

SEATUC Symposium 2016 Final Program

February 23, Tuesday

Plenary Session (9:30-12:30)

Large Lecture Room (Multi-Activity Building)

- 9:30-9:45 Opening Ceremony
- 9:45-10:15 Keynote Speech
 JICA's Assistance in Higher Education Sector in Southeast Asia and
 Contribution to Science and Technology Promotion
 -Takao Toda (Director General, Human Development Department, Japan
 International Cooperation Agency (JICA))
- 10:30-12:30 President Panel

Special Session (13:30-15:00)

Four distinguished professors will serve their presentation.

Room #403 (chair: Prof. Goro Fujita [SIT])

- SS01 High Power Long Distance Wireless Power Transfer System for EV Dynamic Charging
 - As a Demonstrator of Center for Power Electronics in SIT-
 Kan Akatsu (Professor, SIT)
- SS02 Project for Development of Low Carbon Society (LCS) Scenarios for Asia Regions
 Ho Chin Siong (Professor, UTM)

Room #404 (chair: Prof. Muralidhar Miryala)

- SS03 Recent Development of Smart Materials and Biomedical Engineering Research in Thailand
 Anak Khantachawana (Assistant Professor, KMUTT)
- SS04 Preparation and Application of Microfibrillated Cellulose (MFC) from Bamboo for Composite
 Materials
 Bui Chuong (Professor, HUST)

Technical Session (15:30-18:00)

Time slot 1 (15:30-16:30)

Room #403 (chair: Prof. Kimiyoshi Usami [SIT])

- OS02-01 A Preliminary Study of Background Colour Effects for Elderly and Young People by Using Near
 Infra-Red Spectroscopy
 Muhammad Nur Adilin Mohd Anuardi, Hideyuki Shinohara, Atsuko K. Yamazaki
- OS02-02 Affective Evaluation for Material Perception of Bead-Coated Resin Surfaces Using Visual and
 Tactile Sensations: Selection of Evaluation Items Focusing on Color Effects
 Wataru Morishita, Ryuji Miyazaki, Michiko Ohkura, Masato Takahashi, Hiroko Sakurai, Kiyotaka
 Yarimizu, Akira Nakahara
- OS02-03 Effects of Emotionally Induced Sounds to the Language Area of the Brain
 Ainaa Farhanah binti Ismail, Atsuko K. Yamazaki

Room #404 (chair: Prof. Muralidhar Miryala [SIT])

- OS06-01 Plasma Nitriding of Fine Micro-Patterned Martensitic Stainless Steel Mold for Injection Molding
 Tharitwach Aswapanyawongse, Tatsuhiko Aizawa

- OS06-02 The Theory of Tin Whiskers Growth Behaviour for Pure Tin Surface Finish
Nor Akmal Fadil, Siti Zahira Yusof, Ali Ourdjini
- OS06-03 Effect of Parameters in High Pressure Die Casting on Surface Quality
Nattawat Pinrath, Prapakorn Pitayachaval, Pongsak Dulyapraphant, Verachai Arjarn

Room #405 (chair: Prof. Akihiko Hanafusa [SIT])

- OS04-01 Preliminary Survey of Trematode Metacercariae in Cyprinoid Fish from Lam Pao Dam, Kalasin, Thailand
Nipawan Labunruang, Jeerapaporn Insrichaengmai, Sasirin Chairach
- OS04-02 Cercarial Emergence and Longevity of *Opisthorchis Viverrini* in *Bithynia Siamensis Goniomphalos*
Jutharat Kulsantiwong, Sattrachai Prasopdee
- OS04-03 Decline in the Abundance of Fish in the Main Tributaries of the Mekong River in Upper Northeastern Thailand
Wiwat Kaensa, Chanapond Rattanamalee

Room #406 (chair: Prof. Kazunori Mano [SIT])

- OS02-04 A Machine Learning Based Network Monitoring and Management System
Tan Phan-Xuan, Eiji Kamioka
- OS02-05 An SDN-Based Approach to Reduce Wireless Mobile Devices Energy Consumption
Toan Nguyen-Duc, Eiji Kamioka
- OS02-06 A Study of a Native Docker Clustering System on a Power-Constrained Environment
Chanwit Kaewkasi, Wichai Srisuruk, Bhuridech Sudsee, Pathawee Ngoenthai

Room #407 (chair: Prof. Masahiro Inoue [SIT])

- OS11-01 The Radio Frequency Heating to Eliminate Microorganisms in Wine Packaged in Glass Jars Sealed
Chanon Srisuma, Kompisit Krajaipote, Worawut Boonpeang, Poramin Kuntayom, Supawat, Kochapradit, Sumran Santalunai, Thanaset Thosdeekoraphat, Chanchai Thongsopa
- OS11-02 Effect of Current Stress on Formation and Crystallinity of Multilayer Graphene by Solid Phase Precipitation
Md. Sahab Uddin, Hiroyasu Ichikawa, Shota Sano, Kazuyoshi Ueno
- OS11-03 Water Condensation Generator Based on Peltier Cooler Module
Aittitep Phungmuang, Assoc Prof Dr Peerapong Uthansakul

Room #505 (chair: Prof. Naoki Ono [SIT])

- OS08-01 EMS Location Analysis to Minimize Service Risk
Natdanai Chanlawong, Phongchai Jittamai
- OS08-02 Speed-Flow Relationship for Two-Lane Single Carriageway Road
Othman Che Puan, Nur Syahriza Muhamad Nor, Nordiana Mashros
- OS08-03 Simulation of Navigation Control and Obstacle Avoidance for AGV by Computer Vision with Artificial Neural Networks
Jittima Varagul, Toshio Ito

Room #506 (chair: Assoc. Prof. Pornsiri Jongkol [SUT])

- OS04-04 Combination of Impedance Cardiography (ICG) and Electrocardiography (ECG) in Detecting Characteristic Points on ICG Curve
Nguyen Minh Duc, Hoang Thi Nga, Nguyen Tuan Linh, Nguyen Thai Ha, Nguyen Duc Thuan
- OS04-13 How Does the Yeast *Saccharomyces Cerevisiae* Cope with Stresses?
Nitnipa Soontorngun
- OS04-06 Price Strategy Study of Two Cassava Processing Manufacturers
Salintip Pumpeam, Pavee Siriruk

Room #507 (chair: Prof. Chiaki Nakayama [SIT])

