

Session A1

Date	Time	<p style="text-align: center;">Room A</p> <p>J. Mechanical Engineering <i>Chung-Shin Chang, Session Chair</i> <i>Hsiang-Chen Hsu, Session Chair</i></p>
29th Oct. (Sat.)	08:00~08:15	<p>J6001- Effects of Surface Forces on Squeeze EHL Motion between Elastic Ball and Elastic Coated Surface <i>Li-Ming Chu, Jaw-Ren Lin, Hsiang-Chen Hsu, Yuh-Ping Chang</i></p>
	08:15~08:30	<p>J6004- Design and Analysis of Combined Cam-Linkage Mechanism with Translating Follower <i>Jung-Fa Hsieh</i></p>
	08:30~08:45	<p>J6005- Design and Analysis of a Compliant Positioning Platform with Embedded Strain Gauge and Viscoelastic Damper <i>Thanh-Phong Dao, Shyh-Chour Huang</i></p>
	08:45~09:00	<p>J6009- Analysis and Simulation on Two Types of Thrust Reverser <i>Feng Tian, Jingwu He, Yuexi Xiong, and Yanxiong Zhao</i></p>
	09:00~09:15	<p>J6013- A study of cutting temperatures in turning Carbon-Fiber-Reinforced -Plastic (CRFP) composites with nose radius worn tools <i>Chung-Shin Chang</i></p>
	09:15~09:30	<p>J6015- Planetary gearbox fault diagnosis based on windowed synchronous average in the angle domain <i>Zhi-le Wang, Yu Guo, Xing Wu, Jing Na, Rong-Fong Fung</i></p>
	09:30~09:45	<p>J6016- Study of the discharge effects by lateral electrodes in EDM <i>A-Cheng Wang, Hsin-Min Lee, Lung Tsai, Yan-Cherng Lin</i></p>
	09:45~10:00	<p>J6020- Cracked Judge Criteria for Multi-Forging Fastener Forming <i>Chien-Wei Liao, Wen-Shyong Kuo, Chao-Yu Hung</i></p>
	10:00~10:15	<p>J6034- Real-time Fatigue Crack Detection of Composite Vessel using Mechanoluminescent Sensor with GPU acceleration <i>Yu-Nan He, Takuya Hirohata, Naohiro Ueno, Yuki Fujio, Chao-Nan Xu</i></p>

Session B1

Date	Time	<p style="text-align: center;">Room B F. Computer & Information Engineering <i>Jia-Shing Sheu, Session Chair</i></p>
29th Oct. (Sat.)	08:00~08:15	F6003- A Proficiency-based Learning Algorithm Applied to E-learning System for Knowledge-oriented Course <i>Cheng-Hsiu Li</i>
	08:15~08:30	F6004- A Blended System to Compute Daily Energy Expenditure with Cooperation of Smartwatch and Smartphone <i>Khanh Nguyen-Huu, Kyung-Ho Lee, Seong-Won Shin, Young-Je Yu, Chang Geun Song, Seon-Woo Lee</i>
	08:30~08:45	F6005- An Almost Automatic Image Fusion Scheme for Balancing Clarity and Visual Effects <i>Yen-Ching Chang</i>
	08:45~09:00	F6007- SocialCode: A Credit-based Incentive Protocol to Stimulate Network-Coded Cooperative Content Distribution for Vehicular Nodes <i>Ing-Chau Chang, Jacky Lo, Chin-En Yen</i>
	09:00~09:15	F6009- A Passive RFID-based Location System for Personnel and Asset Monitoring <i>Chun-Hao Kao, Rong-Shue Hsiao, Tian-Xiang Chen and Jui-Lun Chen</i>
	09:15~09:30	F6015- Clustering with Fuzzy Supervised Algorithm and Construct Concept Structure <i>Fong-Jhu Yih, Yuan-Hornng Lin and and Jeng-Ming Yih</i>
	09:30~09:45	F6019- IPTV Program Recommendation Based on Combination Strategies <i>Hao Li, Huan Xia, Mohammad Nashir Uddin, Yan kang</i>
	09:45~10:00	F6025- Novel HEVC Parallel Processing Method for Asymmetric Multicores Based on the Prediction Complexity <i>Hyun-Joon Roh, Yeongil Ryu, Eun-Seok Ryu</i>
	10:00~10:15	F6028- Tile Partitioning-based HEVC Parallel Processing Optimization for Asymmetric Multicore Processors <i>Yeongil Ryu, Hyun-Joon Roh, Eun-Seok Ryu</i>

Session C1

Date	Time	<p style="text-align: center;">Room C</p> SA. Recent Advances on Dynamics and Vibration Engineering <i>Jium-Ming Lin, Session Chair</i> <i>Yun-Hai Wang, Session Chair</i>
29th Oct. (Sat.)	08:00~08:15	SA6001- A Novel Flexible Planar Loudspeaker <i>Jium-Ming Lin, Cheng-Hung Lin</i>
	08:15~08:30	SA6002- Tool Machine Performance Assessment System Using Wavelet Packet Transform and Bayesian Classification <i>Shang-Liang Chen, Yin-Ting Cheng and Jui-Ting Hung</i>
	08:30~08:45	SA6005- Vibration Analysis and Stability Analysis of Double-Walled Carbon Nanotubes Subjected to Electrostatics Actuation <i>Tai-Ping Chang</i>
	08:45~09:00	SA6007- The study of interaction, nonlinear and dissipation effects in nanomembranes by investigating the dispersion relations of bending waves <i>Fan Yang, Reimar Waitz, Elke Scheer</i>
	09:00~09:15	SA6008- Dynamic Behavior of Reinforced Concrete One-Way Slabs Subjected to Blast Loading <i>Jong Yil Park, Min Sook Kim, Seung Jae Lee, Young Hak Lee</i>
	09:15~09:30	SA6010- Lower-limb Support Moment depending on Vibro-perception threshold and Vibration Frequency <i>Ki-Young Kwak, Hui-Gyun Kim, Dong-Wook Kim</i>
	09:30~09:45	SA6011- A Study on the Effect of Sub-perception Threshold Vibration Stimulation on Lower Leg muscle using MVC and PMT Analysis <i>Hui-Gyun Kim, Ki-Young Kwak, Dong-Wook Kim</i>
	09:45~10:00	SA6012- Effects on Chaotic Motion of Single-Walled Carbon Nanotube Subjected to Linear and Nonlinear Damping <i>Tai-Ping Chang</i>
	10:00~10:15	SA6031- A New Processing Method for Transonic Delayed Aerodynamic <i>Yun-Hai Wang, Fang-Lei Wang, Bing Zhang, Zhi-Jin Zhou, Qun Cai</i>

