

The Conference Program
The 2013 International Electrical Engineering Congress (iEECON2013)
March 13-15, 2013

March 13, 2013	
15:00-18:00	Registration
18:00-20:30	Welcome reception

March 14, 2013	
8:00-9:00	Registration
9:00-9:20	Opening ceremony

Session Chair	Assoc.Prof.Dr.Athikom Roeksabutr, MUT
9:20-10:00	Keynote I: The Impact of Spectrum Auction on Thailand's Country Competitiveness by Col. Dr. Settapong Malisuwan , Vice Chairman, National Broadcasting and Telecommunications Commission (NBTC)
10:00-10:40	Keynote II: Color Image Enhancement Method Based on Visual Sensitivity by Prof. Akira Taguchi , Tokyo City University, Japan

10:40-11:00	Break
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Session	TH-A1-1	TH-A1-2	TH-A1-3	TH-A1-4
Session Topic	Special Session: Power Electronics	Computational and Signal Processing	Electronic Applications	Special Session: UWB Technology
Session Chair	Assoc.Prof.Dr.Wekin Piyarat, SWU	Assoc.Prof.Dr.Kosin Chamnongthai, KMUTT	Prof.Dr.Apirat Siritaratiwat, KRU	Assoc.Prof.Dr.Somsak Choomchuay, KMITL
11:00-11:20	A DC-distributed Photovoltaic System Using Modular Boost Converters with Maximum Power Point Tracking for Grid-connected System (SS 3-1) <i>Suparak Srita, Yuttana Kumsuwan and Uthen Kamnarn, Chiang Mai University</i>	Parallel Computation is not a Panacea (INV6) <i>Sanpawat Kantabutra, Chiang Mai University</i>	Unmanned Aerial Vehical Technology Trends (INV3) <i>S. Jantarang and S. Purivigraipong, Mahanakorn University of Technology</i>	UWB Path Loss Model for BAN Transfer Function (SS1-1) <i>Siwara Dechapankul, Sanit Teawchim and Sathaporn Promwong, King Mongkut's Institute of Technology Ladkrabang</i>
11:20-11:40	A Class-D LLC Resonant Inverter for High Frequency Induction Cooker Base on Renewable Energy Application (SS 3-2) <i>J. Haema, A. Bilsalam, C. Ekkaravaro-dome, I. Boonyaroonate and V. Chunkag, King Mongkut's University of Technology North Bangkok</i>	Simple Example of Applying Extended Kalman Filter (81) <i>Chadaporn Keatmanee, Junaid Baber and Maheen Bakhtyar, Sripatum University</i>	Automatic Visual Inspection of Hard Disk Drives (INV1) <i>P. Muneesawang and S. Yammen, Naresuan University</i>	WBAN-UWB for Short range Wireless Communications (SS1-2) <i>Boonnayada Rattanakarn, Sanit Teawchim and Sathaporn Promwong, King Mongkut's Institute of Technology Ladkrabang</i>
11:40-12:00	Centralized Control System for Parallel-connected AC/DC Converters with a Fast Transient Response (SS 3-3) <i>Yutthana Kanthaphayao, Uthen Kamnarn and Viboon Chunkag, RMUTSB</i>	The Distributed Arithmetic Architecture for Variable Fractional-Delay Filter Realization (77) <i>Anirut Trakultritung and Sorawat Chivapreecha, King Mongkut's Institute of Technology Ladkrabang</i>	A Methodology of Scratch Inspection on Magnetic Disk Scratched for Low Thermal Contrast Image (48) <i>Y. Todtong, V. Prasertcharoensuk, M. Leeprakobboon, A. Siritaratiwat and A. Kruesubthaworn, Khon Kaen University</i>	A Hardware Implement of A Tiny Cryptographic Engine (SS1-3) <i>Poramet Prasan and Somsak Choomchuay, King Mongkut's Institute of Technology Ladkrabang</i>
12:00-12:20	A Study of Three-phase Common-mode and Differential Mode Conducted Emission Sperator (SS 3-4) <i>Vuttiapon Tarateeraseth, Srinakharinwirot University</i>	Performance of high Rate LDPC Code for Pulse Based UWB Ad-Hoc Network (60) <i>Tanaporn Payommai and Somsin Wangkhuntod, Rajamangala University of Technology Isan</i>	Transition Characteristics of Perpendicular Heat-Assisted Magnetic Recording with Peak Temperature and Cross Track Variations (SS1-5) <i>A. Kaewpukdee, N. Chirdchoo, P. Kovintavewat and L. Wuttisittikuljij, Nakhon Pathom Rajabhat University</i>	A Wideband Monopole with Built-in Interdigital Capacitor for Size Reduction and Capacitive Feed for Improved Response (SS 1-4) <i>Phongsatorn Chomtong, Vech Vivek and Prayoot Akkaraekthalin, King Mongkut's University of Technology North Bangkok</i>