- OS12-01 14 Years Experience of "Sturctor" the In-House 2D Structure Analysis Software
Thanakorn Kaewsiriwan, Rungsun Insoon, Natta Orprasert, Manita Paichatturas, Sart Sukprasert, Suksun Horpibulsuk
- OS12-02 Program Design on Global Project Based Learning for Multicultural and Multidisciplinary Engineering Students in Collaboration with Local Communities
Sayoko Oda, Hiroshi Hasegawa, Atsuko K. Yamazaki, Masahiro Inoue, Yoshimi Furukawa, Kazunori Mano

OS12-03 Integrated Learning towards a Trend of the 21st Century Classroom
On-Uma Lasunon, Suopor Hiranchiracheep

Time slot 2 (17:00-18:00)

Room #403 (chair: Prof. Atsuko K. Yamazaki [SIT])

- OS02-07 Evaluation of Levels of Kawaii Ribbons between Japanese and Saudi Arabians
Barnawi Enayyah Mohammed, Michiko Ohkura
- OS02-08 The Study of Kawaii Feeling by Using Eye Tracking
Tipporn Laohakangvalvit, Ikumi Iida, Saromporn Charoenpit, Michiko Ohkura
- OS02-09 The Accessibility of South East Asian Technical Universities Websites
Sorachai Kamollimsakul

Room #404 (chair: Prof. Ayako Yamamoto [SIT])

- OS06-04 Bagasse Fiber-Chloroacetylated Natural Rubber Composites:
Esterification Crosslinking
Ploenpit Boochathum, Kanjanabha Sratongmao, Anusara Hiransri
- OS06-05 An Adaptive De-Cubing Processing for Laminated Object Manufacturing (LOM) Based on Contour
Proportion in Each Square Cube
Paphakorn Pitayachaval, Paramate Horkaew, Niramol Chaphol
- OS06-06 The Influence of Reheat-Treatment on Properties of Diamond-Like Carbon Film
Nutthanun Moolsradoo

Room #405 (chair: Assoc. Prof. Kenichi Iwata [SIT])

- OS04-07 Fractionation and Antioxidant Activities of the Protein Hydrolysate from Boletus Mushroom
(Boletus Colossus)
Jindaporn Khongdetch, Natta Laohakunjit, Orapin Kerdchoechuen, Khanok Ratanakhanokchai,
Surapong Pinitglang
- OS04-08 Grain Morphology and Mineral Elements Content in Rice Landraces
Theera Thummawongsa, Kanya Manok, Kanyarat Chaekkrathok, Saijai Posoongnoen
- OS04-09 Functional Properties of Fractionated Maize Protein Hydrolysate Obtained by Ultrafiltration
Orrapun Selamassakul, Natta Laohakunjit, Orapin Kerdchoechuen

Room #406 (chair: Prof. Kazunori Mano [SIT])

- OS02-10 Vibration-Based Data Communication between Smartphones
Keishi Usa, Eiji Kamioka
- OS02-11 A Comparison between Two Image Detection Algorithms on Neck Angle Detection and a Prolonged
Usage Classification Concept
Worawat Lawanont, Pornchai Mongkolnam, Chakarida Nukoolkit, Masahiro Inoue
- OS02-12 Speaker Change Detection Considering Mobile Device Environment
Masashi Tateno, Eiji Kamioka

Room #407 (chair: Prof. Kazuyoshi Ueno [SIT])

- OS11-04 A Current-Mode Sinusoidal Quadrature Oscillator Using Single CCCFTA
Thanaset Thosdeekoraphat, Chanchai Thongsopa, Worawut Boonpeang, Supawat Kochapradit,
Charinsak Saetiaiw, Saksit Summart
- OS11-05 The Effects of Stray Field in Difference of Bit Patterns Exposure on Read Head Performance
Ploybussara Gomasang, Rardchawadee Silapunt
- OS11-06 Study and Analysis of the Different Microwave Drying Power Effects on the Microstructure of Air
Dried Sheet (ADS) Rubber
Kompisit Krajaipote, Worawut Boonpeang, Chanon Srisuma, Poramin Kuntayom,
Supawat ,Kochapradit, Thanaset Thosdeekoraphat, Samran Santalunai, Chanchai Thongsopa

Room #505 (chair: Prof. Naoki Ono [SIT])

- OS08-04 Integral Abutment Bridge Model Exploration: Different Boundary Condition from Simply Supported to Fully-Fixed
Muhammad Khairil Ibrahim, Azlan Ab Rahman, Baderul Hisham Ahmad, Fairul Zahri Mohamad Abas
- OS08-05 Towards Japan's Future EV-Friendly Highway Concept with In-Motion Road-Embedded Wireless Chargers
Azreezal Zairee Bin Omar, Goro Fujita

Room #506 (chair: Assist. Prof. Nitnipa Soontornngun [KMUTT])

- OS04-10 Hand and Foot Anthropometry of Elderly
Suwittaya Thienpratharn, Pornsiri Jongkol, Wannisa Nutkhum, Porapat Sinlapasat
- OS04-11 Finite Element Method for Evaluation of Transfemoral Prosthesis Sockets
Le Van Tuan, Onishi Kengo, Otsuka Hiroshi, Agarie Yukio, Akihiko Hanafusa, Shinichiro Yamamoto
- OS04-12 Quantitative Analysis and Evaluation of Prosthetic Sockets for Trans-Femoral Amputees
Kazuma Kurosawa, Yoshitaka Kudo, Takuya Saito, Yukio Agarie, Hiroshi Otsuka, Kengo Onishi, Akihiko Hanafusa, Shin-Ichiro Yamamoto

Room #507 (chair: Prof. Kazuhisa Ito [SIT])

- OS05-01 Design and Prototyping for Control an Automated Storage and Retrieval System
Parinyawat Boonsingh, Wichai Srisuruk, Kontorn Chamniprasart
- OS05-02 Development of a Small Interface Robot Using RT-Middleware as a Common Robot Platform
Mirai Shimoyama, Kazuma Fujimoto, Motohiro Yasuda, Nobuto Matsuhira
- OS05-03 Factory Automation System for Learning: Automate Material Handling System
Piyapong Nootong, Kontorn Chamniprasart

Poster Session (15:00-15:30, 16:30-17:00)

Poster presenters have to appear in front of your posters in both time slots.

