Session A1 | Onsite Oral | Kujyaku

Debbiom	Session A1 Onsite Oral Kujyaku				
Date	AteB. Mechatronic and robotics Engineering / F. Computer & Information Engineering / H. Industry 4.0 & Automation Engineering Session Chair: Prof. Yen-Ching Chang				
	08:00 08:12	CB2413 On Energy Saving of Robotic Systems: An Abductive Reasoning-Based Approach <i>Ju-Feng Wu, Ming-Yang Cheng</i>			
	08:12 08:24	CB2414 DBSCAN-Based Minimum Enclosing Ellipse on Control Barrier Function for Safe Navigation of Mobile Robots Ju-Feng Wu, Chia-Chun Huang, Ming-Yang Cheng			
	08:24 08:36	CF2417 Generating Algorithmic Programming Questions Based on Large Language Models and Context Information Hsin-Chih Ho, Yi-Hsuan Chien, Che-Wei Chang, Yu-Chen Cheng, Xin-Zhang Lai, Zih-An Lin, Yao-Chung Fan			
04 th	08:36 08:48	CF2421 Reducing Probability of Correct Answer Generation in Automated Multiple-Choice Question Distractor Generation Wen-Chuan Hsu, Yu-Chen Cheng, Peng-Yi Lin, Hsing-Ping Liang, En-Tr Chang, Yu-Han Shi, Sin-Syuan Wu, Yao-Chung Fan			
April (Thu.)	08:48 09:00	CF2422 Dynamic QoS Adaptation in IEEE 802.11 Wireless Networks Through Contention Window Optimization Ming-Chu Chou, Guang-Jhe Lin, Chih-Heng Ke			
	09:00 09:12	CF2424 Enhancing Cranioplasty with Deep Learning Based on GANs and Point-Cloud Data <i>Kuei-Yuan Lai, Yen-Ching Chang</i>			
	09:12 09:24	CF2426 Kinetens: Tens Powered Virtual Reality Haptic Feedback Device <i>Onur Can Doğanlar, Kökten Ulaş Birant</i>			
	09:24 09:36	CF2427 Implementation of a Central Telemedicine System and IoT Devices Framework <i>Sarunya Kanjanawattana, Nuntawut Kaoungku, Panya Hantula, Isaman Sangbumrung,</i> <i>Pongsakorn Teerarassamee</i>			
	09:36 09:48	CH2411 Compact Embedded Devices Are Utilized for Fault Prediction in Harmonic Drive Tsung-Yu Yu, Chang-Yen Lin, You-Tsung Chen, Yi-Han Deng, Nan-Kai Hsieh			

Session A2 | Onsite Oral | Kujyaku

Date	Time	A. Materials Engineering / G. Green Technology & Civil Engineering Session Chair: Prof. Ray-Ming Lin
	10:15 10:27	InGaN Multiple Quantum Wells
	10:27 10:39	In-Line Measurement of Shear Viscosity for Polymers Using a Slit Rheometer
	10:39 10:51	Indonesia: A Case Study
04 th April	10:51 11:03	CG2423 Study of Underground Historical Building Affect Land Use Jincheng Civil Defense Tunnel in Kinmen as an Example Tsung-Chiang Wu, Wei-Cheng Lu, Yi-Wen Chen, Ding-Ye Wu, Hsin-Ju Chen
(Thu.)	11:03 11:15	CG2411 The Influence of Catalyst Type-Support and Membrane Commercial on Anion Exchange Membrane Electrolyzers Performance Riki Rahman, Yu-Chen Chen
	11:15 11:27	CG2420 Analysis of River Dredging Cycle According to Vessel Operation Using HEC-RAS: Gyeongin Ara Waterway in Korea Ha-Neul Sun, Jeong-Chan Jin, Su-Min Song, Seung-Oh Lee
	11:27 11:39	CG2421 Feasibility Study for Control of Saltwater Intrusion with Optimal Pumping Rate in Coastal Area Using OpenGeoSys Hyun-Jung Lee, Seung-Jin Maeng, Dong-Hyun Kim, Seung-Oh Lee
	11:39 11:51	CG2424 A Constitutive Model for Concrete Cylinder Confined with Aramid FRP Laminates Yeou-Fong Li, Bo-Yu Chen, Jin-Yuan Syu, Ming-Chien Hsu