12:20-13:20	Lunch
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Session Chair	Prof.Dr.Prayoot Akkaraekthalin, KMUTNB, and Assoc.Prof.Kosin Chamnongthai, KMUTT
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13:20-14:00	Keynote III: Toward User-Centric Smartphone Life in the Big Data / HTML5 Era by <i>Dr. Yasuyuki Nakajima, President and CEO, KDDI R&D Labs, Japan</i>
14:00-14:40	Keynote IV: Singly Terminated Tapered Drain Line for Enhanced Gain-bandwidth Distributed Amplification in CMOS at Microwave to Millimeter Wave Frequencies and Beyond by <i>Prof. Apisak Worapishet, Assistant President (Research), Mahanakorn University of Technology, Bangkok, Thailand</i>
14:40-15:20	Keynote V: Thai Synchrotron Light Source and Its e-Beam Stability by <i>Dr. Supat Klinkhieo, Synchrotron Light Research Institute of Thailand</i>

15:20-15:40	Break
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Session	TH-P1-1	TH-P1-2	TH-P1-3	TH-P1-4
Session Topic	Power System I	Special Session: Photonics	Electronic Circuits	Special Session: Antenna and Propagation
Session Chair	<i>Asst.Prof.Dr.Natthaphob Nimpitiwan, BU</i>	<i>Dr. Sommart Sang-Ngern, MUT</i>	<i>Asst.Prof.Dr.Krit Angkaew, KMUTNB</i>	<i>Dr.Sathaporn Promwong, KMITL</i>
15:40-16:00	Aggregate Model of Induction Motor Load for Power System Dynamic Studies (1) <i>Pichai Aree, Thammasat University</i>	Acousto-optics Frequency Decoder for Optical Logic Switch (SS 4-1) <i>Athikom Roeksabutr, Mahanakorn University of Technology</i>	A Current-mode Electronically Controllable Multifunction Biquadratic Filter Using OTAs (SS Electro 1) <i>Somchai Srisakultiew and Montree Siripruchyanun, Rajamangala University of Technology Isan</i>	Analysis of ADE Dual Reflector Antenna by Using PO and PTD Methods (SS 2-1) <i>Wanwisa Thaiwirot, Rangsan Wongsan and Monai Krairiksh, King Mongkut's University of Technology North Bangkok</i>
16:00-16:20	Object-oriented Modeling and Simulation of Industrial Power System Using MATLAB Simulink (32) <i>Pichai Aree and Nutthapong Tanthanuch, Thammasat University</i>	A Solvable Model for PT-symmetric Solitons (SS 4-2) <i>Athikom Roeksabutr, Thawatchai Mayteevarunyoo, and Boris A. Malomed, Mahanakorn University of Technology</i>	Electronically Tunable Low-Component-Count Current-Mode KHN Filter Using CCCFTAS (19) <i>Surasak Inchan, Supawat Lawanwisut, Thanun Tangrujikul, Tada Comedang and Montree Siripruchyanun, Rajabhat University Ratchaburi</i>	The Design of Switched Beam Patch Antenna by using the Deformed Parasitic Patch for WLAN System (SS 2-2) <i>Supakit Kawdungta, Rajamangala University of Technology Lanna</i>