4F Lobby

- PS01-01 An Investigation of Soil Battery Voltage Efficiency with Several of Parameters
Narong Mungkung, Somchai Arunrungrusmi, Pakpoom Chansri, Toshi fumiyuji
- PS01-02 High Nitrate Wastewater Treatment Using Biofilter with Natural Media
Jiranan Jattutasri, Soydoa Vinitnantharat, Sivawan Phoolphundh
- PS01-03 Methane Emission from Powder Organic Fertilizer and Granule Organic Fertilizer in Paddy Field
Sasidhorn Buddhawong, Sivawan Phoolphundh, Sawanya Junbang, Soydoa Vinitnantharat
- PS01-04 The Effect of Building Form Manipulation on Cooling Load Performance of Medium Rise Building
Wan Sharizatul Suraya, W.M.Rashdi, Mohamed Rashid Embi
- PS01-05 Acid Concentration through Ultrahigh Flux Membranes
Kotone Oura, Motoki Kitajima, Ayumi Ikeda, Mikihiro Nomura, Takahiro Saito, Hiromasa Tawarayama, Shinji Ishikawa, Kazuya Kuwahara
- PS01-06 Ethanol Permeation from Sake through Ceramic Membranes
Hitoshi Aoki, Gabriel Gama da Silva Figueiredo, Motoki Kitajima, Kotone Oura, Ayumi Ikeda, Mikihiro Nomura
- PS01-07 Developments of Ion Exchange Membranes for the Thermochemical Hydrogen Production I-S Process
Takehide Kodaira, Kotone Oura, Ayumi Ikeda, Mikihiro Nomura, Yasuhito Naka, Shin-ichiro Imabayashi, Shin-ichi Sawada, Tetsuya Yamaki, Nobuyuki Tanaka, Shinji Kubo
- PS02-01 Dollhouse-Smart House Interface: Age 3+ Operates Household Appliances
Shohei Imanara, Ryota Horie

- PS02-02 Multi-Objective Planning and Optimization for Wimax Site Placement:
Case Study in Nakhon Ratchasima City, Thailand
Chitapong Wechtaigsong, Chutima Prommak, Ekkaluk Eksook
- PS02-03 Quantization Noise Reduction of Linear PCM Sound by Using Denoising Auto-Encoder
Shohei Oouchi, Kazunori Mano
- PS02-04 Emotion Perception Analysis in Whispered Speech
Yuya Matsumoto, Kazunori Mano
- PS02-05 Beaconless Approach to Maintain Optical Link for Free- Space Laser Communication
Keiichi Yano, Koichi Gyoda
- PS02-06 A Visualization Method of Human Speech Impressions by Using Speech Balloons
Tomohiro Yamada, Kazunori Mano
- PS02-07 The Multiple-Linear Regression Model for Analyzing the Factors of Customer's Purchasing Process
Eri Usami, Vajirasak Vanijja, Masahiro Inoue
- PS03-01 CASBEE-City (Worldwide Use) Assessment in Johor Bahru
Akmal Hakim, Loon Wai Chau, Chin Siong Ho, Shuzo Murakami, Toshiharu Ikaga, Shun Kawakubo
- PS03-02 Integrated Stop Transit for Pedestrian in Pasir Gudang
Nur Syazwani Saari, Sharifah Salwa Mahdzar, Sara Jaberolansar
- PS03-03 The Zoning System in Japan: The Coexistence of High- and Low-Rise Buildings
Serge Gérard N. Ekpodessi, Jun Watanabe, Hitoshi Nakamura
- PS03-04 Navigation for Location-Based Data Acquisition Using Geofences
Masafumi Nakagawa, Toshiaki Kamio, Hiroaki Yasojima, Yosuke Miyagaki
- PS03-05 Geo-Tagged Image Acquisition and Management in Sabo Facility Inspection
Masafumi Nakagawa, Yosuke Miyagaki, Tomoya Nuno, Yuuki Saito, Yasuaki Noda, Kazuyuki Hashimoto, Masaya Ito, Masahiro Miyo
- PS03-06 Patch-Based Texture Reconstruction from Colored Point Cloud
Masafumi Nakagawa, Tomoya Nuno, Takuya Takahashi, Yumi Hanawa, Sho Takayama
- PS03-07 Development of Seismic Response Control Rack for Automatic Warehouse
Hidetaka Funaki, Fumitoshi Kumazawa, Kenji Kabayama
- PS04-01 Expression of Recombinant Protein ORF2 from Porcine Circovirus in Escherichia Coli without Isopropyl- β -Thiogalactoside Inducer
Truong Quoc Phong
- PS04-02 Exploitation of Bioactive Components from Extracts of Ginger, Galangal to Preserve of Squid and Cuttlefish
PhanThanh Tam, Nguyen Hai Yen, Le Sy Hong Lam
- PS04-03 Effect of Inclined Support Surface on Postural Strategy during Platform Translation
Jun Kawano, Shin-Ichiro Yamamoto
- PS04-04 Quantitative Assessment for Trans-Femoral Prosthetic Socket
Yoshitaka Kudo, Kazuma Kurosawa, Takuya Saito, Yukio Agarie, Hiroshi Otsuka, Kengo, Onishi, Akihiko Hanafusa, Shin-ichiroh Yamamoto
- PS04-05 HIV-1 Tat or Rev Fused Fluorescent Proteins, Their Regulation for Emission Induced by Binding with Corresponding RNAs
Yusuke Ito, Chie Nakagawa, Naoki Ooizumi, Syougo Yokota, Kazuya Takahashi, Seiya Urata, Hiroaki Kozuka, Keita Hamasaki

February 24, Wednesday

Intensive Workshop (9:00-16:00)

Room #403

Intensive workshop will be held for the final presentations of “Intensive Workshop”, one of a common course in Master course, Shibaura Institute of Technology. Anyone is welcome to join this session and discuss with presenters.

