Dr. Ivan Kristianto Singgih (UoS, Indonesia), Dr. Duc Duy Nguyen (IU-VNUHCM, Vietnam)</p> <p>Paper 1: Weighted max-min model for fuzzy multi-objective biomass power plants location optimization problem (Paper ID: 340729)</p> <p>Paper 2: A Novel Solution in Tracking Control of Human-Robot Collaboration in the Industrial Workplace (Paper ID: 341091)</p> <p>Paper 3: Emulates3D: Design and Application for Education in the Engineering Maintenance (Paper ID: 341094)</p> <p>Paper 4: A Clustering Algorithm for Storage Location Assignment Problems in E-commerce Warehouses (Paper ID: 340805)</p>	<p>Track 2.4: Advanced Material Processing Chair: A. Prof. Dr Thanh Danh Le (UEH, Vietnam), Dr. Hai Tran (HCMUT, Vietnam)</p> <p>Paper 1: Microstructure Characterization And Sliding Wear Behaviour Of HV0F Sprayed Tungsten Carbide - 12% Cobalt And Chromium Carbide - 25% Nickel Chromium Coatings (Paper ID: 341058)</p> <p>Paper 2: Metal Additive Manufacturing Through Screw Extrusion: State-of-the-art and future prospects (Paper ID: 341124)</p> <p>Paper 3: Ultrasonic Impact on Welding: Microstructural Insights and Mechanical Properties (Paper ID: 341035)</p> <p>Paper 4: Optimization Effects Of HV0F Process Parameters On The Qualities Of WC-20Cr3C2-7Ni Coating Using The Taguchi Method And Grey Relational Analysis (Paper ID: 341056)</p>	<p>Track 2.5: Internet of Things Chair: A. Prof. Dr. Minh Quang Tran (HCMUT, Vietnam), Dr. Lam Son Le (VGU, Vietnam)</p> <p>Paper 1: Developing Cost Effective Monitoring System for Plastic and Rubber Molding Machines (Paper ID: 340919)</p> <p>Paper 2: Development of IoT-based device for non-intrusive measurement of rotational speed of induction motors (Paper ID: 341037)</p> <p>Paper 3: Integrated Monitoring System for Shrimp Farming: Combining Acoustic and Water Quality Analysis (Paper ID: 341209)</p> <p>Paper 4: FPGA-based DNN Implementation for the Autonomous Car System (Paper ID: 340935)</p>	<p>Track 2.6: Production and Sustainability Chair: A. Prof. Dr. Truong Nguyen Luan Vu (HCMUTE, Vietnam), A. Prof. Dr. Thanh Long Le (HCMUT, Vietnam)</p> <p>Paper 1: Design and Implement Higher Layers of Controller Area Network for Electric Autonomous Vehicles (Paper ID: 341067)</p> <p>Paper 2: Experimental Study on the Effect of Bio-Fuels on Performance and Emissions of a Motorcycle (Paper ID: 340766)</p> <p>Paper 3: Investigation of Indoor Navigation based on Proxemics for Mobile Robot using Robot Operating System (ROS) (Paper ID: 341116)</p> <p>Paper 4: Optimization Design of Muffler External Geometry Integrated with Motorcycle Exhaust Thermoelectric Generator System (Paper ID: 340770)</p>

Gala Dinner-Closing Session 1 & 2 (Mua Vang The Warehouse, No. 268 To Hien Thanh Street, Ward 15, District 10)

DAY 2 **Sunday, December 17, 2023**

08:30-09:00	Registration , Location: B11 Hall, B11 Building, Ho Chi Minh City University of Technology
09:00-09:10	Opening Speech for EAI ICRESM 2023 (Session 3)
09:10-09:20	Welcome Speech of Conference Delegates

Keynote Session.
 Time: 09:20 - 09:50
 Room: Online

	<p>Chair: A. Prof. Dr. Xuan Huy Nguyen Ho Chi Minh City University of Technology, VNU-HCM, Vietnam</p>
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09:20 - 09:50	KEYNOTE 3. Navigating the Energy Transition and Carbon Trading: Strategies for Climate Change Mitigation in Vietnam	
09:50 - 10:00	Coffee Break	
	Room: Hall, B11 Building	Field Trip (Option)
10:00 - 11:20	<p>Track 3.1: Strategy and Technique for the Sustainability Chair: A. Prof. Dr. Mai-Ha Phan (HCMUT, Vietnam)</p> <p>Paper 1: Evaluating Vulnerability to Marine Resources and Sea Environment in Tien Yen Bay: A Quick Assessment for Sustainable Management (Paper ID: 341112)</p> <p>Paper 2: Optimization for feeder positions of surface mount machine using Genetic Algorithm (Paper ID: 340958)</p> <p>Paper 3: Geochemical Characterization and Potential Sources of Lithium Mineralization in Various Areas of Vietnam (Paper ID: 341111)</p> <p>Paper 4: An Experimental Study of Maximum Power Point Tracking for Small-Scale Wind Turbines (Paper ID: 340356)</p> <p>Paper 5: Factors affecting CO2 emissions in some Asian developing countries (Paper ID: 340702)</p> <p>Link Zoom: https://us06web.zoom.us/j/82827115717?pwd=vo4Jy2aBVgEIPKMcAn6bF0d2C0CL1 ID: 828 2711 5717, Passcode: 838505 Contact +84-908-220-850 for more details</p>	<p>+ Description: The field trip to The wind power projects and hydrogen factory in Thanh Phu commune, Ben Tre province was a valuable experience for all those who attended. Not only did they gain an understanding of how energy generation works, but it also opened up The possibility to explore other forms of renewable energy sources. It was especially engaging as participants got a hands-on experience with technology developers to learn about installing, operating, and maintaining turbines. they can be utilized in a sustainable manner to reduce our carbon footprint and promote a cleaner environment.</p> <p>+ Participants: authors whom were registered + Time: from 10:00 AM (one day)</p>
11:20	Closing Ceremony Session 3, Lunch-Invited Guests (Hoa Bien Restaurant, No. 52 Lu Gia Street, Ward 15, District 11)	