Paper Award A3 | Onsite / Online Oral | Kujyaku

Date	Time	
	13:00 	CF2411 Using Webpage Comparison Method for Automated Web Application Testing with Reinforcement Learning
	13:15	Ci-Feng Lai, Chien-Hung Liu, Shingchern D. You
	13:15 13:30	CF2416 Reversible Data Hiding Technique Based on Block Rotation Applied to Base64 Images <i>Sian-Hao Weng, Yu-Chih Huang, Ming-Yu Kuo, Wen-Chung Kuo</i>
	13:30 13:45	CJ2417 The Systematic Design of Auxiliary Standing Toilet Chair Long-Chang Hsieh, Tzu-Hsia Chen, Po-Cheng Lai
	13:45 14:00	CL2412 Effects of Air Flow Field Control in Dormitories of Senior Care Facilities on Bioaerosol Diffusion Chih-Hong Huang, I-Hsuan Chiang, Ching-Hsun Wang, Shih-Han Chen
04 th April (Thu.)	14:00 14:15	CO2413 On the Study of Feasibility of Auxiliary Power System for Multi-Rotor UAV Yung-Lan Yeh, Hui-Pei Chang, Ya-Sheng Lin
	14:15 14:30	CO2415 Analysis of the Impact for Circular Hole Opened in the Rear Chamber of Headphones on Acoustic Radiation Ssu-Yun Chen, Shu-Chien Wu, Tzu-Hsuan Lei, Kuang-Che Lo, Yu-Cheng Liu
	14:30 14:45	CO2420 On the Study of Fire Unusual Event Under Industrial Manufacture Hui-Pei Chang, Yung-Lan Yeh, Chia-Yun Hsu, Guan-Yi Wang
	14:45 15:00	SCA2414 Information Security Protection System for Networked OT Environments of Industrial Control in Smart Manufacturing Pin-Kuan Chiang, Shang-Liang Chen, Je-Chiao Ku
	15:00	CF2425 Online Comparative Analysis of Facial Expression Recognition: Image-Based vs.
	15:15	Landmark-Based Approaches Thanawat Srikaewsiew, Sarunya Kanjanawattana
	15:15 15:30	CO2417 Online Advanced Gallbladder Segmentation in Dynamic Ultrasound Imaging Using Fully Convolutional Networks You-Jie Chen, Tai-Been Chen, Wen-Hung Twan
	15:30 	CF2428 AI Risk Assessment Using Failure Mode and Effect Analysis (FMEA) Based on AI Incident Database
	15:45	Yunarso Anang, Lya Hulliyyatus Suadaa, Lutfi Rahmatuti Maghfiroh, Nori Wilantika, Masakazu Takahashi, Yoshimichi Watanabe

