

ISEM 2025 Conference Program

October 26, 2025 (Sun)		
16:00-18:00	Registration (4th Floor)	
17:00-18:30	Welcome Reception (West Room)	
October 27, 2025 (Mon)		
08:30-17:00	Registration (4th Floor)	
	B1 International Lecture Hall	
9:30-9:50	Opening Remark	
9:50-10:40	Plenary Lecture (I): Professor Zbigniew Kowalewski	
10:40-11:30	Plenary Lecture (II): Professor Yoon Young Kim	
11:30-11:40	Break	
	B1 International Lecture Hall	
11:40-12:00	Cadmen Taiwan Auto-Design Co. Product Launch Speech	
12:00-13:30	Lunch	
	Windsor Square	East Room (Best Oral Paper Competition)
13:30-14:10	Keynote Session (I): Professor Bill Yuh J. Chao	13:30-13:45 Paper NO.0010 Paper Title: Energy Absorption of Ultrasonic Vibration Due to the Distorted Atomic Arrangement of Screw Dislocations in BCC Fe All Authors:A Asazuma,S Arikawa Presenter : Akari Asazuma
14:10-15:00	Keynote Session (II): Professor Takenobu Sakai	13:45-14:00 Paper NO.0014 Paper Title: Nonlinear Longitudinal Dynamics of Linear Guideways: Parameter Identification across

ISEM 2025 Conference Program

		Types and Configurations All Authors:YC Lo Presenter : Yi Chun Lo
		Paper NO.0030 Paper Title: Open-Set Fault Diagnosis of Aircraft-Grade Immersed Fuel Pumps Using Time series Contrastive Representation 14:00-14:15 Learning and Extreme Value Theory All Authors:YY Hung,WL Liao,MT Lin Presenter : Yu-Yao Hung
		Paper NO.0004 Paper Title: Mechanical metamaterials with actively reconfigurable dynamic vibration absorbers for flexural band gap modulation 14:15-14:30 All Authors:DB Pham,SC Huang Presenter : Duy Binh Pham

ISEM 2025 Conference Program

		<p>14:30-14:45</p>	<p>Paper NO.0108 Paper Title: Validation of Two-Point Bending Stress Formulation Using 3D-DIC All Authors:FJ Wang,PC Sung,YW Kuo,YL Yeh,WC Wang Presenter : Fa-Jin Wang</p>
		<p>14:45-15:00</p>	<p>Paper NO.0093 Paper Title: A Deep Learning-Enhanced Nondestructive Testing System for Automated Quality Control in Industrial Random Bin Picking All Authors:TS Chen,IH Li,MZ Yang,XH Wang,HR Yu,LW Lee Presenter : Tse-Shin Chen</p>
<p>15:00-15:20</p>	<p>Break</p>		

ISEM 2025 Conference Program

	Windsor Square	North Room	West Room	East Room	
	<p style="text-align: center;">Session E Experimental Mechanics and Multiscale Methodologies</p>	<p style="text-align: center;">Session B Experimental Mechanics for Manufacturing and Material Behavior Analysis</p>	<p style="text-align: center;">Session C Experimental Mechanics for Material Characterization and Structural Mechanics Analysis</p>	<p style="text-align: center;">Best Oral Paper Competition</p>	
15:20-15:40	<p>Paper NO.0083 Paper Title: Elastic metamaterials integrating coaxial tube-based dynamic vibration absorbers for adaptive flexural band gap tuning All Authors:DB Pham,SC Huang Presenter : Duy Binh Pham</p>	<p>Paper NO.0013 Paper Title: Durability and Interfacial Fracture Analysis of Thermally Pressed Natural Fiber Composites All Authors:SN Tsai,SL Huang,WC Chien Presenter : Shang- Nan Tsai or Wei- Chic Chien</p>	<p>PaperNO.0095 Paper Title: Fracture Behavior of Composite Prepregs under Double-leg Tearing All Authors:WS Kuo,CH Liu,MY Shen,JC Kuo Presenter : Wen- Shyong Kuo</p>	15:20- 15:35	<p>Paper NO.0106 Paper Title: Investigation of the Heartwood Effect of the Relationship between Shape Factor and Diving Angle on Elastic Modulus of Japanese Cedar All Authors:MK Fang,WC Wang,YC Wu Presenter : Min-Kai Fang</p>
15:40-16:00	<p>Paper NO.0012 Paper Title: Effect of Strain Rate on the damage behavior of CFRP Evaluated with AE All Authors:R Bharti,T Sakai Presenter : Rahul Bharti</p>	<p>Paper NO.0090 Paper Title: Prediction Mechanism of Filling and Solidification Process of Liquid Metal in High Pressure Die Casting by Using Magma Soft All Authors:NM Dang,XT Vo,TH Nguyen,QK Truong,HK Dang</p>	<p>PaperNO.0086 Paper Title:Study on Influence of Unit Cell Shape on Mechanical Characteristics of Pure Titanium Stent using Rhombus- Shaped Specimens All Authors:I Shimizu,K Akiyoshi,A Wada Presenter : Ichiro Shimizu</p>	15:35- 15:50	<p>Paper NO.0048 Paper Title: Designing AZ31 Hybrids for Implants: Strength– Ductility–Toughness Trade-Offs through Oxide-Ratio Engineering All Authors:SJ Huang,M Mahmoudi,S Kannaiyan Presenter : Mahnaz Mahmoudi</p>