Technical Session (9:00-16:00)

Time slot 1 (9:00-10:20)

Room #404 (chair: Prof. Muralidhar Miryala [SIT])

- OS06-07 High Density Plasma Nitriding of Pure Titanium
Josephine M. Windajanti, T. Aizawa, D.J. Djoko H.S.
- OS06-08 Low Temperature Plasma Nitriding of Pure Tantalum for Industrial Applications
Tatsuhiko Aizawa
- OS06-09 Performance Evaluation of Ankle Foot Orthoses Based on Biosignal Feedback and Ankle Position
Dimas Adiputra, Saiful Amri Mazlan, Hairi Zamzuri, Mohd Azizi Abdul Rahman
- OS06-10 Investigation of Design Parameters Affecting on Mechanical Properties of Coronary Artery Stent Made by Shape Memory Alloys
Sutthinai Uthaiwattananont, Anak Khantachawana

Room #405 (chair: Prof. Mitsuo Yamashita [SIT])

- OS04-05 Effect of Somatosensory Input from Plantar Sole and Lower Limb Muscle in Human Erect Standing
Yohei Okumura, Shin-Ichiro Yamamoto
- OS04-14 The Study on Multi-Stage Bio-Extract Production from Wastewater Originated from Virgin Coconut Oil Manufacturing Process with Fish Wastes
Sasithorn Kusuwanwichid , Sudarut Tripetchkul, Saengchai Akeprathumchai
- OS04-15 Rhizobium Isolates Antagonistic Activity against Fusarium sp. FT-04 Cause of Fusarium Wilt of Tomato
Kingchan Malisorn, Nathapong Malisorn
- OS04-16 Possible Role of Phenolic Compounds on Vermicomposting of Coir Pith
Kanokwan Pundee, Saengchai Akeprathumchai, Sudarut Tripetchkul

Room #406 (chair: Assoc. Prof. Hiroaki Morino [SIT])

- OS02-13 The Tradeoff between Power Consumption and Average Throughput for Energy Efficient Macrocell Strategy
Nur Ellina Binti Ishak, Eiji Kamioka
- OS02-14 Network Selection in Heterogeneous Network Using Analytic Hierarchy Process
N. Effiyana Ghazali, S. H. S. Ariffin, M. A. Baharudin
- OS02-15 Precise Packer Detection Using Model Checking
Nguyen Minh Hai, Do Duy Phong, Quan Thanh Tho, Le Duc Anh
- OS02-16 Reducing Packet Losses during Handover Process via Simple Adaptive RSS Threshold Concept
Muhammad Ariff Baharudin, Eiji Kamioka

Room #407 (chair: Prof. Yoshihiro Niitsu [SIT])

- OS11-07 Study of Rectenna Using Directive Antenna at Frequency of 2.45 GHz
Watcharaphon Naktong, Nuchanart Fhafhiam, Apinya Innok, Amnoiy Ruengwaree
- OS11-08 Analytical Framework for Velocity-Considered SINR Based Vertical Handoff with Dynamic Threshold
Damar Widjaja, Peerapong Uthansakul

- OS11-09 The Ring Antenna with I-Shaped Feeding on Circular Reflector Plane for RFID Applications
Nuchanart Fhaphiem, Piyadanai Boonmaitree, Apinya Innok
- OS11-10 Investigation on the Effect of User Position in Mimo Cognitive Radio Systems with Overlapping Spectrum Sharing
Rattasat Laikanok, Peerapong Uthansakul, Monthippa Uthansakul

Room #503 (chair: Prof. Mikihiro Nomura [SIT])

- OS01-01 Using Well Logging Data to Predict Permeability of a Complex Formation
Fadhil Sarhan Kadhim, Ariffin Samsuri, Ahmad Kamal Idris
- OS01-02 Feasibility Study of Positioning for Free-Fall Type Underwater Observatory System Using Dynamic Image Analysis
Kouki Noguchi, Yuta Sato, Takuya Matsumoto, Kenta Hata, Yoshikazu Koike, Hiroaki Morino, Etsuro Shimizu, Kunio Sakata, Shigeo Itoi, Yoshinari Kou, J Itaru Kawakami, Kuniaki Kurihara, Junich Muramoto
- OS01-03 S1 PWR Subchannel Void Distribution Using CFD Methods
T.K.D. Hoang, P.K. Nguyen, V.H. Pham, X.L. Bui
- OS01-04 Development and Verification of Offshore Wind Farm Layout Optimization Numerical Model with Wake Losses
Danai Kollasuta, Chawin Chantharasenawong

Room #504 (chair: Prof. Goro Fujita [SIT])

- OS10-01 Building Thermal Modeling Based on Energy Consumption and Ambient Temperature
Minh-Hoang LE, Trung-Kien NGUYEN
- OS10-02 Reactive Current Compensating Device for High-Frequency Transformer
Takahiro Ogiya, Satoshi Ogihara, Kazuo Kobayashi, Satoshi Matsumoto
- OS10-03 Cyclability Performance of Electric Double Layer Capacitor with Glass Wool Separator
Mohd Ferdaus Mohammad Yaacob & Zulkarnain Ahmad Noorden
- OS10-04 Direct Power Control for Dual-Active-Bridge Converter
Nguyen Duy Dinh, Goro Fujita

Room #505 (chair: Prof. Hitoshi Nakamura [SIT])

- OS03-01 Urban Theories and a Lighting Master Plan for Historic Quarters in Bangkok
Jirachet Meemootti, Chanyaporn Chuntamara
- OS03-02 Urban Tissue of Tokyo Inner Harbor
Case Study of Shibaura District
Hidetoshi Maeda
- OS03-03 Creating Child-Friendly Environment through Artworks in Cities
Tun Mohd Irfan Mohd Suria Affandi, Ismail Said
- OS03-04 River as a Public Space Corridor in a City
Mohd Hisyam Rasidi, Sara Izrar Aziz

Room #506 (chair: Prof. Masahiro Shibata [SIT])

- OS04-17 Anticancer Activity of Mulberry Suspension Cultured Cells Induced by Elicitors
Rittipun Rungruang, Orapin Kerdchoechuen, Natta Laohakunjit
- OS04-18 Quantification of the Vitamin K3 Concentration
Mio Sawada, Yoshitomo Suhara, Nobuo Watanabe
- OS04-19 Effectiveness of Thai Plant Medicinal Extracts against the Fungi *Collectotrichum* spp., the Causal Agents of Chili Anthracnose
Metinee Wasoontharawat, Kravintra Songkampoo, Kunlaya Kaewked
- OS04-20 Effect of Volatile Organic Compounds from *Phomopsis* sp. (JA1B1-2) as Plant Growth Promoters and Their Antifungal Activities
Sakuntala Siri-Udom, Saisamorn Lumyong

Room #507 (chair: Prof. Nobuto Matsuhira [SIT])