Session D1

Date	Time	<p style="text-align: center;">Room D</p> <p>SR. Recent Advances in Prognostics and System Health Management <i>Laifa Tao, Session Chair</i> <i>Jian Ma, Session Chair</i></p>
29th Oct. (Sat.)	08:00~08:15	<p>SR6002- A method for gear fatigue life prediction considering the internal flow field of the gear pump <i>Haidong Shen, Zhiqiang Li, Lele Qi, Liang Qiao</i></p>
	08:15~08:30	<p>SR6003- Battery capacity degradation prediction using similarity recognition based on modified dynamic time warping <i>Laifa Tao, Chen Lu, Chao Yang, Jian Ma</i></p>
	08:30~08:45	<p>SR6004- Machine component health prognostics with only truncated histories using geometrical metric approach <i>Laifa Tao, Chao Yang, Yujie Cheng, Minvydas Ragulskis</i></p>
	08:45~09:00	<p>SR6014- Failure Behavior Modeling and Reliability Estimation of Product Based on Vine-Copula and Accelerated Degradation Data <i>Dan Xu, Mengli Xing, Qidong Wei, Yunxia Chen, Rui Kang, Yong Qin, Jie Xu</i></p>
	09:00~09:15	<p>SR6015- Performance Degradation Analysis and RUL Prediction of Electronic Controller Based on Ensemble Empirical Mode Decomposition and Gaussian Process Regression <i>Dan Xu, Shao-Bo Sui, Ying Chen, Rui Kang</i></p>
	09:15~09:30	<p>SR6019- Research on two dimensional Wiener stochastic degradation model based on the wear model <i>Hui Zhang, Jun Yao, Yan-Lin Zhao</i></p>
	09:30~09:45	<p>SR6028- An Approach to Structural Reliability Evaluation under Fatigue Degradation and Shocks <i>Wei Zhang, Shan Jiang, Xiaoyang Li, Zili Wang</i></p>
	09:45~10:00	<p>SR6029- An integrated method based on CEEMD SampEn and correlation analysis algorithm to fault diagnosis of a gearbox under different working conditions <i>Jiayu Chen, Dong Zhou, Chuan Lu and Chen Lu</i></p>
	10:00~10:15	<p>SR6031- Aircraft Engine Remaining Useful Life Prediction Using Stacked Sparse Auto-Encoder Based Multiple Layers Feature Self-learning <i>Jian Ma, Wan-lin Zhao, Hua Su, Chen Lu</i></p>

Session E1

Date	Time	Room E TB. Environmental Engineering <i>Kun-Sen Chang, Session Chair</i> <i>Rui-Ting Huang, Session Chair</i>
29th Oct. (Sat.)	08:00~08:15	TB6001- Adsorption of Perfluorooctane Sulfonate (PFOS) and Perfluorooctanoate (PFOA) on Graphene <i>Chao-Chun Lo, Angela Yu-Chen Lin</i>
	08:15~08:30	TB6002- Innovation of Reservoir Cleaning System <i>Rui-Ting Huang, Tzy-Wen Tang, Yi-Ping Lee</i>
	08:30~08:45	TB6008- Recycle of waste textile sludge and foundry sand to produce a compression resistant and flame retardant material <i>Kun-Sen Chang, Kong-Bin Chiu, Yi-Ju Su, Wen-Hung Lo, Chih-Hao Hu, Lin-Wei Wang, Shan-Shan Chu, Kuan-Po Chen, Sheng-Yen Lin, Pei-Chi Lin, Tzu-Hsien Yang</i>
	08:45~09:00	TB6009- Impacts of nano-CuO and nano-ZnO particles on biological phosphorus removal <i>Hao Shiu, Pei-Shan Hung, Meng-Shan Lu, Yung-Pin Tsai</i>
	09:00~09:15	TB6011- Probability Analysis Estimation of Annual Maximum Monthly Rainfall in Bangladesh <i>Md Ashraful Alam, Kazuo Emura, Craig Farnham, Jihui Yuan</i>
	09:15~09:30	TB6012- Comparison of optimum conditions for extracting PHAs from different waste sludge <i>Meng-Shan Lu, Long-Li Lai, Yung-Pin Tsai</i>
	09:30~09:45	TB6013- An Investigation and Assessment of the Water Environment in Taomi Ecological Community <i>Jan-Wei Lin, Ku-Fan Chen, Yung-Pin Tsai</i>
	09:45~10:00	TB6014- Combination of doping Cu and depositing Ag methods to modify TiO₂ film – comparison of photoreduction and hydrothermal deposition methods <i>Chih-Chi Yang, Ruey-An Doong, Yung-Pin Tsai, Yi-Chu Huang</i>
	10:00~10:15	TB6015- Electro-chemical sludge as renewable carbon source for bioethanol production <i>Shou-Te Chen, Wei-Chih Lin, Yung-Pin Tsai</i>

Session A2

Date	Time	<p style="text-align: center;">Room A J. Mechanical Engineering, SJ. Recent Development on Polymer, Polymer Composites and Polymer Application <i>Sarawut Rimdusit, Session Chair</i> <i>Chanchira Jubsilp, Session Chair</i></p>
29th Oct. (Sat.)	10:30~10:45	J6035- The Sensitivity Analysis of TBM Thrust System <i>Bo Yang, Yan Xia, He Li, Bangchun Wen</i>
	10:45~11:00	J6038- The Experimental Research on Axis Orbit of Mixed-flow pump <i>Li Wei, Ji Leilei, Shi Weidong, Zhao Xiaofan, Jiang Xiaoping</i>
	11:00~11:15	J6040- The Stability of Asymmetric Rotor of Roots Vacuum Pump <i>He Li, Tian-ren Wang, Wenpeng Wei, Bang-chun Wen</i>
	11:15~11:30	J6041- Nonlinear dynamic analysis of multiple pinion drives system in Tunnel Boring Machine <i>Yan Xia, Bo Yang, He Li, Wen-Peng Wei, Bang-Chun Wen</i>
	11:30~11:45	SJ6003- A novel mobile communications authentication scheme with roaming service and user anonymity <i>Kai Chain, Wen-Chung Kuo and Jiin-Chiou Cheng</i>
	11:45~12:00	SJ6005- Transverse Spacing of FRP Shear Reinforcement for Concrete Wide Beam <i>Min Sook Kim, Young Hak Lee</i>
	12:00~12:15	SJ6009- Effects of Silicon Carbide Whisker on Shape Memory Polymers from Benzoxazine-Epoxy Polymer Alloys <i>Sarawut Rimdusit, Chutiwat Likitaporn, Chanchira Jubsilp</i>
	12:15~12:30	SJ6010- Wear and Mechanical Properties of Nanosilica-Filled Polybenzoxazine Composites <i>Chanchira Jubsilp, Nutthaphon Liawthanyarat, Sarawut Rimdusit</i>

Session B2

Date	Time	<p style="text-align: center;">Room B</p> F. Computer & Information Engineering, N. Intelligent Computing, SF. Advances in Information Science, SI. Recent Advances in Information Analysis for Big Data and Its Applications <i>Chun-Hsiung Tseng, Session Chair</i> <i>Jeong-Dong Kim, Session Chair</i>
29th Oct. (Sat.)	10:30~10:45	F6031- Implementing Exchanged Hypercube Communication Patterns on Ring-Connected WDM Optical Networks <i>Yu-Liang Liu, Ruey-Chyi Wu</i>
	10:45~11:00	F6037- A Green BIM Approach: BIM-based Building Energy Performance Analysis and Design Optimization <i>Shang-Yuan Chen</i>
	11:00~11:15	F6039- Drowsiness monitoring of sunglasses wearing driver using adaptive IR sensor <i>Sang-Min Park, Yong-Guk Kim</i>
	11:15~11:30	F6040- Mobile Software Apps for Quality Improvement Based DANP Methods <i>Chiu-Hung Su, Ying-Hsun Hung, Wen-Cheng Wang</i>
	11:30~11:45	N6006- Stock Prices Forecasting Based on Wavelet Neural Networks with PSO <i>Kai-Cheng Wang, Chi-I Yang, and Kuei-Fang Chang</i>
	11:45~12:00	SF6001- Investigating the Relationship between Students' Feelings and Their Learning Performance: A Case Study on Calculus with Multimedia Support <i>Chun-Hsiung Tseng, Yung-Hui Chen, Yan-Ru Jiang, Jia-Rou Lin</i>
	12:00~12:15	SF6002- Enhance Life Quality of Disabled People with Mobile Information Technologies Incorporating Multimedia Functionality <i>Chun-Hsiung Tseng, Yung-Hui Chen, Jia-Long Li, Tang-En Hsu, Hao-Chen Huang, Hong-Wei Chen, Yi-Chen Zhou, Li-Hsin Chiu</i>
	12:15~12:30	SI6002- Hybrid Algorithms for Ontology Representation Support to Efficient Data Integration Using ISO/IEC 11179 <i>Jeong-Dong Kim, Suk-Hyung Hwang</i>