16:20-16:40	Examining Impact of mutual Coupling Between Circuits on Transmission Line Fault Location (79) <i>Thanapat Chotprom and Neaboon Hoonchareon, Chulalongkorn University</i>	Investigation of Positive Group Index on Photonic Crystal Waveguide for Slow Photon (SS 4-3) <i>Amorntep Wichasirigul and Wanchai Pijitrojana, Thammasat University</i>	A 0.5-V, 0.5-nW, 5th-Order ECG Lowpass Filter With 56-dB Dynamic Range (28) <i>Chutham Sawigun and Prajuab Pawarangkoon, Mahanakorn University of Technology</i>	Dual Band Printed Hook Lines with Lump Element (SS 2-3) <i>Worathan Wichakoon, Chuwong Phongcharoenpanich and Supakit Kawdungta, King Mongkut's Institute of Technology Ladkrabang</i>
16:40-17:00	Generator out-of-step Protection Using Artificial Neural Network (95) <i>Worawat Nakawiro, Mohd Khairun Nizam Mohd Sarmin, Sheikh Kamar Sheikh Abdullah and Nik Sofizan Nik Yusof, King Mongkut's Institute of Technology Ladkrabang</i>	Chaotic Laser beam Heat Assisted Magnetics Recording System (SS 4-4) <i>Sarut Khonggerd and Wanchai Pijitrojana, Thammasat University</i>	Current-Controlled Current Follower Current Conveyer and its Applications (68) <i>Krit Angkaew, Montri Somdunyanok and Pipat Prommee, King Mongkut's University of Technology North Bangkok</i>	Design of Novel Compact Dual Band Dipole Antenna for WLAN (SS 2-4) <i>Rattapon Jiniwong, Pinit Nuangpirom and Somsak Akkathimagool, Rajamangala University of Technology Thanyaburi</i>
17:00-17:20		Laser Doppler Vibrometer Based on A Heterodyne Interferometer Scheme using Double Pass in An Acousto-Optic Modulator (SS 4-5) <i>Siridech Boonsang and Weerawat Khwankaew, King Mongkut's Institute of Technology, Ladkrabang</i>	A Hardware True Random-Bit Generation System Using Resistor-Capacitor Network Based Chaotic Circuit (58) <i>Patinya Ketthong and Wimol San-Um, Thai-Nichi Institute of Technology</i>	Finite Element Analysis fo a Multiport Waveguide Circuit Loaded with Bi-anisotropic Material (INV9) <i>Tuptim Angkaew, Chulalongkorn University</i>