- OS05-04 An Assistive Sute with Intention Detection Using Pneumatic Artificial Muscles
Hiroshi Suzuki, Daisuke Morisaki, Takahiro Kanno, Yukio Kawakami, Kenji Kawashima
- OS05-05 Adaptive Communication Mechanisms of Responsible Servers for Distributed Care Robot Systems
Satoru Nakayama, Miyuki Nakano, Midori Sugaya

- OS05-06 Design of High-Speed Automatic Visual Inspection Machine for Head Gimbal Assembly (HGA)
Prathan Ch, Sorada K , Jiraphon S
- OS05-07 Proposal of Foot Structure with Linear Springs for Biped Robot
Nguyen Van Tinh, Hiroshi Hasegawa

Time slot 2 (10:50-11:50)

Room #404 (chair: Prof. Ayako Yamamoto [SIT])

- OS06-11 Feasibility Study of Dealloying Corrosion Prevention in Manganese Aluminium Bronze (MAB)
Thunyaphorn Piankijusakul, Napachat Tarelap, Kaysinee Sriraksasin, Nakorn Srisukhumbowornchai
- OS06-12 Accurate Metal Flow Analysis in the Micro-Extrusion Process of Aluminum Alloys
Alsunayyin Khalid, Tatsuhiko Aizawa
- OS06-13 A Study of Friction Coefficient of Gas Soft Nitriding and Sulfur Nitriding Treatment on the Plain Carbon and Alloy Steel
Somsak Siwadamrongpong , Sirijit Champee

Room #405 (chair: Prof. Shin-ichiro Yamamoto [SIT])

- OS04-21 Preventive Potential of Extract from Germinated Soybean against Diabetes
Pasjanant Hiran, Orapin Kerdchoechuen, Natta Laohakunjit
- OS04-22 Evaluation and Selection of Rice Landraces for Early Drought Tolerance
Aduldach Taweephum, Boonanun Kaewkunok, Theera Thummawongsa, Saijai Posoongnoen
- OS04-23 Probiotic Cashew Apple Pulp Fermented with Lactic Acid Bacteria and Bifidobacteria
Ratchadaporn Kaprasob, Orapin Kerdchoechuen, Natta Laohakunjit

Room #406 (chair: Prof. Yoshihiro Niitsu [SIT])

- OS02-17 Unknown English Words Automatic Detection System with Eye-Tracking
Hikari Itani, Eiji Kamioka
- OS02-18 Detection of Learner's Concentration in Distance Learning System
Kimario Nizetha Daniel, Eiji Kamioka
- OS02-19 Effects of Amplified Amplitudes of English Speeches on Brain Function
Kazukiyo Inada, Atsuko K. Yamazaki

Room #407 (chair: Prof. Koichi Gyoda [SIT])

- OS11-11 Wideband Slot Antenna for Mimo Systems
Apinya Innok, Watcharaphon Naktong, Nuchanart Fhafhiem
- OS11-12 Design of a Quasi-Rhomboid Shaped Antenna with Cylindrical Parabolic Reflector for Ultra Wideband Communications
Supawat Kochapradit, Worawut Boonpeang, Charnon Srisuma, Poramin Kumrayom, Kompisit Krajaipote, Thanaset Thosdeekoraphat, Chanchai Thongsopa
- OS11-13 Mushroom Shaped Monopole Antenna Which Has Tuning on Ground Plane with Slot Etching Technique Is Two Layers of Stair for Applying Ultrawideband (UWB) Technology
Watcharaphon Naktong, Apinya Innok, Supatinee kornsing, Amnoiy Ruengwaree

Room #503 (chair: Assist. Prof. Sivawan Phoolphundh [KMUTT])

- OS01-05 The Experimental Study of Thailand Seasonal Coefficient of Performance of Heat Pump Water Heater
Natcha Ohnjaikla, Surachai Sanitjai, Piyatida Trinuruk, Amornrat Kaewpradup
- OS01-06 New Membrane Shape Ceramic Adsorbents for Water Purification
Mikihiro Nomura, Ayumi Ikeda, Yuki Hayashi, Shotaro Tanaka, Yo Matsuo, Toyomitsu Itai
- OS01-07 Decomposition of Tar from Biomass Gasification over Carbonaceous Material
Supatchaya Konsomboon, Suneerat Fukuda

Room #504 (chair: Prof. Goro Fujita [SIT])

- OS10-05 Electrical Tree Growth Performances of Plasma Treated Silicone Rubber Based Nanocomposites
F. N. Musa, N. Bashir, M. H. Ahmad

- OS10-06 A Study on the Pressure Dependence of Wedge Air-Gap Discharge Voltage in Insulated Coating Conductors
Torii Hirotaka, Matsumoto Satoshi
- OS10-07 Effect of Accelerated Thermal Ageing on Electrical Properties of Vegetative Oil under High Voltage Stress
Nor Asiah Muhamad, Mohd Fikri Hilmi Mohd Taib, Abdul Ariff Abdullahamed, Yanuar Z. Arief, Mohd Hafizi Ahmad, Zuraimy Adzis

Room #505 (chair: Prof. Hitoshi Nakamura [SIT])

- OS03-05 Affordances of Street Environment during Children's Home-School Journey in Old City Zone of Makassar
Arti Manikam Asrun, Ismail Said, Dilsan Remaz Ossen
- OS03-06 Safety and Risk Assessment Systems for Underground Space Facilities in Shanghai
Shan Lu, Nakamura Hitoshi, Yu Shu
- OS03-07 Applying the Rudimentary Method for Cultural Ecosystem Services Provision through Urban Squirrel Movements
Noraini Bahari, Ismail Said

Room #506 (chair: Prof. Asao Nakamura [SIT])

- OS07-01 Enhancement of Lipid Production of Oleaginous Green Microalga, *Ankistrodesmus Densus*
Wipawan Siangdung, Kalyanee Paithoonrangarid, Saiwaree Ngoenphoemsup, Panya Triratana, Boosya Bunnag
- OS07-02 Gel Electrophoresis Ideally Identifies and Authenticates Cave and House Edible Bird's Nests from Common Adulterants
Lee Ting Hun, Waseem A. Wani
- OS07-03 Synthesis of Wax Esters from Palm Oil and Cetyl Alcohol by Alkali-Catalyzed Transesterification
Sirirat Wilaikaew, Kornkanok Aryusuk, Narumon Jeyashoke, Kanit Krisnangkura

