



2017 ICAST PROCESS

11/23-11/25



National Kaohsiung First University of Science and Technology
Kumamoto University

11/23 - Day one

8:30-9:00	Register
09:00-09:10	Opening Address Bor-Tsuen Lin (Dean of College of Engineering, National Kaohsiung First University of Science and Technology)
09:10-09:20	Opening Address Chien-Cheng Tseng (Dean of College of Electrical Engineering and Computer Science, National Kaohsiung First University of Science and Technology)
09:20-09:30	Welcome Address Tsuyoshi Usagawa (Dean of Graduate School of Science and Technology, Kumamoto University)
09:30-10:00	Keynote Lecture (I) Tsuyoshi Usagawa (Graduate School of Science and Technology, Kumamoto University) “ Campus-wide e-Learning activities in Kumamoto University in the last decade”
10:00-10:30	Keynote Lecture (II) Chin-Der Wann (Associate Dean, College of Electrical Engineering and Computer Science) “Critical Thinking in Learning”
10:30-10:40	Introduction of First Tech
10:45-11:30	Poster session
11:30-13:00	Lunch
13:00-15:30	Oral session I (Room 608) J01 、 J02 、 J03 、 J04 、 J05 、 J06 、 J07 、 J08
	Oral session I (Room 609) K01 、 K02 、 K03 、 K04 、 K05 、 K06 、 K07 、 K08
	Oral session I (Room 610) I01 、 I02 、 I03 、 I04 、 I05 、 I06 、 I07 、 I08
	Oral session I (Room 611) M01 、 M02 、 M03 、 M04 、 M05 、 M06 、 M07
15:30-16:00	Teatime and break
16:00-17:45	Oral session II (Room 608) J09 、 C01 、 C02 、 C03 、 C04
	Oral session II (Room 609) I09 、 I10 、 I11 、 I12 、 I13 、 I14 、 I15 、 I16
	Oral session II (Room 610) G01 、 G02 、 G03 、 G04 、 G05
	Oral session II (Room 611) H01 、 H02 、 H03 、 H04 、 H05

11/24 – Day two

09:00-10:00	Oral session III (Room 608) B01、B02、B03
	Oral session III (Room 609) K09、K10、L01
	Oral session III (Room 610) A01、F01、F02
	Oral session III (Room 611) E01、E02、E03
10:00-11:00	Poster session (All poster)
11:00-11:30	Ending and Awards
11:30-13:00	Lunch

11/25 – Day three

8:30-8:45	Gather at Cingpu MRT station
8:45-9:45	To Luermen Tienhogong
9:45-11:00	Visit Luermen Tienhogong
11:00-13:40	Have lunch
13:40-14:00	To Southern Branch of the National Palace Museum
14:00-17:00	Visit Southern Branch of the National Palace Museum
17:00-18:30	Back to Cingpu MRT station

Payment instructions:

1. Detailed cost of each person:

Rent of the shuttle bus	\$ 235 NTD
Meal	\$ 222 NTD
Ticket of Museum	\$ 260 NTD
Total	\$ 717 NTD

2. ICAST will provide subsidy on this field trip. So each person who will join the field trip will be required to pay **\$500 NTD** to the travel counter while you check in.

Oral sessions

- (A) Mathematics
- (B) Physics
- (C) Chemistry
- (D) Earth and Environments
- (E) Biological science
- (F) Applied Chemistry and Biochemistry
- (G) Material Science and Engineering
- (H) Mechanical System Engineering
- (I) Computer Science and Electrical Engineering
- (J) Civil and Environmental Engineering
- (K) Architecture
- (L) Multidisciplinary
- (M) General session

Oral session I (Room 608):

No.	Name	Title
J01	YIN-SEN	Loan of building external walls renovation
J02	Chen,Yen-Ting	A Research of Factors that Influence the Different Construction Methods and Characteristic Combinations on Adhesion Strength of Ceramic Tile
J03	Hsueh Chien-Wang	Innovative sludge reduction technology-factors study
J04	Xin Yi -Xiao	Yest inoculation and selection from distiller's yeast
J05	Dun Sheng-Yang	Physical and chemical properties of gasoline and asphalt mixture-preliminary study
J06	Lee Chih-Wei	COD removal of dyeing wastewater by rice husk carbon (RHC)
J07	CHEN,HONG,YU	Study of Alkali-activated Slag Binders
J08	haoyu-Chu	Using a microbiome for the dechlorination of 2,4-Dichlorophenol

Oral session I (Room 609):