Session A4 | Onsite Oral | Kujyaku

Date	Time	E. Chemical & Biomedical Engineering / J. Mechanical Engineering / N. Intelligent Computing / O. Other Engineering and Technology related topics
		Session Chair: Prof. Chih-Kuang Lin
	08:00	
	 08:12	Multiscale Modelling for PCB Assembly Simulation Ming-Hsiao Lee, Jiunn-Horng Lee, Chih-Min Yao, Jen-Gaw Lee
	08:12	CJ2414
	 08:24	Mechanical Analysis of Interference Fitting in an Air-Conditioning Compressor Rui-Feng Chang, Chih-Kuang Lin, Wen-Chang Tsao, Ying-Hua Chen
	08:24	CJ2423
		Numerical Study of the DLD Effect in Quartz Oscillators Yi-Mei Huang, Yong-Ci Liao, Nugraha Merdekawan, Shih-Yung Pao
	08:36	CJ2421
	08:36	A New Approach Employing Model-Based and Machining Learning Technique for
	08:48	the Identification of Rotor's Multi-Fault Shyh-Chin Huang, Sherina Octaviani, Mohammad Najibullah
05 th	08:48	
April (Fri.)	 09:00	Pattern Formation in the Bulk Region of Ionic Liquid <i>Tzyy-Leng Horng</i>
(FT1.)	09:00	CE2416 A Light-Weight Multiscale Self-Attention Based on Segment Anything Model for
		Medical Image Segmentation
	09:12	Chuang-Zhih Tseng, Yao-Sian Huang, Chiao-Min Chen
	09:12	CE2419 Finding New Compounds Through Bi-Enzymatic Cascade System Coupled with
	09:24	PDMA Te-Sheng Chang, Jiumn-Yih Wu, Hsiou-Yu Ding, Tzi-Yuan Wang
	09:24	CO2425
		Research on the Surveying and Updating of 1/1000 Topographic Maps Using Unmanned Aerial Vehicles
	09:36	Chi-Shen Lee, Jun-Yang Xu, Cheng-Wei Chang, Yu-Hung Shih
	09:36	
	 09:48	A Knowledge Graph-Driven Intelligent Forex Trading Bot Sze-Hang Wong, Hei-Chia Wang

Session A5 | Onsite Oral | Kujyaku

Date	Time	F. Computer & Information Engineering / M. Innovation Management / CB. Advances in Vehicles and Railway Vehicle System / CF. Recent Innovations in Sustainability / CG. Recent Advances in High Entropy Alloy Session Chair: Prof. Hsiu-Ying Hwang
	10:15	
	10.15	SCB2412 APP for Vehicle Noise Detection
	10:27	Hsiu-Ying Hwang, Kuan-I Wu, Jia-Shiun Chen
	10:27 10:39	SCB2413 Innovative Design of a Vehicle Engaged with a Driven-In Wheelchair Scooter as Driver Seat Jia-Wei Chen, Hsiu-Ying Hwang
	10:39	CM2411
	 10:51	Remanufacturing Strategy and Blockchain Adoption Strategy in Consideration of Consumer Privacy Chih-Huan Chuang, Chung-Chi Hsieh
	10:51 11:03	SCF2411 BIM-Based Design Decision Process for Comprehensive Mitigation and Adaptation to Climate Action
		Shang-Yuan Chen
05 th April (Fri.)	11:03 11:15	Lightweight Ti-Rich Medium-Entropy Alloys by Microalloying with Boron
	11:15 	SCG2412 Effect of Rapid Heating Rate Annealing on the Microstructure and Mechanical Properties of TiAlNbCrVZr Medium-Entropy Alloy
	11:27	Po-Sung Chen, Ting-Wei Sung, Pei-Hua Tsai, Li-In Wang, Jason Shian-Ching Jang, Chih-Yen Chen
	11:27 11:39	CF2418 A Q-Learning Based Approach with Adaptive Exploration Strategy for Mobile Store Vehicle Routing Problem Chieh-Ju Juan
	11:39	CF2423
	 11:51	An Empirical Analysis on Reinforcement Learning Algorithms for Stock Trading Leonard Christopher Limanjaya, Dae-Ki Kang
	11:51	
	12:03	