Session C2

Date	Time	<p style="text-align: center;">Room C</p> <p>SA. Recent Advances on Dynamics and Vibration Engineering, SK. Mechanism and Machine Design, SL. Intelligent Automation and Smart Systems <i>Chung-Chi Huang, Session Chair</i> <i>Kuan-Chen Lin, Session Chair</i></p>
29th Oct. (Sat.)	10:30~10:45	<p>SA6035- Nanoresonators with significantly modulated resonances utilizing multilayered structures with piecewise constant properties under intentionally applied prestress forces and stresses <i>Ivo Stachiv</i></p>
	10:45~11:00	<p>SK6002- Design and Simulation of Multi-degrees of Freedom Piezoelectric Actuator <i>Shyang-Jye Chang, Jing-Yuan Lin</i></p>
	11:00~11:15	<p>SK6003- Design Analysis of a Radial Flux Permanent Magnet Wind Power Generator Using Skewed Slots <i>Wan-Tsun Tseng, Jian-Wei Li</i></p>
	11:15~11:30	<p>SK6005- Structural Analyses of Ancient Chinese Maze locks <i>Kuo-Hung Hsiao</i></p>
	11:30~11:45	<p>SL6002- Cloud-Computing Based Intelligent Prediction System for Somatic Fitness and Healthcare <i>Hsiao-Man Liu, Chung-Chi Huang, Chung-Lin Huang, Cong-Hui Huang, and Yen-Ting Ke</i></p>
	11:45~12:00	<p>SL6010- Design of Intelligent Wireless System with Fuzzy Technique for Indoor Comfort Environment <i>Cong-Hui Huang, Chung-Chi Huang, Kuan-Chen Lin, Tzu-Yuan Wang, Po-Chang Chen</i></p>
	12:00~12:15	<p>SL6005- Cloud-Computing Based Intelligent Inference system for Component Analysis <i>Chung-Chi Huang, Kuan-Chen Lin, Chung-Lin Huang, Cong-Hui Huang, and Bo-Han Lin</i></p>
	12:15~12:30	<p>SL6007- A Novel Intelligent Communication System for Collaborative Work of Cyber-Physical System <i>Chung-Chi Huang, Kuan-Chen Lin, Chung-Lin Huang, Sheng-Sian Tang, Cheng-Chi Tsai</i></p>

Session D2

Date	Time	<p style="text-align: center;">Room D</p> <p>SR. Recent Advances in Prognostics and System Health Management, SSI. Fault Detection, Prognostics and System Health Management for Electromechanical Systems <i>Hung-Kuang Chen, Session Chair</i> <i>Xiang Li, Session Chair</i></p>
<p style="text-align: center;">29th Oct. (Sat.)</p>	10:30~10:45	
	10:45~11:00	<p>SSJ6001 - The Fault Diagnosis Agreement of WSN <i>Shu-Ching Wang, Shun-Sheng Wang, Kuo-Qin Yan</i></p>
	11:00~11:15	<p>SSJ6002- Performance Evaluation of Mesh Layout Techniques for the Simplification of Large 3D Meshes <i>Hung-Kuang Chen, Chi-Feng Chen</i></p>
	11:15~11:30	<p>SSJ6004- Development of the Fault Detection and Isolation System for Power Estimation of Mobile Robots <i>Ying-Yao Ting, Huan-Sheng Wang, Kuo-Lan Su</i></p>
	11:30~11:45	<p>SSJ6005- Model Based Dynamic Data Reconciliation for Rotating Machinery Monitoring and Diagnosis <i>Dengji Zhou, Huisheng Zhang, Shilie Weng</i></p>
	11:45~12:00	<p>SSJ6008- KPCA-Based Fault Detection and Identification of Organic Rankine Cycle System <i>Jianhua Zhang, Zhongli Luo, Junghui Chen, Ying Cheng</i></p>
	12:00~12:15	<p>SSJ6009- Fault Classification with Discriminant Analysis during Sit-to-Stand Movement assisted by Nursing Care Robot <i>Tianyi Wang, Hieyong Jeong, Takafumi Ohno, Michiko Kido, Kenji Yamada and Yuko Ohno</i></p>
	12:15~12:30	<p>SSJ6011- Defects Detection in Thin-Wall Structures via a Sparse Representation Model of Lamb Waves <i>Xiang Li, Shuxue Ding, Zhenni Li, Yujie Li, Haoli Zhao, Benying Tan</i></p>

Session E2

Date	Time	<p style="text-align: center;">Room E</p> <p>L. Environmental, Food, Health Science & Technology, O. Other Engineering and Technology related topics B. Mechatronic and robotics Engineering <i>Han Ay Lie, Session Chair</i> <i>Buntara Sthenly Gan, Session Chair</i></p>
29th Oct. (Sat.)	10:30~10:45	<p>L6007- Exploring the Benefit of Farming Slideshow to Agri-business Marketing <i>Yung-Hsing Peng, Po-Chuang Huang, Ying-Hsiu Chen, Chia-Cheng Lin</i></p>
	10:45~11:00	<p>L6012- A study on chopsticks length, the quantity of peanuts gripped, and the subjective satisfaction <i>Rain Chen, Min Wang</i></p>
	11:00~11:15	<p>L6017- Effects of Combined Growth of Biogenic and Xenobiotic Substrates on Degradation of Xenobiotic by Activated Sludge <i>Nguyen Phuc Thien, Hoang Thi Hoai and Doan Quang Tri and Ching Yi Chen</i></p>
	11:15~11:30	<p>L6018- Effect of Sleep Induction Time According to Preferred and Non-preferred Color LED Stimulation <i>Seon-Jin Lee, Wonbae Park, Hyunchul Kim and Dong-Wook Kim</i></p>
	11:30~11:45	<p>L6021- Removal of Basic Dyes from Solution using Coconut Shell Charcoal <i>Chutima Jumruen, Pariwat Kri-arb, Sirawit Sukyang and Siritwan Srirorrachatr</i></p>
	11:45~12:00	<p>O6002- Development of the surgical instruments using multi-joint mechanism in endoscopic surgery <i>Ikuo Yamamoto, Keiko Kishikawa, Murray Lawn, Takeshi Nagayasu, Naoya Yamasaki, and Keitarou Matsumoto</i></p>
	12:00~12:15	<p>O6004- Exact Shape Functions for Timoshenko Beam Element <i>Buntara Sthenly Gan, Han Ay Lie, Trinh Thanh Huong, Takahiro Hara</i></p>
	12:15~12:30	<p>O6024- The Critical Success Factors of Smart Green City Logistics Business in Fuzhou <i>Shih-Ming Ou, Qiaoping Mei, Li Yang, Dongling Chen</i></p>