No.	Name	Title
K01	Zhu Beilin	Evaluation on Ecological Environment Evolution of Hangzhou Based on Remote Sensing and Index Evaluation Method
K02	Liu Yiwei	Evaluating the Influence on urban Heat Island Phenomena in Summer from Japanese Style Traditional Residential Houses in Taiwan
K03	Chien-Hui Chean	Study on the Living Environment of Elderly People by Moisture Problem-A Case Study of Mountainous Housing
K04	Hikaru Shirasaka	Development of Structural Design Support System on the World Wide Web
K05	Momoko Otaku	An experiment of the effects of acoustic conditions on children's word intelligibility
K06	Rina Yoshidome	A measurement of acoustic power levels of sound sources in an actual nursery rooms
K07	Daiki Hirata	Seismic Response of Steel Frame with Elastic Outer Columns Equipped with Friction Damper at Base
K08	Aya Tateno	Sliding and Rocking Response of Multi-storied Steel Frame Equipped with Friction Damper at Base under Strong Earthquake

Oral session I (Room 610):

No.	Name	Title
I01	KARTIK GANIGA	Sybil Defence In Open Wireless Network
I02	AISHWARYA SARASWATHI H.M	An Efficient Approach to Dynamic Data Load Balancing in MongoDB
I03	MUHAMMAD- BELLO, BILKISU LARA	RBCWS: a Robust Budget-Conscious Workflow Scheduling Algorithm for Handling Uncertainty in IaaS Clouds
I04	Nancy Jeane Tuturoong	Social Emotional Indicator of Early Childhood Education and Development in Indonesia: A Literature Study Related to Constructivist Learning
I05	Hendarmawan	A study of distributed intranet architecture for educational platform as a solution for Sustainable Development Goals (SDGs)
I06	Theingi Myint	Effect of High Fanout Nets for FPGA Routing Architecture
I07	Koichi Furuya	Broadband Linear to Circular Polarization Reflector Using Modified Metasurface
I08	MON MON THE	Effect of Online Quizzes for Blended Learning at Yangon Technological University

Oral session I (Room 611):

No.	Name	Title
M01	Andan Sigit Purwoko	Global Navigation Satellite System Sensor for Sea Level Monitoring using RTKLIB
M02	MUMAND Fahim	Using non-destructive inspection to determine the self-healing of concrete
M03	Syifa Nashella Rahmah Astaman	Impact of Forest Fires to Total Carbon Emission that Affect Climate Change in Riau Province
M04	Jeremy Gohitua MacArthur	Bamboo Utilization for Mitigation of Landslide Potential using Landsat Imaginary Map and Geological Data, Study Case at Pacitan, East Java, Indonesia
M05	Natsuki Yamamoto	THE ROAD SUBCIDENCE CAUSED BY THE DEFECTED SEWER PIPE AND ITS TREND OF RESEARCH
M06	YOKO SHIMOO	Effective use of Aroma for care after disaster
M07	Norika Narimatsu and Ayaka Kosai	Visualization of Beat by using a "Vibration Speaker"

Oral session II (Room 608):

No.	Name	Title
J09	Yu Shu Qiu	Research on Cost-Effective Mixing Design of Slag Concrete
C01	Moh Mualliful Ilmi	Ultra-high capacity Adsorbent : Green Synthesis of ZIF-67 nanopores as solution for Pb^{2+} heavy metal pollution problem in aquatic environments
C02	Ryohei Akiyoshi	Construction of supramolecular structures of Co(II)-metallo-macrocycle incorporating lipid amphiphilic molecule
C03	Sotaro Kusumoto	Syntheses of the dimeric cubane Ni(II) capsules and guest-tuned ferromagnetic coupling
C04	Hikaru Kitayama	Magnetic Behavior of Spin Crossover Complex between Graphene Oxide Layers

Oral session II (Room 609):

No.	Name	Title
I09	Otgontsetseg Sukhbaatar	Predicting academic performance of students in online learning environment using classification method
I10	Habibur Rohman	Optimal Placement and Sizing of SVC (Static VAR Compensator) for Voltage Security Improvement Using Quantum Behaved Particle Swarm Optimization
I11	Chou Tsung Yuan	Application of the Internet of Everything in Educational
I12	Bo-Yue Zeng	Integration of Robot Arm and Machine Vision: Imitate human drawing mode
I13	Ryo Fukumura	Development of Compact Pulsed Power Modulator for Biological Applications
I14	Takasumi Ikebe	Effects of Nanosecond Pulse Electric Discharge Underwater Shock Waves on the Proliferation of Histiocytic Lymphoma Cells
I15	Hironori Uchinohae	Research on Immediately Ca^{2+} Increase of Hela-S3 to Nanosecond Pulse Electric Field
I16	Shinji Hirakawa	Inactivation of Bacteria in Liquid Food by Pulsed Electric Fields (PEF) with Moderate Thermal Energy: Roles of PEF and Thermal Treatments on Bacterial Inactivation

Oral session II (Room 610):

No.	Name	Title
G01	Shota Hisada	Martensitic Transformation and Crystal Structure in Equiatomic HfPd Alloy
G02	Hiroki Ito	Grain boundary engineering for improving hydrogen embrittlement of SCM435 steel
G03	Yusuke Nagaoka	Microstructural changes of titanium heated with a mixture of iron, graphite and alumina powders in the air
G04	Yu-Cyuan Ciou	Preliminary study on effects of admixture on the strength of foamed concrete
G05	An, Miao	Development of The Polycarboxylic Slump Retaining Admixture Preparation and Application.