Session A6 | Onsite Oral | Kujyaku

	Session Au Olisite Orai Rujyaku				
Date	Time	G. Green Technology & Civil Engineering / J. Mechanical Engineering / CA. Best Paper Awards / CJ. Integrated Strategy for Urban Flood Prevention with DNA (Data-Network-AI) Mitigation Measures Session Chair: Prof. Seung-Oh Lee			
	13:00 13:12	SCA2413 Chemical Bond Characteristic and Strength Activity of Geopolymer Mortar Containing Fly Ash and Chemically Pretreated Paper Mill Sludge Ash Andri Kusbiantoro, Amalina Hanani Ismail, Nabilah Mamat, Khairunisa Muthusamy, Yuyun Tajunnisa, Nur Achmad Husin, Mohamad Khoiri			
	13:12 13:24	CJ2422 Analysis and Experiment of Electrical Discharge Machining with a Novel Helical-tube Tool Electrode for High-Efficiency Machining and Higher Accuracy Albert Wen-Jeng Hsue, Chern-Rei Tarn			
	13:24 13:36	CG2419 Evaluation of Flood Risk Preparedness Capacity Using PROMETHEE Method and Network Analysis Su-Min Song, Hyung-Jun Park, Ha-Neul Sun, Seung-Oh Lee			
	13:36 13:48	CG2422 Review of Flood Inundation Map with of HEC-RAS 2D and FLUMEN Models for Flash Floods in Urban Areas Chanjin Jeong, Sun-Dong Jegal, Dong-Hyun Kim, Seung-Oh Lee			
05 th April	13:48 14:00	SCJ2411 Urban Flood Digital Twin Platform 2D/3D Visualization Technology(II) Bon-Hyun Koo, Tae-Young Ham, Tae-Min Jin, Gyeoung-Hyeon Kim, Kyu-Cheoul Shim			
(Fri.)	14:00 14:12	SCJ2412 Application of Composite Flooding Simulation in Drainage Basin Units Eun-Taek Shin, Tae-Soo Eum, Kang-Been Kim, Dong-Hwi Kim, Chang-Geun Song			
	14:12 14:24	SCJ2413 Evaluation of Urban Resilience in Terms of Socioeconomic Cost Due to Flood Hyung-Jun Park, Dong-Hyun Kim, Seung-Oh Lee			
	14:24 14:36	SCJ2416 Spatio-Temporal Flooding Forecast Using Machine Learning Se-Dong Jang, Gwi-Un Jeong, Ji-Yun Jeon, Jae-Yong Jo, Byunghyun Kim			
	14:36 14:48	SCJ2414 Evaluation of Urban Inundation Analysis Capacity by Simplification of Storm Sewer Network at Various Grid Resolutions Sang-Bo Sim, Hyung-Jun Kim			
	14:48 15:00	SCJ2415 Analysis on Urban Flood Forecasting Performance Using Parallel Computing Technique Hyung-Jun Kim, Sang-Bo Sim			

Session B7 | Online Oral | Official Website

Date	Time	J. Mechanical Engineering / O. Other Engineering and Technology related topics / CI. Sustainable City, Architecture, Interior Design and Science
		Session Chair: Prof. May Ann R. Codera
	08:00	CJ2415
	 08:12	Electric Furnace with Air and Liquid Quenching Attachment May Ann R. Codera, Johnny B. Materum, Elpidio S. Virrey
	08:12 	CJ2420 A Numerical Model for Pressure Vessel Support Systems Design Under Varied Load Conditions
	08:24	Isaak Dassa, Konstantinos Karamitsios
	08:24 	CO2418 Lighting Design for Visual Comfort amid Energy Efficiency Considerations: A Case Study of Patient Room
	08:36	Samaneh Aghajari, Cheng-Chen Chen
	08:36	CO2426 Development of PDED Plended Laboratory Pased Learning Innevation for
		Development of PPED Blended Laboratory Based Learning Innovation for Embedded System Technology Education
	08:48	Surasak Inchan, Chidapha Khumchai, Somsak Akatimagool
	08:48	SCI2412 Research on the Effect of Planting Design on the Thermal Comfort of Campus
06 th		Sidewalk in Tunghai University, Taiwan
April (Sat.)	09:00	Pei-Ling Wu, Szu-Jin Wu
(0411)	09:00	
	 09:12	
	09:12	
	09:24	
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	09:36	
	09:48	
	09:48	
	10:00	