ISEM 2025 Conference Program

		Presenter : Xuan Tien Vo			
16:00-16:20		<p>Paper NO.0025 Paper Title: On the System Engineering of R&D of High Performance Propeller for Quar-Drone All Authors:YL Yeh,HP Chang,CH Chang Presenter : Yung-Lan Yeh</p>	<p>Paper NO.0052 Paper Title: Investigating the Morphological and TRIP Effects of Retained Austenite Using Micro-Grid Strain Mapping All Authors:YC Shih,PY Huang,JF Tu,BS Li Presenter : Huang Pin Yu</p>	15:50-16:05	<p>Paper NO.0071 Paper Title: Development of Biodegradable Mg-Based Nanocomposites Reinforced with Graphene and Copper for Biomedical Applications All Authors:S Selvaraju,SJ Huang,DA Asrate,MR Fajri Presenter : Dawit Andualem Asrate</p>
16:20-16:40		<p>Paper NO.0081 Paper Title: A Wireless Temperature Measurement System and Temperature/Load Analysis for Friction Stir Welding Process All Authors:JN Aoh,PC Lin,HW Tsao Presenter : Jong-Ning Aoh</p>	<p>Paper NO.0078 Paper Title: An Automated Optical Inspection System embedded with Bayesian Optimization and Support Vector Data Description for Imbalanced Micro-LED Defects All Authors:ZM Wang,CL Kan,JM Cheng,YB Chiao,TM Fang,YF Jiang,SP Lin,YM Li,CY Chang Presenter : Ze-Min Wang</p>	16:05-16:20	<p>Paper NO.0101 Paper Title: Prototype of nanometer-scale stage using elastic modulus ratio for phase shifting in laser interferometry All Authors:R Hayashi,M Fujigaki Presenter : Ryunosuke HAYASHI</p>
				16:20-16:35	<p>Paper NO.0082 Paper Title: Reliability Assessment of Advanced Fan-Out</p>

ISEM 2025 Conference Program

16:40-17:00		Paper NO.0102 Paper Title: Analysis and prediction of mechanical aging in hybrid NR/SBR rubber fenders All Authors:SN Maurya,KY Li,YC Chiou Presenter : Swami Nath Maurya	Paper NO.0076 Paper Title:Residual Stress Measurement and Parameter Optimization in Laser Drilling All Authors: CL Kan,ZM Wang,JM Cheng,YB Chiao,TM Fang,YF Jiang,SP Lin,YM Li,CY Chang Presenter : Ze-Min Wang	Packages Under Drop Impact Conditions All Authors:BR Ding,MK Shih Presenter : Yuan-Hong Ding
				16:35-16:50 Paper NO.0006 Paper Title: Mechanical Property Measurement and Analysis of Graphene-Based Electrode Substrates Using Temporal Fourier Transform Profilometry All Authors:HY Hsiao,BJ Wen Presenter : Han-Yi Hsiao
	Windsor Square			
18:30-20:30	Banquet			