Session A3

Date	Time	<p style="text-align: center;">Room A</p> <p>SE. Recent Advances in Machinery Diagnostics, Modal Analysis, Measurement & Signal Processing, SP. Recent Advances in Intelligent Control System and Detection Algorithm, SSD. Recent Innovations in Sensors <i>Guo Yu, Session Chair</i> <i>Chien-Wu Lan, Session Chair</i></p>
30th Oct. (Sun.)	08:00~08:15	<p>SE6002- Mechanical compound faults extraction based on improved frequency domain blind deconvolution algorithm <i>Zeguang Yi, Nan Pan, Yu Guo</i></p>
	08:15~08:30	<p>SE6004- Rolling element bearing fault feature extraction based on combination of envelope order tracking and constrained independent component analysis <i>Tangfeng Yang, Guo Yu, Xing Wu, Jing Na, Rong-Fong Fung</i></p>
	08:30~08:45	<p>SE6006- Experimental investigation on double impulse phenomenon of hybrid ceramic ball bearing with outer race spall <i>Guo Yu, Shou-Bao Sun, Xing Wu, Jing Na, Rong-Fong Fung</i></p>
	08:45~09:00	<p>SE6007- Design and Control of V Type Linear Ultrasonic Motor <i>Zhi-Yuan Yao, Mo-Jian Yang, Yue Jian</i></p>
	09:00~09:15	<p>SE6009- Swing Period Detection of Acoustic Emission Signal of Articulated Robot <i>Tangfeng Yang, Xiaoqin Liu, Bo He, Xing Wu</i></p>
	09:15~09:30	<p>SP6004- Autonomous Patrolling Robot with Stereo Vision System <i>Chien-Wu Lan, Kuang-Hsiung Tan, Shih-Sung Lin, Chi-Yao Chang, Jo-Yen Nieh</i></p>
	09:30~09:45	<p>SSD6008- A proximity sensor based on fiber-optic electric field sensing technology for detection of human approaching high-voltage electric apparatus <i>Lu-Tang Wang, Nian Fang and Zhao-Ming Huang</i></p>
	09:45~10:00	<p>SSD6011- Seeking Null Frequencies by Autocorrelation of Spectrum of Sagnac Interference Signal <i>Nian Fang, Xiaozhi Xiong, Weiqi Li, Lutang Wang and Zhaoming Huang</i></p>
	10:00~10:15	<p>SSD6014- Real-Time Neural Signal Sensing and Spike Sorting System Using Zero-Crossing Feature with Highly Efficient Data Transmission <i>Sungjin Oh, Sungmin Han, and Inchan Youn</i></p>

Session B3

Date	Time	<p style="text-align: center;">Room B</p> SH. Intelligent System and Applications, SU. Recent Advances in Infrastructure Technologies <i>Kuo-Lan Su, Session Chair</i> <i>Jr-Hung Guo, Session Chair</i>
30th Oct. (Sun.)	08:00~08:15	SH6004- Fusion Algorithm Based Security System with Multiple Sensors <i>Jr. Hung Guo, Kuo-Hsien Hsia</i>
	08:15~08:30	SH6005- Development of Cloud Machining Supplier Matching System using AHP Evaluation Method <i>Shang-Liang Chen, Hoai-Nam Dinh, Sheng-Jih Fang and Yun-Yao Chen</i>
	08:30~08:45	SH6008- Development of an Indoor Mobile Robot Localization System Using Radio Beacon Mapping and Neural Network <i>Chun-Chi Lai, Kuo-Lan Su</i>
	08:45~09:00	SH6010- Development of an Articulation Robot Arm <i>Kuo-Lan Su, Jian-Fu Weng, Jr-Hung Guo, Kai-Lu Cai</i>
	09:00~09:15	SH6017- Activity Recognition Using Transfer Learning <i>Wen-Hui Chen and Po-Chuan Cho</i>
	09:15~09:30	SH6019- A recommendation system for emergency events using Recurrent Neural Network <i>Bitzel Cortez, Young Jin Kim</i>
	09:30~09:45	SU6005- Generalized Finite Element Method for the Analysis of High-Rise Wall-Frame Structural Systems <i>Hongjoon Son, Jonghwan Park, Heecheul Kim, Young Hak Lee, Dae-Jin Kim</i>
	09:45~10:00	SU6007- Adaptive Differential Evolution with Mean-of-pbest Mutation Strategy for PID Controller Design <i>Ti-Hung Chen, Ming-Feng Yeh</i>
	10:00~10:15	SU6008- Differential Evolution Based Networked Control System Design <i>Ti-Hung Chen, Ming-Feng Yeh</i>

Session C3

Date	Time	<p style="text-align: center;">Room C</p> SSA. Recent Advances in Bioinformatics and Bio-instruments, WB. Biomechanics, F. Computer & Information Engineering <i>Yu-Seop Kim, Session Chair</i> <i>Jung-Ge Tseng, Session Chair</i>
30th Oct. (Sun.)	08:00~08:15	SSA6016- Comparison of Real time PCR Results by Applying Different Powers <i>Ji-Soo Hwang, Jong-Dae Kim, Yu-Seop Kim, Hye-Jeong Song, Sang-Yoon Kim and Chan-Young Park</i>
	08:15~08:30	SSA6017- Comparison of PCR ramping speeds for the chamber thicknesses of the PCB-based Micro PCR Chip <i>Seung-Cheol Lee, Yu-Seop Kim, Hye-Jeong Song, Jong-Dae Kim, Sih-Ae Lee and Chan-Young Park</i>
	08:30~08:45	SSA6018- Evaluation independent system for the development of DNA amplification section <i>Deuk-Ju Lee, Jong-Dae Kim, Yu-Seop Kim, Hye-Jeong Song, Inyoung Kim and Chan-Young Park</i>
	08:45~09:00	SSA6026- Improving Performance for Classifying Ovarian Cancer with Menopause Information <i>Eun-Suk Yang, Yu-Seop Kim, Jong-Dae Kim, Chan-Young Park, Hye-Jeong Song</i>
	09:00~09:15	SSA6027- Best Serum Biomarker Combination for Classifying Ovarian Cancer <i>Eun-Suk Yang, Yu-Seop Kim, Jong-Dae Kim, Chan-Young Park, Hye-Jeong Song</i>
	09:15~09:30	WB6001- Injury Assessment Via Stress Analysis of the Human Knee Joint <i>Pu-Pin Yu, Jung-Ge Tseng, Ming-Yuan Huang, Bo-Wun Huang</i>
	09:30~09:45	F6041- A Hierarchical Network Model for Network Topology Design Using Genetic Algorithm <i>Shuo Zhang, Ning Huang, Yue Zhang, Weiqiang Wu</i>
	09:45~10:00	WB6003- Evaluate the Mechanical Performance to EVAR with Chimney Grafts Technique <i>Bing-Feng Huang, Wei-Ling Chen, Ming-Long Yeh, Chung-Dann Kan</i>
	10:00~10:15	F6042- The Influence of Application Processes on Network Performance Reliability <i>Yue Zhang, Ning Huang, Weiqiang Wu, Shuo Zhang</i>

Session D3

Date	Time	<p style="text-align: center;">Room D G. Green Technology & Civil Engineering <i>Yit-Jin Chen, Session Chair</i> <i>Yao-Tang Chang, Session Chair</i></p>
30th Oct. (Sun.)	08:00~08:15	<p>G6005- Intelligent Wireless Green Energy Power Storage and Transmission System Based on Assembly Method of Pivoting Antenna Module <i>Ming-Shen Jian, Rui-Wei Tong, Yu-Huei Lin, Chih Cheng, Yi-Chi Fang, Hsuan-Chia Chang</i></p>
	08:15~08:30	<p>G6013- Compression Capacity and Displacement for Drilled Shafts in Gravelly Soils <i>Yit-Jin Chen, Tsu-Hung Chu, Jen-Kai Huang</i></p>
	08:30~08:45	<p>G6014- Compressive Strength of Charcoal-filled Lightweight Foamed Concrete <i>Yeong Huei Lee, Shahrin Mohammad, Ming Han Lim, Yee Ling Lee, Yee Yong Lee, Cher Siang Tan, Chau Khun Ma</i></p>
	08:45~09:00	<p>G6016- Green Options for Anti-Corrosion of High Strength Concrete Incorporating Ternary Pozzolanic Materials <i>Chien-Jou Yang, Yuan-Yuan Chen</i></p>
	09:00~09:15	<p>G6017- Study on the factors that influence the intention of college students to participate in the green building <i>ChienJen Hung, Chenchen Lai, Meiyang Chen</i></p>
	09:15~09:30	<p>G6022- Land Cover Classification using Multi-Spectral Satellite Imagery <i>Tri Dev Acharya, In Tae Yang and Dong Ha Lee</i></p>
	09:30~09:45	<p>G6023- A Study of Applying Water Retention and Permeable Methods into Yonghe District Wastewater Operations Manager <i>Lee-Kuo Lin, Chien-Ching Chen, Yu-Chen Hsiao</i></p>
	09:45~10:00	<p>G6024- Pollution detection and prevention of the ready-mixed concrete plant management <i>Lee-Kuo Lin, Pi-Lan Hsu, Jye-Hwang Lo</i></p>
	10:00~10:15	<p>G6030- Octree Data Processing for Structural Shape Management using Terrestrial Laser Scanning <i>Gichun Cha, Donghwan Lee and Seunghee Park</i></p>