Room #507 (chair: Prof. Nobuto Matsuhira [SIT])

- OS05-08 Case Study Applying the Machine Vision for Face Detection and Recognition System
Suphen Thawatcharaphorn, Sorada Khaengkarn, Kontorn Chamniprasart
- OS05-09 Contour Based Objects Pose Estimation Using Differential Evolution Algorithm
Tao Ngoc Linh, Hiroshi Hasegawa
- OS05-10 Robotic Curve Tracking and Reproduction Using Machine Vision
Phuwarin Sinmaroeng, Pichitra Uangpairroj, Kontorn Chamniprasart

Time slot 3 (13:00-14:20)

Room #404 (chair: Prof. Tatsuhiko Aizawa [SIT])

- OS06-14 Effect of Mechanical Alloying on Hydrogen Cycling of Magnesium Hydride (MgH₂) at Elevated Temperatures
A. Miizan, T. Ashida, A. Takasaki
- OS06-15 Comparison of Microstructure and Mechanical Properties of Hard-Facing Welds Generated by GTAW and OAW Welding Processes
Jongkol Srithorn, Kampon Promsupha
- OS06-16 Nb₂O₅ and Si Enhanced Hydrogen Sorption Kinetics Synthesized by Mechanical Milling
M. A. Shamsudin, K. Mineo, A. Takasaki
- OS06-17 Perovskite-Type Mn-Based Oxygen Storage Materials Synthesized by Mechanical Milling
Kengo Nishihara, Alicja Klimkowicz, Tetsuya Yamazaki, Akito Takasaki

Room #405 (chair: Assoc. Prof. Sota Yamamoto [SIT])

- OS04-24 Production of Flavored Kluay Hom Tong for Milk Additive Agent
Sorarak Ngamsanga, Natta Laohankunjit, Orapin Kerdchoechuen
- OS04-25 Theaflavins Improve Circulatory Function through Sympathetic Nerve System
Akiko Saito, Masahiro Shibata, Takeshi Ishii, Tsutomu Nakayama, Naomi Osakabe
- OS04-26 Baked Foams Compositing of Cassava Starch, Eucalyptus Fiber, and Gluten Protein for Food Packaging
Nattapon Kaisangsri, Orapin Kerdchoechuen, Natta Laohakunjit

- OS04-27 Effect of Erythrocyte's Density upon the Rheological Behavior in the Micro-Tube Flow
Hiroshi Yonezawa, Fumiya Kobayashi, Masahiro Shibata, Nobuo Watanabe

Room #406 (chair: Prof. Eiji Kamioka [SIT])

- OS02-20 Real Time Obstacle Detection and Avoidance Using Kinect Depth Sensor and Pioneer LX Mobile Robot
Thanh-Huong Nguyen, Minh-Hoang Le
- OS02-21 Intuitive Operation of Drones Using Newly Developed Three-Dimensional Input Device
Hiroya Sano, Yuya Mochiyoshi, Michiko Ohkura
- OS02-22 Temperature Dependent Sleep Control Using Virtual Ground Voltage Detection for Fine-Grain Power Gating
Masaru Kudo, Kimiyoshi Usami
- OS02-23 Collecting Data of SNS User Behavior to Detect the Symptom of Its Excessive Usage - Design of Data Collection Application
Ploypailin Intapong, Tiranee Achalakul, Michiko Ohkura

Room #407 (chair: Prof. Masahiro Inoue [SIT])

- OS11-14 A University Testbed for Data Transmissions over Visible Light Communication Channels
Do Trong Tuan, Ha Duyen Trung
- OS11-15 Intelligent Water-Saving Irrigation System for Cassava Field Using Fuzzy Controller
Teerapat Charoenpru, Tanasan Srikotr, Prayoth Kumsawat
- OS11-16 Mobility Prediction for High Speed Vehicle Using User's History Data Traffic with Markov Chain Algorithm
Arfah A. Hasbollah, Sharifah H. S. Ariffin
- OS11-17 DWT Based Image Compression for Wireless Sensor Networks
Tanasan Srikotr, Teerapat Charoenpru, Prayoth Kumsawat

Room #503 (chair: Asist. Prof. Sivawan Phoolphundh [KMUTT])

- OS01-08 Dry Powder Foods Sterilization Techniques by Atmospheric-Pressure Plasma
Narong Mungkung, Somchai Arunrungrusmi, Pakpoom Chansri, Toshi fumiyuji
- OS01-09 Effective Hydrogen Separation through Silica Based Membranes
Ayumi Ikeda, Mikihiro Nomura
- OS01-10 Separation of Alkaline Solutions through Zeolitic Ceramic Membranes
Motoki Kitajima, Kotone Oura, Ayumi Ikeda, Mikihiro Nomura
- OS01-11 Study on Bioenergy Recovery from Anaerobic Co-Digestion of Glycerol Residue and Treated Palm Oil Mill Effluent Using Anaerobic Hybrid Reactor
Chinnapong Wangnai, Pratin Kullavanijaya, Chalermchai Ruangchainikom

Room #504 (chair: Prof. Satoshi Matsumoto [SIT])

- OS10-08 PQ Power Optimization in Hydro-Thermal Power System Using Newton Iteration Technique
Luu Huu Vinh Quang
- OS10-09 Basic Experiment on 13.56 MHz Coupling System of Wireless Power Transfer for Electric Vehicle Dynamic Charging
Nguyen Tri Cuong, Kan Akatsu
- OS10-10 Performance Study of Supercapacitor-Battery Integration Scheme for Energy Storage System
Nasrur Rasyadi Md Rafie & Zulkarnain Ahmad Noorden
- OS10-11 Countermeasures to Voltage Fluctuation during Reclosing Islanded Entity to Utility
Tran Thanh Son, Goro Fujita

Room #505 (chair: Prof. Hidetoshi Maeda [SIT])

- OS03-08 Estimating the Effects of Traffic Heat Reduction through Neighborhood Greening Methods in a World Heritage Site - Malacca, Malaysia
Kei Saito, Ismail Said, Michihiko Shinozaki
- OS03-09 Modelling Deforestation and Greenhouse Gas Emissions in Iskandar Malaysia
Yakubu Aliyu Bununu, Ahmad Nazri Muhamad Ludin, Nafisa Hosni