ISEM 2025 Conference Program

October 28, 2025 (Tue)			
08:30-17:00	Registration (4th Floor)		
	Windsor Square	East Room (Best Oral Paper Competition)	
9:00-9:40	Keynote Session (III): Professor Satoru Yoneyama	9:00-9:15	Paper NO.0063 Paper Title: Study on the thermal effects of the EUV pellicle All Authors:YC Lo,CH Hwang,YC Lee Presenter : Yen-Chun Lo
		9:15-9:30	Paper NO.0035 Paper Title: Investigation on the Evolution Behavior of Cu ₆ Sn ₅ during Thermocompression Bonding and Thermal Aging with a Bi-Layer Diffusion Barrier of Metallic Glass Thin Film All Authors:HY Lin,MT Lin,CH Lin,ZY Zhao,YH Ye,ZY Wu Presenter : Hao-Ying Lin
9:40-10:20	Keynote Session (IV): Professor Yu-Lung Lo	9:30-9:45	Paper NO.0034 Paper Title: Measurement of the Mechanical Behavior

ISEM 2025 Conference Program

		<p>of ZrCuTi Metallic Glass Thin Films Deposited at Different DC Magnetron Sputtering Powers under Various Temperature and Time Conditions Using the Bulge Test Method All Authors:CJ Wang,SY Huang,MT Lin Presenter : Chen- Jia Wang</p>
<p>9:45- 10:00</p> <p>Paper NO.0029 Paper Title: Trends in Underfill Stress and Warpage as a Function of C4 Bump Pitch All Authors:CC Wang,CY Tsai Presenter : Cheng- Yen TSAI</p>		
<p>10:00- 10:15</p> <p>Paper NO.0092 Paper Title: A Comparative Study of Aluminum – Copper Dissimilar Laser Welding All Authors:A Abroori,YD Kuan,SW Tsai Presenter : Achmad Abroori</p>		

ISEM 2025 Conference Program

10:20-10:40	Break	10:15-10:40	Break
10:40-11:20	Keynote Session (V): Professor Raman P. Singh	10:40-10:55	<p>Paper NO.0088 Paper Title: Correlation between internal friction evolution and microstructural orientation changes during metal fatigue All Authors:CM Lin,SF Luo,W Wu Presenter : Shao-Feng Luo</p>
11:20-12:00	Keynote Session (VI): Yukitoshi Otani	10:55-11:10	<p>Paper NO.0084 Paper Title: Fatigue Life of Welded Bellows under Axial Compression All Authors:JQ Lin,CS Lin,KL Shih Presenter : Jia-Qian Lin</p>
		11:10-11:25	<p>Paper NO.0042 Paper Title: A Study on the Effects of Fiber Surface Modification on the Interfacial and Mechanical Properties of Regenerated Carbon Fiber Reinforced Thermoplastic Composites All Authors:MY Shen,CH Liu,JH Chen,HC Liu,YX</p>

ISEM 2025 Conference Program

	Liao Presenter : Yi-Xuan Liao
	Paper NO.0041 Paper Title: Surface Modification Techniques on the Mechanical Properties of Thermoplastic Carbon Fiber Composites / Aluminum Honeycomb Sandwich Structures All Authors:MY Shen,CH Liu,JH Chen,CY Ding,SH Nie Presenter : Shi-Han Nie
	Paper NO.0039 Paper Title: Effect of Ultrasonic Vibration on the Kinetic State of Atoms Around The Vacancy of bcc Fe All Authors:K Inoue,A Asazuma,S Arikawa Presenter : Kazuya Inoue

ISEM 2025 Conference Program

	Windsor Square	North Room	West Room	East Room	
12:00-13:00	12:00-13:00 Asian Society of Experimental Mechanics steering committee	Lunch			
	Windsor Square	North Room	West Room	East Room	
	Meeting Room	Session G AI and Advanced Computational Methods in Experimental Mechanics	Session C Experimental Mechanics for Material Characterization and Structural Mechanics Analysis	Best Oral Paper Competition	
13:00-13:20	13:00-14:00 Taiwan Society for Experimental Mechanics Members General Meeting and Board of Directors and Supervisors Meeting	Paper NO.0096 Paper Title: Intelligent Electrochemical Sensing of Caffeine and Chlorogenic Acid Using Artificial Neural Networks All Authors:BC Gu,KJ Chung,CC Wu Presenter : Chia-Che Wu	Paper NO.0001 Paper Title: Evaluation of Anodic Electrode Structure in Relation to the OCV of All Solid-State AMP-Battery Using Pulsed Ultrasound All Authors:W Zhang,S Ozaki,H Kikura,Y Tamaura,T Kawamoto Presenter : Weichen Zhang	13:00- 13:15	Paper NO.0062 Paper Title: X- ray Stress Measurement of Polyphenylene Sulfide All Authors:Y Kanaji,M Nishida Presenter : Yuzuki Kanaji