Session E3

Date	Time	<p style="text-align: center;">Room E</p> M. Innovation Management, O. Other Engineering and Technology related topics <i>Jeng-Ming Yih, Session Chair</i> <i>Chin-Yuan Fan, Session Chair</i>
30th Oct. (Sun.)	08:00~08:15	M6004- A study of the correlation between self-confidence and professional achievements of designers <i>Rain Chen, Yu-Tzu Yang, Li-Chou Chen, Chia-Hui Feng, Gen-Ming Guo</i>
	08:15~08:30	M6005- Cognitive Diagnostic Assessment Based on Knowledge Structure <i>Jui-Chiao Tseng, Ting-Hung Huang and Jeng-Ming Yih</i>
	08:30~08:45	
	08:45~09:00	M6007- Combining ZMET and MEC in Study of User Expectations for Ideal catering customer service APP <i>Ton Chaing, Hsin Rau, Jon-Luen Chiang</i>
	09:00~09:15	M6008- The Lifespan of Semiconductor Patents by Assignee and Patent Characteristics <i>Shu-Hao Chang, and Chin-Yuan Fan</i>
	09:15~09:30	M6011- A Survival Analysis on Fuel Cell Material Values Exploration and Exploitation of Emerging Technology <i>Seng-Su Tsang, Wen-Cheng Wang</i>
	09:30~09:45	O6006- Design of the Crashworthy Structure of an Urban Aircraft <i>Bairong Shang, Jingwu He, Yuexi Xiong, Zhe Hu</i>
	09:45~10:00	O6011- Development of a MDO Platform for Aero-Structural Interactions <i>Hu Zhe, He Jingwu, Xiong Yuexi, Pan Yang</i>
	10:00~10:15	O6023- Comparative study on two civil engine thrust reversers of maintainability analysis <i>Hua-Cong Xu, Yang Pan, Yue-Xi Xiong, Jing-Wu He</i>

Session A4

Date	Time	<p style="text-align: center;">Room A</p> <p>SO. Data Driven Modelling and Soft Computing, SZ. Information and Communications Technological Convergence and Applications <i>Nan Pan, Session Chair</i> <i>Wen-Chung Kuo, Session Chair</i></p>
30th Oct. (Sun.)	10:30~10:45	<p>SO6001- An Efficient Hybrid Big Bang-Big Crunch Algorithm for Multi-Objective Optimization on Heterogeneous Distributed System <i>Yan Kang, Qing Liu, Hao Li and XiaoDong Yang</i></p>
	10:45~11:00	<p>SO6002- Apply Data Mining to Analyze the Rainfall of Landslide <i>Zne-Jung Lee, Chou-Yuan Lee, Wei-Feng Ling, and Yuan-Chih Lee</i></p>
	11:00~11:15	<p>SO6011- Field Climate Tracking with Virtual Weather Stations Constructed by Private Stations and Open Data <i>Chin-Shun Hsu, Yung-Hsing Peng, Chien-Der Lin, Po-Chuang Huang</i></p>
	11:15~11:30	<p>SZ6004- The Experimental Implementation Configured by a Fiber-Bragg-Grating Fiber Laser and Optical Code Division Multiple Access on Wireless Communication Application <i>Yao-Tang Chang, Bo-Rong Huang, Hsu-Chih Cheng</i></p>
	11:30~11:45	
	11:45~12:00	<p>SZ6006- Privacy Enhancement for Medical Images Communication by Spatial Light Modulation-based OCDMA Scrambling Cryptography <i>Yao-Tang Chang, Yih-Chuan Lin</i></p>
	12:00~12:15	<p>SZ6008- Verifiability Data Hiding Scheme with Tamper Detection <i>Wen-Chung Kuo, Shao-Hung Kuo, Lih-Chyau Wu</i></p>
	12:15~12:30	<p>SZ6014- Case Studies of Applying Electronic Flexible Material and Technology to Create the New Media Arts <i>Pei-Hsuan Su</i></p>

Session B4

Date	Time	<p style="text-align: center;">Room B</p> <p>SM. Recent Advances in Green Innovative Materials and Civil Engineering, SW. Recent Innovations and Applications in Fingerprint, <i>Wei-Ting Lin, Session Chair</i> <i>An Cheng, Session Chair</i></p>
30th Oct. (Sun.)	10:30~10:45	<p>SM6001- Seismic Testing and Verification of a Miniature Reinforced Concrete Specimen considering Corrosive Hazards <i>Wei-Ting Lin, An Cheng, Tzu-Ying Lee, Yuan-Chieh Wu</i></p>
	10:45~11:00	<p>SM6006- Properties of Controlled Low Strength Material with Circulating Fluidized Bed Combustion ash and Recycled Aggregates <i>Tsai-Lung Weng, Wei-Ting Lin, Hao-Wen Lai</i></p>
	11:00~11:15	<p>SM6007- Deterioration Evaluation of RC Building Structures Using Material Testing Data Base <i>Tsai-Lung Weng, Wei-Ting Lin, En-Tzu Chang</i></p>
	11:15~11:30	<p>SM6015- Effect of Sand Ratio on the Strength and Durability of Self-Compacting Concrete <i>Tsai-Lung Weng</i></p>
	11:30~11:45	<p>SM6017- Variation of Moisture Content for Compacted Soil Slopes Subjected to Artificial Rainfall <i>Shu-Rong Yang, Chao-Hsiang Kuo, Li-Jie Huang</i></p>
	11:45~12:00	<p>SM6010- Seismic Performances of the Motor Control Centers in a Nuclear Power Plant using the Seismic Qualification Analysis and Test <i>Chi-Che Hung, Yuan-Chieh Wu, Wei-Ting Lin</i></p>
	12:00~12:15	<p>SW6003- An Application to α Brainwave Sampling and LabVIEW System Input - Output Transmission Interface of MindWave Brainwave Mind Control in Practical Applications Research <i>Ho-Nien Shou, Jyh-Haw Wang</i></p>
	12:15~12:30	<p>SW6004- Implementation of a Following Wheel Robot Featuring Stereo Vision Capability <i>Jia-Shing Sheu, Ho-Nien Shou, Wei-Hsiu Tsai, Jia-Jie Su</i></p>

Session C4

Date	Time	<p style="text-align: center;">Room C</p> <p>SX. Recent Advances in Vehicle System <i>Yaojung Shiao, Session Chair</i> <i>Hsiu-Ying Hwang, Session Chair</i></p>
30th Oct. (Sun.)	10:30~10:45	<p>SX6001- Steering Test of Mid-size Bus with Flexible-body Dynamics Model <i>Jia-Shiun Chen</i></p>
	10:45~11:00	<p>SX6002- Noise and Vibration Analysis for a Midsize Electric Bus Using Boundary Element Method <i>Hsiu-Ying Hwang</i></p>
	11:00~11:15	<p>SX6003- Plate Load Design and Application of Four-rotor Aerial Vehicle <i>Jiunn Fang, Yau-Ren Shiao, Wei-Chun Hung, Yu-Lan Chen</i></p>
	11:15~11:30	<p>SX6004- Design and Simulation of Non-Rotor Unmanned Aerial Vehicle <i>Jiunn Fang, Yau-Ren Shiao, Yu-Lan Chen, Wei-Chun Hung</i></p>
	11:30~11:45	
	11:45~12:00	<p>SX6006- Proposing a Valve Train System for Cylinder Deactivation in Si Engines <i>Ly Vinh Dat and Yaojung Shiao</i></p>
	12:00~12:15	<p>SX6007- Control of Steering Wobble in Motorcycle by a New Variable Damping Damper <i>Yaojung Shiao, Yi-Lin Wu</i></p>
	12:15~12:30	<p>SX6008- Design of a New Intelligent Distributed Transportation Merging Management System <i>Yaojung Shiao, Yuan Zou, Chen-En Hsia, Hoang Thang</i></p>