Poster C1 | Onsite Poster | Foyer 4F

Date	Time	No.	Session Chair: Tz-Yun Chen		
04 th April (Thu.)	08:00 10:00	1	CA2413 Mechanical Properties of Carbon Fiber/Epoxy Resin Composite Laminates Reinforced with Carbon Nanopaper Derived from Regenerated Carbon Fibers <i>Ming-Yuan Shen, Jui-Chieh Kung</i>		
		2	CA2416 The Effects of Addition Elements on the Mechanical Properties and Microstructural Evolution of AlCrFeNiTi Based High-Entropy Alloys Wen-Nan Wang, Ching-Li Hsieh, Tao-Hsing Chen		
		3	CE2415 Advancing Multiple Myeloma Detection Through Functional Film Surface-Modified Chips Yu-Hsiang Tang, Tsung-Tao Huang, Chun-Chiang Huang, Jun-Sheng Wang, Ming-Hua Shiao		
		4	CE2412 A Study on Tumor Positioning via a Lung Phantom for Applications in Radiation Therapy Ai-Ho Liao, Bo-Wei Huang, Ho-Chiao Chuang		
		5	CE2413 Develop of Conductive Organic Polymer Coatings with Anti-Adhesion and High-Sensitivity Applied to Specific Detection of Tumor Chips Tsung-Tao Huang, Yu-Hsiang Tang, Ming-Hua Shiao, Chia-Wei Chang, Yen-Pei Lu, Jheng-Fong Jhong		
		6	CB2412 Experimental Validation of Energy Consumption Model of an Industrial Robotic Arm Jin-Siang Shaw, Yu-Kang Chang		

Poster C2 | Onsite Poster | Foyer 4F

Date	Time	No.	Session Chair: Tz-Yun Chen			
	10:15 12:03	1	CH2412 On a Novel Tensegrity-Based Rotational Vibratory Platform Wen-Hsiang Hsieh, Chen-Ji Pan			
					2	CJ2413 Influence of Corrugated Rail on the Fatigue Life of Rail Fastening <i>Yung-Chuan Chen, Li-Wen Chen, Wei-Hua Lu, Yao-Nan Wang, Han-Hsiang Chen</i>
		3	CJ2416 Development of a Pump-Type Fine Bubbles Generator Hao-Wei Du, Pei-Hsing Huang, Po-Chien Hsu, Chia-Lung Kuo			
04 th		4	CJ2418 The Structural Analysis and Mold Flow Analysis for Critical Components of Redox Flow Batteries Cheng-Hsien Kuo, Shang-Ching Chaung, Jyun-Jhih Liao, Yao-Ming Wang, Ching-Wen Tseng			
April (Thu.)		5	CJ2419 Design and Characteristic Analysis of 3D Printing Finger-Gloved Conductive Composite Substrate for Rehabilitation Care Strain Sensor Zhao-Chi Chen, Yu-Jen Liou			
		6	CJ2428 Experimental Study of a Tensegrity-Based Vibratory Platform Driven by Cam Mechanisms Wen-Hsiang Hsieh, Hukamasidhi Yoel			
		7	CE2420 Interface Pressure and Comfort Evaluation of an Innovative Pressure Relief Cushion Chun-Ting Li, Guo-Jui Chen, Yen-Nien Chen			
		8	CF2419 Development of Mobile App to Promote Kenrokuen Revisits Using Gamification Satoshi Futakuchi, Yuta Motoji, Hidetaka Nambo, Takashi Oyabu			