ISEM 2025 Conference Program

13:20-13:40		<p>Paper NO.0040 Paper Title: Analysis and study on the mechanical properties of titanium alloys with different molybdenum contents at different temperatures All Authors:CF Lin,WJ Xiao,ZH Chen,TH Chen Presenter : Chi-Feng Lin</p>	<p>Paper NO.0073 Paper Title: Ti_3C_2 MXene-Modified AZ31 Magnesium Alloy for Improved Hydrogen Storage Performance All Authors:S P M,SJ Huang,BT Abraham,S Kannaiyan Presenter : Biniyam Tizazu Abraham</p>	13:15-13:30	<p>Paper NO.0057 Paper Title: Mechano-synthesis and Analysis of catalytic effects of Medium-entropy alloy (TiNiAlZn) upon solid state hydrogen storage performance of magnesium All Authors:J Wijaya,SJ Huang,DA Asrate,S Kannaiyan Presenter : Dawit Andualem Asrate</p>
13:40-14:00		<p>Paper NO.0028 Paper Title: An Innovative Cross-Dimensional Fault Diagnosis Method for Equipment Vibration Using Image-Based Features, Recurrence Plots, and Convolutional Neural Networks All Authors:KJ Chung,PH Chen</p>	<p>Paper NO.0079 Paper Title: Investigation on Elastic Wave Propagation of Titanium Alloy Plate All Authors:YE Lin,CS Ling,YC Lee Presenter : You En Lin</p>	13:30-13:45	<p>Paper NO.0007 Paper Title: Simulation on driving frequency of ultrasonic dissector All Authors:YH Sun,JH Lin,FY Chang,YC Lee Presenter : Jian-Hua Lin</p>

ISEM 2025 Conference Program

		Presenter : Kuan-Jung Chung		13:45-14:00	Paper NO.0070 Paper Title: Optimization of parameters for Parametric Array Loudspeakers to achieve the acoustics excitation on selected point All Authors:ZJ Gao,YJ Chan Presenter : Zi-Jie, Gao
14:00-14:20	Session A Experimental Mechanics for Semiconductor Technology	Session D Experimental Mechanics for Dynamic Response and Extreme Environmental Conditions	Paper NO.0047 Paper Title: X-ray Stress Measurement of Polyphenylene Sulfide (PPS) All Authors:Y Kanaji,M Nishida	14:00-14:15	Paper NO.0059 Paper Title: Criteria for Initiation of Inter-Element Compressive Forces of Metal V-belt CVT All Authors:K Obunai,K Okubo Presenter : Yuga Tamai
	Paper NO.0110 Paper Title: Fracture Strength Evaluation of High Slenderness Ratio Silicon Die via Four-Point Bending Test All Authors:DS Liu,JY Chi,HC Liu,CL Chung,ZW Zhuang Presenter : De-Shin Liu	Paper NO.0105 Paper Title: Evaluation of Ultraviolet Degradation of Natural Rubber in High-Altitude Environment All Authors:T Matsuo,F Ozaki Presenter : Takuma Matsuo	Presenter : Yuzuki Kanaji		