- OS03-10 Achieving Low Carbon Built Environment in Iskandar Malaysia Using Expanded Life Cycle Assessment with Induced Impact: Overview of Existing Assessment System Developed for Iskandar Malaysia
Dora Yeap Chu Im, Ho Chin Siong
- OS03-11 The Sustainability Reality of Subdivision Designs in Iskandar Malaysia
Anis Shazreen Azmi, M. Rafee Majid

Room #506 (chair: Prof. Yoshihide Suwa [SIT])

- OS06-18 Plasma Oxydation Printing onto Carbon-Based Coatings for Micro-Texturing
Ersyzario Edo Yunata, Tatsuhiko Aizawa
- OS06-19 Plasma Oxidation Printing onto the DLC and Ceramic Coatings for Fabrication of Micro-Stamping Dies
Nike F.Khusnah, Tatsuhiko Aizawa, Setyawan Sakti
- OS06-20 A Surface Effect of Ceramic Cutting Using Abrasive Waterjet
Paphakorn Pitayachaval, Kongkiat Phimchat, Narongsak Thammachot

Room #507 (chair: Prof. Yukio Kawakami [SIT])

- OS05-11 A Numerical Study of a Rectangular Plate Resulting from Close-In Underwater Explosion Shock
Tien-Dat Hoang , Ngoc-Kien Nguyen , Hai-Anh Nguyen
- OS05-12 Structure Analysis of Low Floor Electric Bus Using the Finite Element Method
Worakiat Prasatsup, Kontorn Chamniprasart
- OS05-13 An Application of the Parameter-Influence Technique for a Reduced Heat Transfer Model Identification
Chanyut Khajorntraidet, Kazuhisa Ito
- OS05-14 Experimental and Modeling Study on a Future Cooling System for Lithium-Ion Battery of Electric Vehicle
Naoki Ono, Tatsuya Yamada, Yosuke Hoshi, Takashi Yamada

Time slot 4 (14:50-15:50)

Room #404 (chair: Prof. Tatsuhiko Aizawa [SIT])

- OS06-21 Influence of Heat Treatment Condition on Mechanical Behavior of 6061 Aluminum Alloy
Kanokporn Boonjubut, Rattanaporn Wongthong
- OS06-22 Microstructural Interactions during Casting and Artificial Ageing for a Hypoeutectic A356 Aluminium Alloy with Ag and Sc Additions
D. Bakavos, Supparek Boontein, C. Limmaneevichitr, D. Bakavos
- OS06-23 Material Properties of an AZ31 Magnesium Alloy Sheet at Room Temperature
Masahiro Ohkawa, Shigeki Mori, Akito Takasaki

Room #405 (chair: Assoc. Prof. Nobuo Watanabe [SIT])

- OS04-28 Physicochemical, Functional and Prebiotic Properties of Dietary Fiber Prepared from Rice Hull
Kulnipa Tanarungrangsee, Natta Laohakunjit, Orapin Kerdchoechuen
- OS04-29 Flavan 3-ols Retarded Disuse Atrophy Induced by Hindlimb Suspension in Mice
Mao Ito, Masahiro Nakamura, Yuji Miyake, Naomi Osakabe
- OS04-30 Decolorization of Stevia Syrups by Coagulation/Flocculation Techniques
Keerati Thamapan, Natta Laohakunjit, Orapin Kerdchoechuen

Room #406 (chair: Assoc. Prof. Ryota Horie [SIT])

- OS02-24 Automatic ECG R-Peak Detection Algorithm toward Computational Atrial Fibrillation Diagnosis
Mohamad Sabri, Eiji Kamioka
- OS02-25 Walking Support System for Blind People Using Phosphene
Manami Kanamaru, Eiji Kamioka
- OS02-26 Evaluation of Feelings of Excitement in Driving Simulator by ECG
Yoshihiro Harada, Haruhiko Nakatsuji, Yosuke Tate, Hiroki Seto, Takeshi Aikawa, Kodai Ito, Michiko Ohkura

Room #407 (chair: Prof. Kimiyoshi Usami [SIT])

- OS11-18 Generating Evacuation Routes by Using Drone System and Image Analysis to Track Pedestrian and Scan Area after Disaster Occurrence
Aljehani Maher, Masahiro Inoue
- OS11-19 Mathematical Modeling of Pixel Identification Base on Thermal Imaging for Real Time Dead Animal Detection
Worawut Boonpeang, Kompisit Krajaipote, Chanon Srisuma, Poramin Kuntayom, Supawat ,Kochapradit, Sumran Santalunai ,Thanaset Thosdeekoraphat, Chanchai Thongsopa

Room #504 (chair: Prof. Satoshi Matsumoto [SIT])

- OS10-12 Partial Discharge Characteristics of Low-Density Polyethylene and Effect of Nanofiller Using Pulse Sequence Analysis
Yanuar Z. Arief, Mohd Hafizi Ahmad, Nor Asiah Muhamad, Rudi Kurnianto, Noor Aliaa Awang, Rainer Patsch
- OS10-13 Numerical Consideration of Integrated Radial and Dual Axial-Flux Ferrite Magnet Machine
Takatoshi Sunaga, Shoji Shimomura
- OS10-14 Effect of Humidity and Nanofiller on Self-Healing Properties of Silicone Rubber
Zuraimy Adzis, Muhammad Taufik Kamaruddin, Yanuar Z. Arief, Mohd Hafizi Ahmad, Izzah Hazirah Zakaria

Room #505 (chair: Prof. Hidetoshi Maeda [SIT])

- OS03-12 Framework of Decision Making for Managing Variations to Construction Design
Norazam Othman, Abdul Ghani Khalid, Sarajul Fikri Mohamad, Zuhaili Mohamad Ramly, Mohd Saidin Misnan, & Zakaria Mohd Yusof
- OS03-13 Building Attributes Acquisition Using High Resolution Satellite Sar Data and Airborne Lidar Data
Tatsuya Yamamoto, Masafumi Nakagawa
- OS03-14 Camera Path Design for Panoramic Image Acquisition
Shido Tanaka, Sho Takayama, Masafumi Nakagawa

Room #506 (chair: Prof. Yoshihide Suwa [SIT])