18:30-22:00	Banquet
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March 15, 2013				
Session	FR-A1-1	FR-A1-2	FR-A1-3	FR-A1-4
Session Topic	Power System II	Signal Processing	Electronic Materials and Devices	Microwave Techniques
Session Chair	<i>Asst.Prof.Dr.Somchai Hiranvarodom, RMUTT</i>	<i>Dr.Wisarn Patchoo, BU</i>	<i>Dr.Suwit Kiravittaya, NU</i>	<i>Asst.Prof.Dr.Sarawuth Chaimool, KMUTNB</i>

8:20-8:40	Maximum Power Point Tracking Using Fuzzy Logic Control in Flyback MPPT Inverter for PV Systems (99) (INV 11) <i>Poom Konghuayrob and Somyot Kaitwanidvilai, King Mongkut's Institute of Technology Ladkrabang</i>	Forbidden Interval Theorems for Threshold Signal Detectors Based on Cross Correlation (INV 10) <i>Sanya Mitaim and Bart Kosko, Thammasat University</i>	Influence of Growth Temperature on InAs Quantum Dots (5) <i>M. Kunruga, P. Prongjit, P. Boonpeng, S. Panyakeow, S. Ratanathammaphan, Chulalongkorn University</i>	An UWB Bandpass Filter with Dual-Notched Band Using Embedded Fold Slot and Slotted Step Impedance Resonators (7) <i>Mongkol Meeloon, Matinee Rattarasarn, Rungrueng Pattanakun, Sarawuth Chaimool and Prayoot Akkaraekthalin, TGGs, King Mongkut's University of Technology North Bangkok</i>
8:40-9:00	Resonance Harmonics of Oil-immersed Transformer with Low Voltage Capacitor Bank (33) (INV 12) <i>Preecha Sarot and Itsda Boonyaroonate, King Mongkut's University of Technology Thonburi</i>	Modified Adaptive Forgetting-Factor Recursive Least Squares-based Frequency-Domain Equalisation (69) <i>Suchada Sitjongsataporn, Mahanakorn University of Technology</i>	Magnetic Properties of BIT Patterned Media for L10-FePt at Areal Density of 1 Tb/in ² (94) <i>W. Tipcharoen, N. Prapasawad, A. Kaewrawang, A. Siritariwat, A. Kruesubthaworn, and K. Tonmitra, Khon Kaen University</i>	An UWB Bandpass Filter Using Step-Impedance Coupled Line for Double Notch (96) <i>Wichai Krongkitsiri and Prayoot Akkaraekthalin, Rajamangala University of Technology ISAN</i>
9:00-9:20	Prototype Development of Home Energy Management System (23) <i>Chanutpol Pewlong and Naebboon Hoonchareon, Chulalongkorn University</i>	Adaptive Bilateral Filter via Image Segmentation (6) <i>Theerawit Wilaiprasitporn and Widhyakorn Asdornwised, Chulalongkorn University</i>	Mismatch Model of Operating Temperature and Channel Width on Threshold Voltage of MOSFETS in VLSI (39) <i>A. Ruangphanit, N. Sakuna, K. Kiddee, R. Muanghlua and S. Niemcharoen, King Mongkut's Institute of Technology Ladkrabang</i>	On The Study of Class-reconfigurable 2.45 GHz GAN HEMT Power Amplifier (100) <i>Nattapong Sirivech and Suramate Chalermwisutkul, King Mongkut's University of Technology North Bangkok</i>
9:20-9:40	Optimal Transformer Sizing in PEA Distribution System (90) <i>K. Hongesombut and K. Assawabenchang and V. Surapatana, Kasetsart University</i>	Discrete Wavelet Transform Implementation Based on Binomial Filter and Coefficient-Distribution Distributed Arithmetic (76) <i>Supasin Kumsroy, Sorawat Chivapreecha, and Akraphon Tirat, King Mongkut's Institute of Technology Ladkrabang</i>	Spin Transfer Noise in CPP-GMR Read Based Heusler Alloy with Varying Layer Thickness (51) <i>P. Khunkitti, A. Siritariwat, M. Leeprakobboon, A. Kruesubthaworn and A. Kaewrawang, Khon Kaen University</i>	A New Miniaturized Epsilon-Near Zero Metasurface Using Minkowski Fractal Pattern (63) <i>Tanan Hongnara, Sarawuth Chaimool and Prayoot Akkaraekthalin, King Mongkut's University of Technology North Bangkok</i>
9:40-10:00	H [∞] Control Based-Specified Structure Robust Power Oscillation Damping Controller Design of UPFC (78) <i>Tossaporn Surinkaew and Issarachai Ngamroo, King Mongkut's Institute of Technology Ladkrabang, King Mongkut's Institute of Technology Ladkrabang</i>	An Implementation of Cubic Hermite Variable Fraction Delay Filter for Digital Image Interpolation (SS Signal 1) <i>Parinya Soontornwong, Jaraspat La-inchua and Sorawat Chivapreecha, King Mongkut's Institute of Technology Ladkrabang</i>	Simple Energetic Estimation of Electronic States in Quantum-dot Cellular Automata (SS 3-6) <i>Suwit Kiravittaya, Poonyasiri Boonpeng, Somchai Ratanathammaphan and Somsak Panyakeow, Naresuan University</i>	Low and Zero Refractive Index Metamaterials: Characteristics and Its Applications (18) <i>Sarawuth Chaimool, Tanan Hongnara and Prayoot Akkaraekthalin, King Mongkut's University of Technology North Bangkok</i>