ISEM 2025 Conference Program

14:20-14:40	<p>Paper NO.0064 Paper Title: Analysis of crack growth in multilayer ceramic capacitor under sintering process stress All Authors:YC Yeh,JS Tsai,YC Hung,TC Chiu Presenter : Yu-Che Hung</p>	<p>Paper ND.0009 Paper Title: Multi-scale Simultaneous High-speed Visualization of Material Impact Experiments All Authors:C Kirk,A Roginski,WW Chen Presenter : Wayne Chen</p>	<p>Paper NO.0049 Paper Title: Neutron Stress Measurements of Aluminum Casting Alloy with Coarse Crystal Grains and Texture All Authors:M Nishida,T Matsue,T Shobu,S Morooka,PG Xu Presenter : Masayuki Nishida</p>	<p>validation of heterogeneous bonding between perforated metal and CFRP All Authors:YJ Huang,PY Wu,KR Zhang,GM Luo Presenter : Huang,Yan-Jhe</p>
14:40-15:00	<p>Paper NO.0074 Paper Title: Viscoplastic characterization of SAC305 solder under low-strain-rate conditions All Authors:HY Liu,YS Kuo,TC Chiu Presenter : Yi-Shan Kuo</p>	<p>Paper ND.0077 Paper Title: Efficient Hydrogen Evolution Catalysis using Mo₂C MXene/Cobalt Thiophosphate Composites All Authors:YE Chou,SJ Huang,R Sankar,M Mahmoudi Presenter : Yen-en Chou</p>	<p>Paper NO.0072 Paper Title: MXene-Catalysed Hydrogen Storage Enhancement in AZ31 Magnesium Alloy Integration of V₂C All Authors:A Madhav,SJ Huang,BT Abraham,S Kannaiyan Presenter : Biniyam Tizazu Abraham</p>	<p>Paper NO.0075 Paper Title: Catalytic Effect of Niobium on the hydrogen storage properties of AZ31 Magnesium Alloy All Authors:DM Jomon,SJ Huang,N Einollahi,S Kannaiyan Presenter : Naser Einollahi</p>

ISEM 2025 Conference Program

15:00-15:20	<p>Paper NO.0031 Paper Title: Characterization of the viscoplastic constitutive behavior of copper trace used in microelectronic interconnect All Authors:ZY Huang,TC Chiu Presenter : Zhi-Yin Huang</p>	<p>Session F Optical Techniques in Experimental Mechanics</p> <hr/> <p>Paper NO.0091 Paper Title: Verification of Micro-Scale Stress Measurement System for Through-Glass Via Substrate All Authors:PC Sung,PY Chen,WC Kuo,WC Wang,JC Chuang Presenter : Po-Chi Sung</p>	<p>Paper NO.0003 Paper Title: Assessment of Fatigue Crack Precursors in AA5083 via Ultrasonic Properties All Authors:HH Lai,EH Zhou,CH Ou,W Wu Presenter : Hsuan-Han Lai</p>		
15:20-15:40	<p>Session E Experimental Mechanics and Multiscale Methodologies</p> <hr/> <p>Paper NO.0027 Paper Title: Magnetically responsive elastic substrates for cell research All Authors:K Jiang,S Gu,S Omata,Y Morita Presenter : Kun Jiang</p>				
15:40-16:00	Break				