Session D4

Date	Time	<p style="text-align: center;">Room D G. Green Technology & Civil Engineering, TC. Architecture and Building Materials <i>Carig Farnham, Session Chair</i> <i>Yi-Chang Wu, Session Chair</i></p>
30th Oct. (Sun.)	10:30~10:45	<p>G6031- Numerical simulation of joint connection on three-hinged gable frame steel structure in span length variation <i>Pinta Astuti, Hakas Prayuda, Martyana Dwi Cahyati</i></p>
	10:45~11:00	<p>G6032- Verification of accuracy of 3D shape information using photograph taken by digital cameras <i>Donghwan Lee, Gichun Cha and Seunghee Park</i></p>
	11:00~11:15	<p>TC6004- Effect of highly reflective roofing sheet on building thermal loads for a school in Osaka <i>Jihui Yuan, Kazuo Emura, Craig Farnham</i></p>
	11:15~11:30	<p>TC6008- An explorative study of the ecological design of residence buildings in Ming and Qing dynasties in Yangzhou <i>Man Lu, Gang Wang, Jian Zhou</i></p>
	11:30~11:45	<p>TC6009- Landscape design of river channels in small towns based on regional culture--Case study of landscape design of Duohua River of Longli County, Guizhou Province <i>Man Lu, Chuan-Yue Wang, Jian Zhou</i></p>
	11:45~12:00	<p>TC6010- Necessity for Diversity of Commercial Facilities for Daily Shopping in Residential Planning <i>Ping-li Chen, Yungchi Yen</i></p>
	12:00~12:15	<p>TC6011- Cluster Mapping in Urban-Rural Planning: The Case of Manufacturing Industries in Taiwan <i>Yung-Chi Yen, Shiann-Far Kung, Ping-Li Chen</i></p>
	12:15~12:30	<p>TC6013- Optimization of Air Conditioner Load-Shifting with Exterior Wall Phase Change Material Panels <i>Craig Farnham, Kazuo Emura, Jihui Yuan, Md Ashrafal Alam</i></p>

Session E4

Date	Time	<p style="text-align: center;">Room E TA. Civil & Structure Engineering, SSF. Structural Health Monitoring <i>Wan-Cheng Yuan, Session Chair</i> <i>Hao-Jan Chiu, Session Chair</i></p>
30th Oct. (Sun.)	10:30~10:45	<p>TA6003- Innovative Entire Bridge Launching for the Construction of A 140 m Arch Steel Bridge <i>Hao-Jan Chiu, Min Chao, Chih-Wei Lu, Chyuan-Hwan Jeng</i></p>
	10:45~11:00	<p>TA6006- Analysis of Potential Use as Structural Element of Laminated Timber from Three Species of Fast-Growing Trees <i>Sri Indah Setiyaningsih, Saptahari Soegiri, Adang Surahman, Eka Mulya Alamsyah</i></p>
	11:00~11:15	<p>TA6009- Effects of Tendon Layout on Flexural Capacity of Prestressed Concrete Flat Plates <i>Min Sook Kim, Young Hak Lee</i></p>
	11:15~11:30	<p>TA6010- Performance-Based Seismic Assessment of a Large Concrete Framed Structure Supporting Multi-units of Heavy Compressors <i>Song Fong Jan</i></p>
	11:30~11:45	<p>TA6011- Innovation of Railway Security Management System <i>Tzy-Wen Tang, Rui-Ting Huang, Yi-Ping Lee</i></p>
	11:45~12:00	<p>TA6020- Seismic responses of a Cable-Stayed bridge with consideration of uniform temperature loading <i>Jun-Jun Guo, Xin-Zhi Dang, Wan-Cheng Yuan</i></p>
	12:00~12:15	<p>TA6022- The seismic fragility analysis of continuous bridge with uniform drift CMEJ under the excitation of seismic sequence <i>Jian-Guo Wang, Yu-Tao Pang, Wan-Cheng Yuan</i></p>
	12:15~12:30	<p>SSF6012- Laser ultrasonic propagation imaging method for damage measuring of aluminum plate structure <i>Aoqi Zhang, Changgil Lee, Gichun Cha, Seunghee Park</i></p>

Session A5

Date	Time	<p style="text-align: center;">Room A SSK. Advances in Marine Equipment, Facility, and Device, SSN. Advances in Ocean Engineering and Marine Science <i>Pei-Hwa Huang, Session Chair</i> <i>Chang-Geun Song, Session Chair</i></p>
30th Oct. (Sun.)	13:30~13:45	<p>SSK6003- Laboratory Experiments for Dynamic Change of Suspended Sediment Concentration by Solitary Wave <i>Jae-Nam Cho, Song-Geun Song, Kyu-Nam Hwang, Seung-Oh Lee</i></p>
	13:45~14:00	<p>SSN6005- Numerical Computation of Transient Salinity Distribution in Macro-Tidal Estuary <i>Seung-Oh Lee, Chang-Geun Song</i></p>
	14:15~14:30	<p>SSN6011- The Cascaded UUV Three-dimensional Trajectory Tracking Control Based on Model Predictive and Sliding Mode Control <i>Bing Sun, Wenyang Gan, Man Mei, Daqi Zhu</i></p>
	14:30~14:45	<p>SSN6012- Numerical Modeling of Dynamic Behavior for Jacket Foundation of Offshore Wind Turbine <i>Cheng-Yu Ku, Lien-Kwei Chien, Yan Su</i></p>
	14:45~15:00	<p>SSN6014- Investigation of effects of wave directions on hull wave load by hydroelastic experimental method <i>Zhan-Yang Chen</i></p>
	15:00~15:15	<p>SSN6016- Dynamic Response Analysis of Micro-Grid with Ocean Thermal Energy Conversion <i>Pei-Hwa Huang, Ming-Wang Chen, Chia-Yu Hsu</i></p>

Session B5

Date	Time	<p style="text-align: center;">Room B</p> SSE. Advances in Additive Manufacturing <i>Filip GÓRSKI, Session Chair</i> <i>Cheng-Mei Tung, Session Chair</i>
30th Oct. (Sun.)	13:30~13:45	SSE6001- A Knowledge-Based System for Machine Selection in the Metalworking Industry <i>Shang-Liang Cheng, Hoai-Nam Dinh, Cheng-Ru Yu and Yin-Ting Cheng</i>
	13:45~14:00	SSE6003- Substitute effects of additive manufacturing technology on dentures by system dynamics <i>Chiung-Wen Hsu, Cheng-Mei Tung</i>
	14:15~14:30	SSE6004- Selective Laser Melting for Production of Orthopaedic Implants with Gradient Porosity <i>Fousová Michaela, Kubásek Jiří, Vojtěch Dalibor</i>
	14:30~14:45	SSE6006- Mechanical properties of composite parts manufactured using Fused Deposition Modeling technology <i>Filip Górski, Radosław Wichniarek, Wiesław Kuczko, Paweł Buń, Adam Hamrol</i>
	14:45~15:00	SSE6007- Methodology of application of low-cost additive manufacturing for production of medical supplies <i>Filip Górski, Radosław Wichniarek, Wiesław Kuczko, Paweł Buń, Adam Hamrol</i>
	15:00~15:15	SSE6009- FaaS-based Advanced Additive Manufacturing System for Mass Customized Production <i>Hyoung Seok Kang, Wen Bin Zhao, Sun Hong Kim, Young Jun Jung, Sang Do Noh, Hyun Kim, Ji Yeon Son</i>