Oral session II (Room 611):

No.	Name	Title
H01	Mr. HITHESH G SHETTY	Effect of Reflow and Isothermal Aging Temperature on Sn-Pb and Pb-free Solder/Substrate Interfacial Regions
H02	SANDESH G SHETTY	Study of Thermal Resistance on Interface Materials
H03	PRAJESH YOGESHBHAI ASHRA	Study of Vibrational Analysis of Cantilever Beam Made by Natural Hybrid Fibre Composites
H04	Li-Wei Yang	Optical Design of High Contrast Reading Panel Using Edge-lit LED Light Guide Plate
H05	Suprayitno	Optimum Design of Micro-edge Deep Drawing Punch

Oral session III (Room 608):

No.	Name	Title
B01	Yuichi Uchida	Electronic Structure of Titania Nanosheets with Vacancies Based on First-principles Calculations
B02	WANG,CHIH-TENG	Developing a Method to Shorten the Lighting Luminosity Measuring Distance
B03	WAN-HSUAN,CHEN	The Study on Development of Surgical Lights Module for LED Source

Oral session III (Room 609):

No.	Name	Title
K09	Yuta Sasaki	Damage of ceiling systems after the Kumamoto earthquakes -A steel school buildings
K10	YU - CHUN, YAO	Simulation Analysis for Passive Buildings by Building Information Modeling
L01	Yoshihide Furukawa	Portfolio Evaluation of Thermal Power Plant Investment based on Risk-Sensitive Value Measure

Oral session III (Room 610):

No.	Name	Title
A01	Felipe R. Sumalpong, Jr.	British Put Option in a Regime-Switching Model
F01	Ayaka Yamamoto	Synthesis and Characterization of Graphene Oxide-based CO_2 Adsorbents
F02	Keisuke Awaya	Ultrathin NiO/ $Ti_{0.91}O_2$ p-n Junction and its Depletion Layer

Oral session III (Room 611):

No.	Name	Title
E01	Hiu-Chi Tseng	Internet of Things Electronic handcuffs monitoring system with biometrics function of the system architecture
E02	Jin-zhou Jiang	Improvement of phenolics degradation by high efficiency biological sludge
E03	Chang Kai Wei	The influence of Anammox sludge growth on the Ammonia-Nitrogen removal rate

Poster sessions:

No.	Name	Title
B01-p	Shinya Nakaguchi	First-principles molecular dynamics study of Fe-S melts under outer-core conditions
B02-p	Eisaku Ushijima	Free Energy of Liquid Phase of Rare Gas Element by Thermodynamic Integration
C01-p	Yuta Kido	Fabrication of pn junction films using ZnO nanorods and semiconductor nanocrystals for gas sensing
C02-p	Yudai Hirano	Hydrogen generation from water by graphene oxide electrode
E01-p	Lini Murni	Production of a novel antimicrobial protein peocin from <i>Paenibacillus ehimensis</i> by recombinant <i>E. coli</i>
F01-p	Ikumi Morikawa	Quantitative prediction of biochemical activity of chemicals targeting biogenic amine receptors
F02-p	Takafumi Inoue	A 3D quantum chemical QSAR study on the fatty acid synthase inhibitor for cancer therapy
G01-p	Ryota Fukumori	Orientation dependence on Bending Deformation in Pure Magnesium sheets
G02-p	Hiroaki Fukuda	Effects of wire brushing and annealing on microstructure and tensile properties of AZ61Mg alloys
H01-p	Huang YuChun	Development of embedded high pressure pipe pressure monitoring device
H02-p	Lin,Guan-Liang	Research on the planning and design of high efficiency and energy saving in robot arm carry the glass substrate
I01-p	Bo-Shun Yang, Hao-Shiang Chang	Estimation on Wind Speed and Status Assessment Using Kalman Filtering
I02-p	Tohko Nishiyama	A low-profile antenna for unidirectional beam pattern in horizontal plane
I03-p	Ryunosuke Makihara	Developing a Dashboard System Designed to Support Summarizing Learning Activities Collected through Web Browser - Implementation with IMS Caliper and OpenLRS-
I04-p	Kai Kiyota	Real-Time Frequency Domain Binaural Model-Based Speech Segregation using a Single Board Computer - Application for Binaural Hearing Aids -
I05-p	Shoya Jinnai	Trade-off Measurements between Interaural Level and Time Differences using One-third-octave-band Noise by means of Bone Conduction Actuators
I06-p	Takuya Mori	On trade-off phenomenon between interaural time and level differences for bone conduction- Method of Constant vs Method of Adjustment-
I07-p	Wenang Song	Detection of Kaminsky attack using DNS log
I08-p	Ying-Lin Guo	Target Positioning and Tracking in Small-Cell Mobile Communications Networks