ISEM 2025 Conference Program

Windsor Lobby				
Poster Sessions				
15:40-17:30	<p>Paper NO.0015</p> <p>Paper Title: Effect of an arm-length on the braking performance for the λ-type Enforcement Braking Device for automobile</p> <p>All Authors:T Sekido,Y Miyashita,N Nishimura</p> <p>Presenter : Taisei Sekido</p>	<p>Paper NO.0016</p> <p>Paper Title: Motion evaluation of driven vehicle subjected to a side collision</p> <p>All Authors:M Yoshida,K Kaga,N Nishimura</p> <p>Presenter : Manato Yoshida</p>	<p>Paper NO.0026</p> <p>Paper Title: Solute Concentration Measurements Using Heterodyne Interferometry</p> <p>All Authors:ST Lin,T Ly,LY Chen,CS Chen</p> <p>Presenter : Shyh-Tsong Lin</p>	<p>Paper NO.0032</p> <p>Paper Title: Bonding Strength of Cu/Sn/Cu Joints with Zr-Based Metallic Glass Thin Film Bi-Layer Diffusion Barriers</p> <p>All Authors:CH Lin,YH Ye,MT Lin</p> <p>Presenter : Chi-Hang Lin</p>
	<p>Paper NO.0033</p> <p>Paper Title: Characterization of Residual Stress in 4H-SiC Induced by a hole using Ns Laser Processing</p> <p>All Authors:YL Lo,PI Chen,JY Yang</p> <p>Presenter : Jia-Yan Yang</p>	<p>Paper NO.0036</p> <p>Paper Title: Effect of Magnetron Sputtering Power on the Microstructure and Internal Friction Behavior of ZrCuTi Metallic Glass Film</p> <p>All Authors:MT Lin,YC Chen,HY Hsieh</p> <p>Presenter : HSIANG-YU HSIEH</p>	<p>Paper NO.0037</p> <p>Paper Title: Application of the Three-Dimensional Finite Element to Investigate the Bending Deformation Problem in Multi-Pass Rolling of H-beam</p> <p>All Authors:CY Wu,JT Huang,MT Lin</p> <p>Presenter : Chia-Yu WU</p>	<p>Paper NO.0038</p> <p>Paper Title: Simulation analysis of CFRP/aluminum alloy heterogeneous joint for robotic arm lightweight and performance optimization using Taguchi method</p> <p>All Authors:CH Liu,CH Wu</p> <p>Presenter : Chih-Hung Wu</p>
	<p>Paper NO.0045</p> <p>Paper Title: Study on the Preparation of Environmentally Friendly Bio-based Flame-Retardant Epoxy Resin Composites Using Tea Leaf Waste from Agricultural Waste and</p>	<p>Paper NO.0055</p> <p>Paper Title: Optical recognition applied to display recycling</p> <p>All Authors:PY Chan</p> <p>Presenter : PO-YUN CHAN</p>	<p>Paper NO.0061</p> <p>Paper Title: Effect of Adding Hybrid Carbon Nanofillers in Adhesive on the Mode I and Mode II Fracture Toughness of Carbon/Epoxy Composite Bonded Joints</p>	<p>Paper NO.0069</p> <p>Paper Title: A Transfer Learning based on 1D-CNN for Critical Dimension Estimation in Optical Metrology of HAR Grating Structures</p> <p>All Authors:PL Lan,YL Lo,PH Wu</p>

ISEM 2025 Conference Program

the Improvement of Their Fire Resistance Properties All Authors:Y Huang,J Jinlong Presenter : Yi-Xuan Huang		All Authors:YM Jen,YL Cai Presenter : Yi-Ming Jen	Presenter : Pei-Hsien Wu
Paper NO.0094 Paper Title: Fabrication of silicone composites via hydrogel-assisted suspended 3D printing All Authors:L Tsai,YC Yang Presenter : Yi chung Yang	Paper NO.0097 Paper Title: Automated Straightness Measurement of H-Beams Using Image Stitching and Digital Image Correlation All Authors:HR Prasad,CH Sung,ZL Tseng,CT Chuang,MT Lin,TYF Chen,CM Tsai Presenter : HARSHITH RENUKA PRASAD	Paper NO.0098 Paper Title: Stereo Vision-Based Contour Reconstruction Technology for Non-Contact Measurement of Hot-Rolled H-Beam Steel. All Authors:K Bodapati,ZL Tseng,GH Xu,TYF Chen,MT Lin,CM Tsai Presenter : Kushal Bodapati	Paper NO.0099 Paper Title: Analysis and Investigation of the Friction Characteristics of the Feed System All Authors:YT Chan,SH Chen,WD Jeheng,BF Yu,YR Lin Presenter : Yu-Rong, Lin
Paper NO.0100 Paper Title: Establishment of the Influence of Electrical and Mechanical Circular Interpolation Friction on Error All Authors:CL Hsu,BF Yu,SH Chen,YT Chan Presenter : Chia-lien Hsu	Paper NO.0103 Paper Title: Effect of Sputtering Deposition Method on the Mechanical Behaviour of Zr–Cu–Based Thin–Film Metallic Glasses Using Bulge Test. All Authors:U Mandapalli,TAK Nguyen,MT Lin Presenter : : Upendra mandaplli	Paper NO.0104 Paper Title: Investigation on the Fracture Toughness and Microstructure of DC-Sputtered ZrCuTi Metallic Glass Thin-Film with different sputtering power All Authors:S Nallagundla,CM Hsieh,MT Lin Presenter : Shravani Nallagundla	Paper NO.0109 Paper Title: Vision-Based 2D Image Processing and Path Generation for Automated Seam Sealing All Authors:IH Chiang Presenter : I-HUING CHIANG
Paper NO.0112 Paper Title: A	Paper NO.0089 Paper Title: Analysis	Paper NO.0113 Paper Title: A Study	Paper NO.0050