10:00-10:20 Break

Session	FR-A2-1	FR-A2-2	FR-A2-3	FR-A2-4
Session Topic	Electrical Machine and Drives	Computer Systems and Applications	Computers and Communications	Wireless Communications and Networks
Session Chair	Assoc.Prof.Dr.Chaiwut Chat-uthai, KMITL	Assr.Prof.Decha Wilairat, MU	Assoc.Prof.Dr.Kosin Chamnongthai, KMUTT	Asst.Prof.Dr.Surachet Kanprachar, NU
10:20-10:40	A New Reduced-order Position and Speed Estimator for Permanent-Magnet Synchronous Motors (INV 2) <i>Manussanun Buranachokphaisan and Somboon Sangwongwanich, Chulalongkorn University</i>	Deployment of 6RD IPV6 Home Gateway on Thai Uninet (INV4) <i>T. Angchuan, N. Chuangchunsong, R. Elz, and S. Kamolphiwong, Prince of Songkla University</i>	Multiplexed Bus for Mobile Communications and an IPS (INV7) <i>Tomoaki Sato, Phichet Moungnoul and Masa-aki Fukase, Hiroaki University</i>	Improved DV-Hop Localization in Wireless Sensor Networks Using Selected RSSI (82) <i>Mongkol Wongkhan and Soamsiri Chantaraskul, King Mongkut's University of Technology North Bangkok</i>
10:40-11:00	A Simple Measurement of Cogging Torque in Brushless DC Motor and its Measurement Uncertainty Analysis (27) <i>Teeradej Srisiriwanna and Mongkol Konghirun, King Mongkut's University of Technology Thonburi</i>	Interactive 3D Visualization of GPU-Based Volume Rendering for Air-Cargo Container CT Inspection (31) <i>Xi Zhang and Jinhui Liu, Hunan University</i>	Ethernet-based Reconfigurable Co-design System for Remote Data Processing (56) <i>Sethakarn Prongnuch and Theerayod Wiangtong, Mahanakorn University of Technology</i>	Pulse Shaping Design for Cognitive Radio Ultra-wideband System (98) <i>Nakarin Ratchapo and Wilaiporn Lee, King Mongkut's University of Technology North Bangkok</i>

11:00-11:20	An Improved Combine Active Islanding Detection Method Based on Frequency and Phase Perturbations (38) <i>Nattapon Boonyapakdee, Tirasak Sapaklom and Mongkol Konghirun, King Mongkut's University of Technology Thonburi</i>	Optimizing SNPHAP with RADIX Computation (70) <i>Apisit Rattanatrurak, Surin Kittitornkun and Sissades Tongsimma, King Mongkut's Institute of Technology Ladkrabang</i>	Reduce the Computing Time Using Dynamic Time Warping (DTW) for Speech Recognition (SS Signal 2) <i>Sun Xihao and Yoshikazi Miyanaa, Hokkaido University</i>	Selective Broadcast Mechanism for VANET Based on Incidence Relevance Analysis (10) <i>Rattaphon Phiwkamphon and Chaiyachet Saivichit, Chulalongkorn University</i>
11:20-11:40	Effects of Noise Contributed from Frequency of Power Line to AC Power Measurements (42) <i>Tanya Kochawat and Voraphol Phapukdee, National Institute of Metrology (Thailand)</i>	Performance Evaluation of the Data Block Transmission via MTOM -based WEB Services (37) <i>Jedsada Phengsuwan, Kamron Aroonrua, and Naiyana Sahavechaphan, National Electronics and Computer Technology Center</i>	Comparison of Critical Frequency of E layer Over Chumphon, Thailand with IRI 2007 Model (SS-Communications) <i>Poramintra Wongcharoen, Pornchai Supnithi, Suthichai Noppanakeepong, Somkiat Lerkvaranyu, King Mongkut's Institute of Technology Ladkrabang</i>	Intelligent and Dynamic Channel Allocation for IEEE 802.15.4 Based Wireless Sensor Networks (101) <i>Anuchit Nirapai, Chayaphon Tanwongvarl, and Soamsiri Chantaraskul, King Mongkut's University of Technology North Bangkok</i>
11:40-12:00		Enhancing Image Annotation Games by Using Asian Wordnet (54) <i>Virach Sornlertlamvanich and Thatsanee Charoenporn, National Electronics and Computer Technology Center</i>	Alternative Approach for ETSI FM Sound Broadcasting Transmitter Testing (INV8) <i>Kitti Wongthavarawat, National Electronics and Computer Technology Center</i>	Adaptive ED Threshold for IEEE 802.15.4 to Support Coexistence With IEEE 802.11B/G (4) <i>Wantawat Wongmanoch and Watit Benjapolakul, Chulalongkorn University</i>