Poster C4 | Onsite Poster | Foyer 4F

Date	Time	No.	Session Chair: Tz-Yun Chen
	08:00 10:00	1	CF2429 Interactive Learning Mobile Application Development: The Case Context of Network Installation <i>Fu-Hsiang Wen, Tienhua Wu, Guan-Han Tao, Ting-Wei Hsu</i>
		2	CE2414 Ultrasound Alleviates DSS-Induced Intestinal Inflammation and Behavioral Deficits Shu-Ming Chang, Ting-Rui Zhang, Yu-Chen Lin, Feng-Yi Yang
05 th		3	CL2415 Utilizing Waste Recycling for the Preparation of Eco-Adsorbents Kae-Long Lin, Ya-Wen Lin, Yan-Yu Lin
April (Fri.)		4	CO2422 Research on Integrating 3D Digital Technology to Simulate Underground Historical Site Safety Detection Tsung-Chiang Wu, Cheng-Wei Chang
		5	CO2424 A Novel Sampling Technology for Verifying Product Reliability <i>To-Cheng Wang, Yu-Chen Liu, Zhang-Kai Huang</i>
		6	CG2426 2D and 3D Coastal City Flood Analysis Considering Extreme Conditions and Climate Change Jaehwan Yoo, Se Dong Jang, Jo Hyeon Tak, Jo Jaeryun, Byunghyun Kim

Poster C5 | Onsite Poster | Foyer 4F

Date	Time	No.	Session Chair: Tz-Yun Chen
	10:15 12:03	1	SCB2411 New Motion in a New Age: A Perspective from the Railway Poster Artist, Anna Katrina Zinkeisen Hsin-Yi Wu
		2	SCB2414 Real-Time Operation Monitoring System for Railway Vehicles Yaojung Shiao, Chun-Po Wang
		3	SCB2415 Enhancement of Learning Interest of Computer Programming by Virtual Reality Meiling Jow, Yaojung Shiao
05 th		4	SCB2416 Influence of Couplers on Narrow Gauge Train Cheng-Hao Huang, Yu-Zhi Liu, Wu-Pin Hsuan, Yan-Yu Chang
April (Fri.)		5	SCB2417 The Impact of Various Parameters on the Contact Behavior of the Third Rail System Cheng-Hao Huang, Jing-Jhih Chen, Ting-Yi Tsai, Sung-Fu Chao
		6	SCF2413 Intelligent Defect Detection Quality Feedback Based Inverse Optimization of Process Parameters System for Smart Manufacturing Chung-Chi Huang, Chung-Lin Huang, Song-Yih Lin, Bo-Yang Ding, Rong-Hsu Lin
		7	CO2427 A Research on User Evaluation of Communication Toy Robots Hiromi Ban
		8	

Poster D7 | Online Poster | Official Website

Date	Time	No.	Session Chair: Tz-Yun Chen
	08:00 10:00	1	CL2411 Metal Recovery from Spent Crystalline-Silicon Solar Cells by Using Microwave Pyrolysis and Acid Leaching Yu-Fong Huang, Ting-Ting Cheng, Shang-Lien Lo
		2	SCH2411 Study on Temperature Compensation Methods for Monitoring Sensors Addressing Load Management Needs in the Steel Industry Liyuan Sun, Yaoshen He, Nan Pan, Shilong Chen, Zeming Yang
06 th April (Sat.)		3	SCH2412 Centralized Photovoltaic Heliostat Field Layout and Optical Perception Optimization Based on Improved Dung Beetle Optimization Algorithm Bin Liu, Chengyu Jiang, Biguang Kong, Jiayu Wu, Junwei Yang
		4	SCH2413 Study on Sensor Fault Detection Under Coupled Interaction of Electric Vehicles and Distribution Networks Yuan Wang, Quan Zhang, Huijie Wang, Chunfang Pan, Nuobin Zhang
		5	SCH2414 Study on a Novel Power System Load Forecasting Method Based on Multi-Indicator Clustering Optimization and Sensors Tingjie Ba, Shuo Ding, Qi Huang, Zeming Yang, Yiming Zhang, Junwei Yang