ISEM 2025 Conference Program

	<p>Comparison of Incremental and Integral Hole-Drilling Methods for Residual Stress Measurement</p> <p>ZrCuTi/Cu bilayer thin films</p> <p>All Authors:NM Dang, HK Dang, MT Lin</p> <p>Presenter : Hoang Khang Dang</p>	<p>of the Influence of Die Radius on the Force, Deformation, and Burr Height in the Sheet Metal Forming Process by Simulations and Experiments</p> <p>All Authors:TT Nguyen, VH Hoang, NMD Ta, QD Huynh, NM Dang, TP Duong</p> <p>Presenter : Thanh Tan Nguyen</p>	<p>on the flow field and gas-solid separation effect of cyclone separator under positive and negative pressure boundary conditions</p> <p>All Authors:JK Liu, JQ Lin, CS Lin</p> <p>Presenter : Jia-Qian Lin</p>	<p>Paper Title: Model Validation and Failure Analysis of an Integrated Starter Generator under High-Speed Thermal and Centrifugal Loading</p> <p>All Authors:JT Liu, HW Mo, JQ Lin, CS Lin</p> <p>Presenter : Lin, Chang-Sheng</p>
--	---	--	--	--

ISEM 2025 Conference Program

October 29, 2025 (Wed)				
08:30-17:00	Registration (4th Floor)			
	Invited Special Lecture in Experimental mechanics for semiconductor process (B1 International Lecture Hall)			
9:00-9:40	Lecture (I): Dr. Wei-En FU			
9:40-10:20	Lecture (II): Professor Chang-Chun Lee			
10:20-10:40	Break			
	B1 International Lecture Hall	North Room	West Room	East Room
	Session F Optical Techniques in Experimental Mechanics		Session D Experimental Mechanics for Dynamic Response and Extreme Environmental Conditions	Session H. Experimental Mechanics in Biomechanics Application
10:40-11:00	Paper NO.0087 Paper Title: Mounting stiffness measurement of python skin membrane of Erhu using fringe projection All Authors:JS Hsu,YT Shi,YR Wen,JH Lai Presenter : Jiong-shiun Hsu		Paper NO.0002 Paper Title: Numerical Solution of Timoshenko Beam Equation for Calibration of a Force Transducer All Authors:D Goldar Presenter : Dulal Goldar	Paper NO.0080 Paper Title: Preparation of elastin materials with similar extensibility to biological soft tissues All Authors:E Yamamoto,Y Kawamura Presenter : Ei Yamamoto
11:00-11:20	Paper NO.0065 Paper Title: Implementing an Imaging Tracking System on Site for Evaluating the 2nd Direction of Tree Growth Subjected to Various Weathers All Authors:CH Hwang,SH Tu,TY Kuo		Paper NO.0085 Paper Title: Sustainable Hydrogen Storage Using AZ31 Magnesium Alloy Reinforced with Biomass-Derived Coconut Shell Biochar All Authors:D Kalimamurugan,SJ	Paper NO.0060 Paper Title: Combining Digital Image Correlation (DIC) and Finite Element Analysis (FEA) to analyze the stress and strain behavior of transparent