- OS06-24 A Part Orientation Analysis Based on Support Structure
Paphakorn Pitayachaval, Apichet Koncam
- OS06-25 Strain-Induced Phase Transformation from Martensitic to Austenitic Phases by Nitrogen Solid Solution
Abdelrahman, Tatsuhiko Aizawa
- OS06-26 Effect of Particle Size Compatibilizer and Waste Melamine Formaldehyde Content on Characteristics of Highdensity Polyethylene Matrix Composites
Somsak Siwadamrongpong, Janjira Aphirakmethawong

Room #507 (chair: Prof. Masaomi Kimura [SIT])

- OS05-15 A Research on Energy Efficiency Improvement of Water Hydraulic Motor System
Pha N. Pham, Kazuhisa Ito
- OS05-16 Efficiency Improvement of Hydraulic System with Boosting Suction Line and Load Sensing Technique
Ryo Yagisawa, Kazuhisa Ito
- OS09-01 A Permutation-Based Genetic Algorithm for Solving the Machine Layout of Manufacturing System
Suphatra Kritwattanakorn, Kontorn Chamniprasart, Wanwanut Boongsood

Poster Session (10:20-10:50, 14:20-14:50)

Poster presenters have to appear in front of your posters in both time slots.

4F Lobby

- PS05-01 Optimization of Resonance Frequencies in a Rotor Dynamic System by Applying the Multi Objective Genetic Algorithm
Tien-Dat Hoang , Ngoc-Kien Nguyen , Hai-Anh Nguyen

- PS05-02 The Study of Factors Influencing to Surface Hardness of Hardened Carbon Steel -SCM440 Grade in Hard Turning
Peerapong Kasuriya, Komson Jirapattarasilp
- PS05-03 Development of a New Cooling System for Lithium-Ion Battery of Electric Vehicle Utilizing Phase Change Material and Heat Pipes
Tatsuya Yamada, Kazuhiro Kudo, Naoki Ono
- PS05-04 Observation and Measurement of the Vapor Phase and Its Flow Velocity in a Heat Pipe System
Yosuke Hoshi, Ryo Ueno, Hitoshi Nakamura, Takashi Yamada, Naoki Ono
- PS05-05 Fault Diagnosis for Water-Hydraulic Servo Cylinder System with Kalman Filter
Shohei Tsuruda, Kazuhisa Ito
- PS05-06 Development of Elderly Pedestrian Accident Simulation Model and Evaluation of Injury Risk
Tomoaki Wakamiya, Sota Yamamoto
- PS05-07 Bending Stiffness of Stent Graft by 4-Point Bending Test
Yuya Sato, Sota Yamamoto
- PS05-08 Biomechanical Evaluation of Hip Pad for Elderly Male Hip Fracture
Abe Takamiti, Sota Yamamamoto
- PS06-01 Characterization of Carbon Materials Prepared from Biomass Charcoals
Kamonwan Aup-Ngoena, Mai Noipitaka, Kornkanok tangjitmanb
- PS06-02 Efficiency Improvement of Small-Drilling on Titanium Alloys by Diamond-Like Carbon Coatings
Nutthanun Moolsradoo
- PS06-03 Fracture Analysis of Gantry Crane Gear Tooth by Nondestructive Evaluation Method
Mai Noipitak, Sittisak Charunetratsamee
- PS06-04 Osteoblast Proliferation on Graphene Oxide Electrodeposited on Anodized Titanium for Orthopedic Implants
Pacharaporn Tanurat, Sirinrath Sirivisoot
- PS06-05 Study on Tool Performance of Drill Coated with Diamond-Like Carbon Coatings for Drilling on Duplex Stainless Steel Grade Uns S31803
Suthiphong Sopha
- PS06-06 Effect of Heat Treatment Cycle to the Microstructural Analysis of Service-Exposed Ni-Cr Alloy Turbine Blade
Nuzul Hazwani Mohamad Hanafi, Astuty Amrin, Roslina Mohammad
- PS06-07 Viscosity Evaluation of Air Foam Mixed Soil for Foam Injection Shield Tunneling Method
Mika Yamamoto, Yoshihide Suwa, Atsushi Kagawa
- PS08-01 Study on the Settlement Behavior of Embankment on the Soft Ground Reinforced by Soil-Cement Columns
Le Ba Khanh, Le Ba Vinh, Ngo Binh Giang, Nguyen Tan Bao Long
- PS08-02 Time Required for Take-Over from Automated to Manual Driving When Exiting the Highway
Arata Takada, Toshio Ito
- PS08-03 Driver Modeling in Unconscious Driving State
Kenta Yamazaki, Toshio Ito
- PS08-04 Nighttime Pedestrian Detection by On-Board Monocular Camera
Yuki Takata, Toshio Ito
- PS10-01 Adjusting the Energy Value of Water Consumption for PQ Power Optimization in Hydro-Thermal Power System
Luu Huu Vinh Quang
- PS10-02 Comparing the Impacts of the SVCs and the SCs Affecting to the Transient Stability in Multi-Machine Power System
Luu Huu Vinh Quang
- PS10-03 Using the Transient Energy Function to Assess the Dynamic Stability in Multi-Machine Power System
Luu Huu Vinh Quang
- PS10-04 Terahertz Spectroscopy of Freon Substitute Refrigerant and Molecular Vibration Analysis
Yukinari Hirai, Ryo Saito, Tatsuya Ishizuka, Satoshi Matsumoto
- PS10-05 Moth-Flame Optimization for Optimal Reactive Power Dispatch
Khai Phuc Nguyen, Goro Fujita

- PS11-01 A Design of Patch Antenna Operated in Ultra High Frequency with Graphene and Titanium Dioxide
Nateetorn Fugto, Sirinrath Sirivisoot ,
- PS11-02 Noise Reduction Based on a New Sensor Mounting Method in Tilt Measurement with Analog Accelerometer
Hung Viet Dao, Takashi Komeda
- PS12-01 Promoting the Entrepreneurship Intention of Engineering Students in Vietnam: A Brief Review and Proposed Measuring Model
Trang Doan Thi Thu, Le HieuHoc, Kien Dao Trung
- PS12-02 The Effective Comparison of Feedforward Training of Visual Defect Inspection Patterns in Welding
Phonsak Lerthiranphanya

Closing Session (16:20-17:00)

Large Lecture Room (Multi-Activity Building)

Closing event will be prepared. Every participant join the final session.

SEATUC Symposium 2016 organizing committee will present Best Paper Award and Best Poster Award to good presentations to boost young researchers or young staff members towards the cutting edge of research.