Session C5

Date	Time	<p style="text-align: center;">Room C</p> <p>E. Chemical & Biomedical Engineering, SC. Recent Advances in Biomaterials, SSL. Advances in Energy of Building and Indoor Environment <i>Kazuhiro Imai, Session Chair</i> <i>Chung-Jen Ou, Session Chair</i></p>
30th Oct. (Sun.)	13:30~13:45	<p>E6005- Arduino® Based LED and Laser Controller for Wireless Optogenetics <i>Chung-Jen Ou</i></p>
	13:45~14:00	<p>SC6002- In vivo Evaluation of Bulk Metallic Glasses for Orthopaedic Devices <i>Kazuhiro Imai</i></p>
	14:15~14:30	
	14:30~14:45	<p>SSL6007- Strategies of Energy Consumption Analysis for the Seasoning Helios Orbit Variations to the Indoor Illuminating Conditions <i>Chung-Jen Ou</i></p>
	14:45~15:00	<p>SSL6008- Experimental study and evaluation the performance of a sensible heat recovery exchanger combined with wet film <i>Wu-Yan Li, Jun Lu, Yong-Cai Li, Zong-Sheng Liu</i></p>
	15:00~15:15	<p>M6006- Novel Item Relational Structure Theory Based on Liu's Strict Item Ordering Consistence and Normalized Criteria <i>Hsiang-Chuan Liu, Yen-Kuei Yu, Hsien-Chang Tsai</i></p>

Session D5

Date	Time	<p style="text-align: center;">Room D</p> <p>K. Nanotechnology, SSC. Recent Advances in Microtechnology, O. Other Engineering and Technology related topics, SSH. Recent Advances in Environmental Engineering, SSL. Advances in Energy of Building and Indoor Environment</p> <p><i>Ming Chang, Session Chair</i> <i>Cheng-Yu Ku, Session Chair</i></p>
30th Oct. (Sun.)	13:30~13:45	<p>K6001- Separation criteria of nanoscale water droplets from a nozzle plate surface</p> <p><i>Van Quang Nguyen and Jau-Wen Lin</i></p>
	13:45~14:00	<p>SSC6001- Mixing Efficiency Enhancing in Micromixer by Controlled Magnetic Stirring of Fe₃O₄ Nanomaterial</p> <p><i>Ming Chang, Jacque Lynn F Gabayno, Ke-Wei Huang, Yaw-Jen Chang</i></p>
	14:15~14:30	<p>SSL6005- Climate Change Impacts on Energy Demand in Buildings using a Micro-Urban Climate Modeling System: Madrid case study</p> <p><i>Roberto San José, Juan L. Pérez, Libia Pérez, Julia Pecci, Antonio Garzón and Marino Palacios</i></p>
	14:30~14:45	<p>SSC6007- Effects of target material geometry and RF power on coating quality for Metal Deposition Process</p> <p><i>Bo-Wun Huang, Pu-Ping Yu, Wen-Ye Huang</i></p>
	14:45~15:00	<p>SSH6001- Human Health Impact Assessment of Global Climate over Milan and London at very high spatial resolution</p> <p><i>Roberto San José, Juan L. Pérez, Libia Pérez, Julia Pecci, Antonio Garzón and Marino Palacios</i></p>
	15:00~15:15	<p>SSH6002- Distributed Modeling of Rainfall-induced Shallow Landslides in Unsaturated Soil</p> <p><i>Chih-Yu Liu, Cheng-Yu Ku, Yan Su, Jing-En Xiao</i></p>

Session E5

Date	Time	<p style="text-align: center;">Room E D. Optical Engineering, SSB. Innovative Technology of Green Energy Harvest and Storage, WA. Biocomputing and Bioinformatics, <i>Yenming J. Chen, Session Chair</i> <i>Hsiang-Chuan Liu, Session Chair</i></p>
30th Oct. (Sun.)	13:30~13:45	<p>D6002- Design and Verification of a Flat-Field Aberration-Corrected Concave Blaze Grating for Hyperspectral Imaging <i>Cheng-Hao Ko, Sheng-Yu Tsai, Yueh-Hsun Wu, Jih-Run Tsai, Bang-Ji Wang, Shin-Fa Lin, and Chiu-Der Hsiao</i></p>
	13:45~14:00	<p>D6003- Two Dimensional Analytical Modeling of a Linear Variable Filter for Spectral Order Sorting <i>Cheng-Hao Ko, Yueh-Hsun Wu, Symphony Chakraborty, Jih-Run Tsai, Bang-Ji Wang, Shin-Fa Lin and Chiu-Der Hsiao</i></p>
	14:15~14:30	<p>SSB6003- Modeling and Simulation of IGCC Considering Pressure and Flow Distribution of Gasifier <i>Di Huang, Huisheng Zhang, Shilie Weng, Ming Su</i></p>
	14:30~14:45	<p>SSB6004- Strength Analysis for the Rudder of Power-Free Underwater Vehicle in Kuroshio Subjected to Typhoon Waves <i>Chuan-Tsung Lee, Ray-Yeng Yang, Huang Hsing Pan, Li-An Kuo</i></p>
	14:45~15:00	<p>WA6001- Novel Integrated Analysis for Breast Cancer Classification Based on Fisher Discriminant Analysis and Choquet Integral with Respect to Liu's Generalized Lambda Measure <i>Hsiang-Chuan Liu, Hsien-Chang Tsai, Yi-Chih Chien, Chien-Chang Kao and Shou-Tung Chen</i></p>
	15:00~15:15	<p>WA6002- Multi-Source Decision Making in Automatic ECG Diagnosis by Advanced Machine Learning <i>Yiu-Jen Chang, Paul Wei-Hua Tang, Wen-Hsien Ho, Yenming J. Chen</i></p>

Session A6

Date	Time	<p style="text-align: center;">Room A</p> SN. Swarm Intelligence and Innovation of Power Engineering Applications, SV. Recent Innovations and Smart Applications in Wireless Network <i>Ming-Hung Chen, Session Chair</i> <i>Shih-Chen Shi, Session Chair</i>
30th Oct. (Sun.)	15:30~15:45	SN6001- A backtracking evolutionary algorithm for power systems <i>Ji-Pyng Chiou, Chung-Fu Chang, Chin-Ju Li</i>
	15:45~16:00	SN6003- Robust ECG R Peaks detection using Artificial Bee Colony <i>Bing-Ci Wu, Chun-Ling Lin</i>
	16:00~16:15	SN6004- Development of a multi-sensor intelligent home environment monitoring system based on Arduino and Wi-Fi <i>Chun-Hsiang Hsu, Chun-Ling Lin</i>
	16:15~16:30	SN6005- Fall detection system using wearable accelerometers <i>Jhan-Fong Yu, Chun-Ling Lin</i>
	16:30~16:45	SN6006- Smart homecare system for tele-health monitoring <i>Yi-Chung Cheng, Chun-Ling Lin</i>
	16:45~17:00	SV6004- Grain Bulk Density Measurement Base on Wireless Network <i>Fangming Wu, Bingfang Wu, Leidong Yang</i>
	17:00~17:15	SV6006- A Novel Method for Measuring the Resilience of MANET Based on Time-Spatial Model <i>Wei-Qiang Wu, Ning Huang, Bo Hu, Yue Zhang</i>