ISEM 2025 Conference Program

	Presenter : Chi Hung Hwang		Huang,M Mahmoudi,S Kannaiyan Presenter : Mahnaz Mahmoudi	orthodontic aligners on teeth All Authors:PY Ko,CH Sung,ZL Tseng,GH Xu,CT Chuang,EW Lin,MT Lin,TYF Chen Presenter : Pai-Yu,Ko
Windsor Lobby (Best Poster Competition)				
11:20-11:40	Paper NO.0017 Paper Title: Evaluation of the adhesive strength between scab and skin to improve buttonhole puncture method for dialysis treatment All Authors:A Fuchtia,E Yamamoto Presenter : Ai Fuchita	Paper NO.0018 Paper Title: Evaluation of road materials by analysis of reflected signals from the road surface All Authors:M Narita,T Sekido,N Nishimura Presenter : Mayu Narita	Paper NO.0019 Paper Title: Mechanical properties of skin tissues obtained from diabetic hairless rats All Authors:Y Yamaguchi,E Yamamoto Presenter : Yui Yamaguchi	Paper NO.0020 Paper Title: Corrosion Resistant SiO ₂ /PMMA Nanocomposite Coatings on Ti-6Al-4V: Effect of Dispersion Control via Sol-Gel Processing All Authors:CE Jiang,GY Chen,SC Shi Presenter : Guan-Yu Chen
11:40-12:20	Paper NO.0022 Paper Title: Stress-strain behavior of the AZ91/graphene composites after T6 heat treatment and equal channel angular pressing All Authors:Y Adityawardhana,SJ Huang Presenter : Yudhistira Adityawardhana	Paper NO.0023 Paper Title: Production of Aluminum Metal Matrix Composites Based on 5083 Series Reinforced With Nano-Sized SiC Particles Produced Through Stir Casting and Equal Channel	Paper NO.0043 Paper Title: 2D Digital Image Correlation (DIC) Analysis of Tensile Behavior in Short Carbon Fiber Reinforced Thermoplastic Composites All Authors:CY Shen,YH Jhen,CH Liu,ST Chiang	Paper NO.0044 Paper Title: AI-based Denoising and Accuracy Optimization of Profile Measurement Data for Hot-Rolled H-Beams All Authors:ZL Tseng,GH Xu,MT Lin,TYF Chen,CM Tsai

ISEM 2025 Conference Program

		Angular Pressing Process All Authors: SJ Huang, H Inprasetyobudi Presenter : Hery Inprasetyobudi	Presenter : Chia-Yu Shen	Presenter : Zi-Liang Tseng
12:20-13:20	Lunch			
	Windsor Lobby (Best Poster Competition)			
13:20-14:00	Paper NO.0046 Paper Title: Development of AI-Based H-Beam Straightness Analysis Technology All Authors: CH Sung, ZL Tseng, CT Chuang, MT Lin, TYF Chen, CM Tsai Presenter : CHIA-HENG, SUNG	Paper NO.0051 Paper Title: Effect of element on the mechanical properties and microstructural evolution of AlCoCrFeNi high-entropy alloys All Authors: WN Wang, YP Huang, TH Chen Presenter : Tao-Hsing Chen	Paper NO.0053 Paper Title: Shock-induced plasticity and phase transformation of the AlCoCrFeNi high-entropy alloys All Authors: DK Nguyen, TH Fang, CC Huang Presenter : Duy-Khanh Nguyen	Paper NO.0054 Paper Title: Wide-Angle Lens Aberration Correction Based on U-Net All Authors: CM Tsai, CC Yeh, AS Chen, BH Tang Presenter : Chun-Chen Yeh
14:00-14:40	Paper NO.0056 Paper Title: Dispersion-Complementary Design of a Doublet Metalens: An Achromatic Simulation Study Centered at 587 nm All Authors: CM Tsai, AS Chen, CC Yeh, BH Tang Presenter : An-Sheng Chen	Paper NO.0058 Paper Title: Multimodal Framework for Automated Pulmonary Fibrosis Report Generation from Chest CT Images All Authors: CW Chang, CM Tsai, BH Tang, AS Chen, CC Yeh Presenter : Bo-Han Tang	Paper NO.0066 Paper Title: Evaluation of PPS Mechanical Properties for Accurate Non-Destructive Stress Measurement All Authors: K Takeshima, M Nishida Presenter : Keiichiro Takeshima	Paper NO.0067 Paper Title: Construction of a tensile testing machine attached to an X-ray stress measurement system All Authors: K Nakamura, M Nishida Presenter : Koki Nakamura

ISEM 2025 Conference Program

14:40-15:00	Paper NO.0068 Paper Title: High-Fidelity Simulation of Defect-Containing Aluminum Cast Flanges Using Salome-Meca and Experimental Calibration All Authors:K Goto,M Nishida Presenter : Koki Goto	Paper NO.0111 Paper Title: Integrated Finite Element and Modal Analysis of Stone Storage Racks under Seismic Excitation All Authors:CS Lin,JQ Lin Presenter : Jia-Qian Lin		
15:00-15:20	Break			
	B1 International Lecture Hall			
16:00-17:00	Closing Ceremony			