12:00-13:00	Lunch			
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Session	FR-P1-1	FR-P1-2	FR-P1-3	FR-P1-4
Session Topic	Special Session: Computational Techniques for Smart Power Systems	High Voltage and EMC	Biomedical Engineering	Antenna Technology
Session Chair	Dr.Jonglak Pahasa, U. of Phayao	Asst.Prof.Dr.-Ing Thanapong Suwanasri, KMUTNB	Dr. Surachoke Tanapitak, MU	Assoc.Prof.Vech Vivek, KMUTNB
13:00-13:20	Microgrid Frequency Stabilization by Controllable PV Source based on Fuzzy Logic Control (85) <i>Nattapol Sa-ngawong, Theerawut Chaiyatham, and Issarachai Ngamroo, King Mongkut's Institute of Technology Ladkrabang</i>	EMC Issues in Modern Power Systems (34) (INV 13) <i>Vuttiapon Tarateeraseth, Srinakharinwirot University</i>	Acute Leukemia Classification using Digital Image Processing (15) <i>J. Laosai, T.Panupng, and K.Chamnongthai, Ubon Ratchathani Rajabhat University</i>	The Rectangular Slot Antenna with Twin C-Shape Slot Etching for Wireless Applications (11) <i>Amnoi Rungwaree, Pipat Kongmuang and Apriada Namsang, Rajamangala University of Technology Thanyaburi</i>
13:20-13:40	Power Ramp Rate of Wind and Solar Farms on Frequency Regulation in Microgrid System (92) <i>T. Priroon, K. Hongesombut, and Y. Weerakamaeng, Kasetsart University</i>	The C-FV Method For mportant Ranking Of High Voltage Equipment in Power Substation (22) <i>Thanapong Suwanasri, Sarawut Wattanawongpitak, Pakit Jittapramualboon and Cattareeya Suwanasri, King Mongkut's University of Technology North Bangkok</i>	A Design of a Wideband Pulse Generator Using Avalance Transistor Switches (40) <i>C. Thammatharn, P. Vongkanghae, S. Thanapitak, D. Wilairat, C. Neatpisarnvanit, and P. Kirawanich, Mahidol University</i>	CPW Fed Square Printed Monopole Antenna with Tuning by Tapered Ground and Fed Strip for UWB Application (12) <i>Amnoi Rungwaree, Pawee Chaiboon and Chonnikan Panidnok, Rajamangala University of Technology Thanyaburi</i>
13:40-14:00	Feature Selection for Adaptive Power System Stabilizer using Optimal Support Vector Machines (89) <i>Jonglak Pahasa and Issarachai Ngamroo, University of Phayao</i>	Partial Discharge Detection For Test Transformer (35) <i>Cattareeya Suwanasi, Thanapong Suwanasri, Pongsakorn Thawonsukanan, Sayan Ruankon, and Pinit Jitjing, King Mongkut's University of Technology North Bangkok</i>	Wavelet Packet Decomposition Based Spike and Epileptic Seizure Classification Using Multiclass Support VectorMachine(57) <i>Patcharin Artameeyanant and Kosin Chamnongthai, King Mongkut's University of Technology Thonburi</i>	Triple Band Ellipse Patch Monopole Antenna for WLAN/WiMAX Applications (14) <i>Pichet Moeikham, Chatree Mahatthanajatuphat and Prayoot Akkaraekthalin, King Mongkut's University of Technology North Bangkok</i>

14:00-14:20	Transient Stability Augmentation of OFDFIG Based-wind Power by Superconducting Fault Current Limiter (80) <i>Tanapon Karaipoom and Issarachai Ngamroo, King Mongkut's Institute of Technology Ladkrabang</i>	Saint Elmo's Fire Corona Generated by HVDC,HVAC and Tesla Coil (45) <i>Kittipong Tonmitr, Arkom Kaewrawang, Surapong Seela-or, and Nuttapon Chaidangsri, Khon Kaen University</i>	Development of Force Platform System for Standing Analysis of Canines (83) <i>Pachara Chalayon, Sumit Durongphongtorn, and Chanchana Tangwongsan, Chulalongkorn University</i>	A Multiband Loop Antenna with Strip-line U-Shape Parasitics for WLAN and WiMAX Applications(49) <i>Surasak Kerdpol, Norakamon Wongsin, Chatree Mahatthanajatuphat, and Prayoot Akkaraekthalin, King Mongkut's University of Technology North Bangkok</i>
14:20-14:40	Simultaneous Coordinated Tuning of IPFC and PSS Controller for Damping of Low Frequency Oscillations in Power System (91) <i>T. Kerdphol, K. Hongesombut, and Y. Weerakamaeng, Kasetsart University</i>	A Study Effect of Three type Electric Field on Exhaust Emission Reduction and compare AC-DC Source for suitable from Benzene Engine (84) <i>P.Udomdat, S. Potivejkul, K. Kitwattana, and S.Leejongpermpoon, King Mongkut's Institute of Technology Ladkrabang</i>	Gait Analysis and Estimation for Robotic Lower-extremity Orthosis (86) <i>Surachad Tohvarapa and Sanya Mitaim, Thammasat University</i>	A Dual Band-notched UWB Monopole Antenna with Using C-shaped Slot and Hairpin Slot (66) <i>Tanaporn Pechrkool, Tanan Hongnara, Sarawuth Chaimool, and Prayoot Akkaraekthalin, King Mongkut's University of Technology North Bangkok</i>