Session B6

Date	Time	<p style="text-align: center;">Room B</p> SSM. Advances in Nursing, WC. Health Care Technology <i>Rong-Shue Hsiao, Session Chair</i> <i>Ping-Nan Chen, Session Chair</i>
30th Oct. (Sun.)	15:30~15:45	SSM6006- A Secure IoT based e-Nursing System with Wearable Healthcare Devices <i>Kuo-Hui Yeh</i>
	15:45~16:00	SSM6013- A Fuzzy Emergency Patients Classification in Nursing Stations at Taiwan Lantern Festival <i>Pin-Wen Huang, Yuli Lin, Kuan-Jung Chung, Zih-Ping Ho</i>
	16:00~16:15	
	16:15~16:30	WC6014- Sleeping Posture Recognition Based on Fuzzy C-Means Clustering <i>Chun-Hao Kao, Rong-Shue Hsiao, Mekuanint Agegnehu Bitew, Tian-Xiang Chen and Tzu-Yu Li</i>
	16:30~16:45	WC6016- The systematic node management mechanism based on the ZigBee-based Real-time Vital Signs Information Monitoring System for large number of patients <i>Ke-Feng Lin, Shih-Sung Lin, Min-Hsiung Hung, Chung-Hsien Ku, Ping-Nan Chen</i>
	16:45~17:00	WC6024- An Intelligent RFID Ambulance Warning System for Emergency Medical Services <i>Yeong-Lin Lai, Yung-Hua Chou, Li-Chih Chang</i>
	17:00~17:15	WC6027- Evaluation of Radiation Dose to Intraoperative Pedicle Screw Insertion at Operating Room <i>Hsien-Wen Chiang, Tzu-Chao Chuang, Ya-Ling Liu, Pao-Shu Chang, Tou-Rong Chen, Jao- Jai Jane, Shih-Yu Chao</i>

Session C6

Date	Time	<p style="text-align: center;">Room C B. Mechatronic and Robotics Engineering, C. Electrical & Electronic Engineering, O. Other Engineering and Technology related topics <i>Samima Akter, Session Chair</i> <i>Priyanath Das, Session Chair</i></p>
30th Oct. (Sun.)	15:30~15:45	<p>B6003- Measurement of Power and Energy Consumption of a Competition-Mobile-Robot <i>Tsing-Tshih Tsung, Yun-Ju Chuang, Ho Chang, Chun-Lun Shen, Yin-Tung Sun</i></p>
	15:45~16:00	<p>C6001- Analysis of Current Waveforms for Determining Motor's Quality Types by Using Modified Linear Discriminant Analysis <i>Yun-Chi Yeh, Tsung-Fu Chien, Cheng-Yuan Chang, Che Wun Chiou</i></p>
	16:00~16:15	<p>C6014- A Novel Unambiguous Alternative Binary Offset Carrier Signal Tracking <i>Keunhong Chae, Seungsoo Yoo, Sun Yong Kim, Gyu-In Jee, Dong-Jin Yeom, and Seokho Yoon</i></p>
	16:15~16:30	<p>C6015- A Novel Rapid Direct P-Code Acquisition Scheme <i>Keunhong Chae, Seungsoo Yoo, Sun Yong Kim, Gyu-In Jee, Dong-Jin Yeom, and Seokho Yoon</i></p>
	16:30~16:45	<p>C6016- Unambiguous Time-Multiplexed BOC Signal Tracking for GPS Receivers <i>Keunhong Chae, Seungsoo Yoo, Sun Yong Kim, Gyu-In Jee, Dong-Jin Yeom, and Seokho Yoon</i></p>
	16:45~17:00	<p>C6033- A Fault Location Identification Technique using Wavelet Transform <i>Samima Akter, Priyanath Das, Hemantha Badhai, Biman Kumar Saha Roy</i></p>
	17:00~17:15	<p>O6027- Analysis of Hospital Interior Air Quality Audits <i>Lee-Kuo Lin, Yan-Sin Cai, Yao-Chien Tsai</i></p>

Session D6

Date	Time	<p style="text-align: center;">Room D</p> SQ. Intelligent Manufacturing and Forming Technology <i>Gow-Yi Tzou, Session Chair</i> <i>Chao-Cheng Chang, Session Chair</i>
30th Oct. (Sun.)	15:30~15:45	SQ6001- Study of Hollow Stem Hip Bone Forming Processing <i>Dyi-Cheng Chen, Jheng-Guang Lin</i>
	15:45~16:00	SQ6002- Study of vibration characteristics and modal analysis in grinding machine <i>Dyi-Cheng Chen, Ming-Fei Chen, Jing-Hao Kang, Chia-Chun Lai</i>
	16:00~16:15	SQ6004- Analytical Approach to Rotating Compression of Porous Cylinder Considering Constant Shear Friction <i>Gow-Yi Tzou, Yeong-Maw Hwang, Sai-Chih Pan</i>
	16:15~16:30	SQ6005- Die Stress Analysis and Improvement of Welding Valve Stopper in Multi-Stage Forging <i>Gow-Yi Tzou, Un-Chin Chia, Kao-Hua Chang, Ching-Wei Shih</i>
	16:30~16:45	SQ6006- Discrete Particle Simulation of Copper Powder Compaction <i>Chao-Cheng Chang</i>
	16:45~17:00	SQ6007- Study on Metal Cutting Improvement of CNC Multi-axis Machine Using Vibration Platform <i>Shao-Yi Hsia, Wen-Bin Huang, Chen-Chung Chang</i>
	17:00~17:15	SQ6008- A Study on Scheduling Management of Shipbuilding Industry considering Working Environment <i>Jae-chul Lee, Ji-ho Jeong, Philip Wilson, Soon-sub Lee, Donghoon Kang, Jong-Hyun Lee, Sung-chul Shin</i>

Session E6

Date	Time	<p style="text-align: center;">Room E</p> <p>I. Control Engineering, J. Mechanical Engineering, O. Other Engineering and Technology related topics, WE. Medical Imaging, Image and Signal Processing, WF. Modelling, Simulation, Systems and Control</p> <p><i>Hung-Yi Chen, Session Chair</i> <i>Chung-Dann Kan, Session Chair</i></p>
30th Oct. (Sun.)	15:30~15:45	<p>I6002- Active Control for Non-Autonomous Diaphragm-type Pneumatic Isolation System by Using an Augmented Adaptive Sliding-mode Controller</p> <p><i>Hung-Yi Chen, Jin-Wei Liang</i></p>
	15:45~16:00	<p>WF6004- 2D Numerical model of nanowire electron transferring pathway in microbial fuel cell</p> <p><i>Tzu-Hsuan Lan, Chin-Tsan Wang, Yung-Chin Yang</i></p>
	16:00~16:15	<p>WE6001- A Simple Homecare Cardiac Arrhythmias Detection and Reporting System for the Elderly</p> <p><i>Yun-Chi Yeh, Tsung-Fu Chien, Cheng-Yuan Chang, Che Wun Chiou, Yun-Te Lin</i></p>
	16:15~16:30	<p>WE6012- Retrieving Hidden Atrial Repolarization Waves from the Surface ECGs</p> <p><i>Wen-Hsien Ho, Yenming J. Chen</i></p>
	16:30~16:45	<p>WE6016- Using a multiple regression model to early evaluated the stenosis of arteriovenous access with biophysical mock system</p> <p><i>Wei-Ling Chen, Chung-Dann Kan</i></p>
	16:45~17:00	<p>O6038- Research On The Path Of Synergetic Development Between Logistics Industry And The Leading Industries In Fujian Province</p> <p><i>Qiao-Ping Mei, Qi Jiang, Li Yang</i></p>
	17:00~17:15	<p>J6049- Numerical Simulation and Experimental Validation for the Thermal Analysis of a Compact LED Recessed Downlight with Heat Sink Design</p> <p><i>Huan-Chu Hsu, Yi-Cheng Huang</i></p>