14:40-15:00	Break
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Session	FR-P2-1	FR-P2-2	FR-P2-3	FR-P2-4
Session Topic	Power Electronics Technology	Control Technology	Analog Circuits	Oscillator Circuits
Session Chair	Asst.Prof.Pinit Thepsatorn, SWU	Prof.Dr.Tomoaki Sato, Hirosaki U.	Assoc.Prof.Dr.Montree Siripruchyanun, KMUTNB	Prof.Dr.Prayoot Akkaraekthalin, KMUTNB
15:00-15:20	Analysis of 6-Pulses Three-Phase PWM AC-AC Matrix Converter(52) <i>Prasopchok Hothongkham and Jensak Eakburanawat, Rajamangala University of Technology Rattanakosin</i>	The Speed Control of DC Motor Using PI Control Method (SS Electro 2) <i>K. Phipek, C. Sompracha and V. Tipsuwanporn, Rajamangala University of Technology Rattanakosin</i>	An Active-only Current-mode Biquad Filter Based on Lossless Integrators (SS Electro 3) <i>Surasak Inchan, Supawat Lawanwisut, Thanun Tangrujikul, Tada Comedang and Montree Siripruchyanun, Rajabhat University Ratchaburi</i>	A Realization of Current-mode Quadrature Oscillator with Independent Tuning (47) <i>Kanyawit Klinbumrung, Peerawut Suwanjan, and Winai Jaikla, King Mongkut's Institute of Technology Ladkrabang</i>
15:20-15:40	Common Mode Noise in Comparison to the Full-bridge and Buck Converters for DC Motor Drive (88) <i>A. Srisawang, Vongchavalitkul University</i>	Robust Digital Control for Interleave PFC Boost Converter with DC-DC Converter Load (17) <i>Yuji Fukaiishi, Kohji Higuchi, Hiroyuki Furuya, Yuki Satake, and Kosin Chamnongthai, The University of Electro Communications, Japan</i>	A Discrete-time Parametric Amplifier Using Switched Gain Cell Technique (29) <i>Chutham Sawigun and Amorn Jiraseree-amornkun, Mahanakorn University of Technology</i>	Current-mode Sinusoidal Oscillator with Magnitude Controllability Using Voltage Differencing Transconductance Amplifiers (73) <i>Soodteeruk Choocharoen, Peerawut Suwanjan, and Winai Jaikla, Mongkut's Institute of Technology Ladkrabang</i>
15:40-16:00	Analysis and Design of Three-phase PWM AC-AC Matrix Converter with Various Pulses (50) <i>Prasopchok Hothongkham and Jensak Eakburanawat, Rajamangala University of Technology Rattanakosin</i>	New Capacitor Voltage Control For Modular Multilevel Inverters (26) <i>Nathawit Panichchob and Somboon Sangwongwanich, Chulalongkorn University</i>	Simple Simulated Floating Inductance Using CMOS OTA and CCDDCC (43) <i>Montri Somdunayakanok and Pipat Prommee, Rajamangala University of Technology Rattanakosin</i>	A Robust Van Der Pol Chaotic Oscillator with Single Control Parameter and Absolute-Value Nonlinearity (59) <i>Bandhit Suksiri and Wimol San-Um, Thai-Nichi Institute of Technology</i>