

ISEE-2017 CONFERENCE AND NICT-WORKSHOP PROGRAM

Wednesday, November 29 , 2017

Time	HALL B4			
07:30-08:30	Registration			
08:30-09:00	Opening Ceremony			
09:00-09:45	<p style="color: #0000FF; margin: 0;">NEW CHALLENGES AND OPPORTUNITIES IN THE DEVELOPMENT OF MILLIMETER-WAVE FRONT-END MODULES FOR 5G WIRELESS COMMUNICATION EQUIPMENT – Prof. Nicolas Constantin</p> <p style="margin: 0;">Chair: Prof. Thuong Le-Tien, Prof. Nguyen Huu Phuc</p>			
09:45-10:30	<p style="color: #0000FF; margin: 0;">CONTROL ISSUES IN THE GRID-CONNECTED CONVERTERS – Prof. Dong-Choon Lee</p> <p style="margin: 0;">Chair: Prof. Thuong Le-Tien, Prof. Nguyen Huu Phuc</p>			
10:30-10:45	Coffee break			
10:45-11:30	<p style="color: #0000FF; margin: 0;">INTEGRATED WIRELESS SENSORS: A HARDWARE PERSPECTIVE – Prof. Khaled Nabil Salama</p> <p style="margin: 0;">Chair: Prof. Thuong Le-Tien, Prof. Nguyen Huu Phuc</p>			
11:30-13:30	Lunch break (Restaurant B4)			
Time	Room: 401 B4	Room: 402 B4	Room: 403 B4	Room: 405 B4
13:30-15:10	<p style="color: #0000FF; margin: 0;">C-1: Communications</p> <p style="margin: 0;">Chairs: Dr. Ha Hoang Kha and Prof. Kaei Washino</p>	<p style="color: #0000FF; margin: 0;">P-1: Power and Energy Systems</p> <p style="margin: 0;">Chair: Prof. Nguyen Van Nho and Prof. Dong-Choon Lee</p>	<p style="color: #0000FF; margin: 0;">A-1: Automation</p> <p style="margin: 0;">Chair: Prof. Huynh Thai Hoang and Prof. Ho Pham Huy Anh</p>	<p style="color: #0000FF; margin: 0;">N-1: NICT workshop on short-range access communications and related technologies</p> <p style="margin: 0;">Chair: Dr. Pham Tien Dat</p>
15:10-15:30	Coffee break			
15:30-17:00	<p style="color: #0000FF; margin: 0;">C-2: Communications</p> <p style="margin: 0;">Chairs: Prof. Thuong Le-Tien and Prof. Kojima Toshiharu</p>	<p style="color: #0000FF; margin: 0;">P-2: Power and Energy Systems</p> <p style="margin: 0;">Chair: Prof. Nguyen Huu Phuc and Prof. Shouji Usuda</p>	<p style="color: #0000FF; margin: 0;">I-1: Adv. Tech. for IoT Applications</p> <p style="margin: 0;">Chair: Dr. Truong Quang Vinh and Prof. Shoshi Inoue</p>	<p style="color: #0000FF; margin: 0;">N-2: NICT Workshop</p> <p style="margin: 0;">Chair: Dr. Atsushi Kanno</p>
18:30-21:00	Gala Dinner (Athena Hotel)			
Thursday, November 30 th , 2017				
Time	Room: 401 B4	Room: 402 B4	Room: 403 B4	Room: 405 B4
08:00-10:20	<p style="color: #0000FF; margin: 0;">P-3: Power and Energy Systems</p> <p style="margin: 0;">Chair: Prof. Phan Quoc Dung and Prof. Hong-Hee Lee</p>	<p style="color: #0000FF; margin: 0;">C-3: Communications</p> <p style="margin: 0;">Chairs: Dr. Do Hong Tuan and Prof. Kaei Washino</p>	<p style="color: #0000FF; margin: 0;">M-1: Microelectronics and Embedded Systems</p> <p style="margin: 0;">Chair: Dr. Huynh Phu Minh Cuong and Prof. Nicolas Constantin</p>	<p style="color: #0000FF; margin: 0;">ASEAN IVO Project Meeting</p> <p style="margin: 0;">Dr. Pham Tien Dat</p>
10:20-10:40	Coffee break			
10:40-12:00	<p style="color: #0000FF; margin: 0;">P-4: Power and Energy Systems</p> <p style="margin: 0;">Chair: Dr. Nguyen Quang Nam and Prof. Nguyen Ngac Ky</p>	<p style="color: #0000FF; margin: 0;">C-4: Communications</p> <p style="margin: 0;">Chairs: Dr. Trinh Xuan Dung and Dr. Tran Trung Duy</p>	<p style="color: #0000FF; margin: 0;">C-5: Communications</p> <p style="margin: 0;">Chairs: Prof. Ho Van Khuong and Dr. Vo Que Son</p>	

PROGRAM DETAILS

Wednesday (November 29th, 2017)

Time	Content	Speaker
Plenary session – Hall B4		
7:30 ÷ 8:30	Registration	
8:30 ÷ 8:35	Introduction	MC
8:35 ÷ 8:40	Opening remarks from ISEE 2017 General Chair	Prof. Thuong Le-Tien, HCMUT, Vietnam
8:35 ÷ 8:40	Opening remarks from HCMUT	Prof. Vu Dinh Thanh, Rector, HCMUT, Vietnam
8:40 ÷ 8:50	Opening remarks from NICT	Prof. Naoya Wada, NICT, Japan
8:50 ÷ 9:00	Photo Session	
9:00 ÷ 9:45	New Challenges and Opportunities in the Development of Millimeter-wave Front-End Modules for 5G Wireless Communication Equipment	Prof. Nicolas Constantin, ETS, Canada
9:45 ÷ 10:30	Control Issues in the Grid-Connected Converters	Prof. Dong-Choon Lee, Yeungnam University, Korea
10:30 ÷ 10:45	Coffee break	
10:45 ÷ 11:30	Integrated Wireless Sensors: A Hardware Perspective	Prof. Khaled Nabil Salama, KAUST, Saudi Arabia
11:30 ÷ 13:30	Lunch time	

C-1: Communications – Room 401 B4

(Co-Chairs: Dr. Ha Hoang Kha and Prof. Kaei Washino) – Time: 13:30 ÷ 15:10

13:30 ÷ 14:10	5G Phased Array Antenna Design Flow - A comprehensive approach with EEs of EDA	Mr. Tony NG, Keysight Technologies
14:10 ÷ 14:50	Invited Talk: The Total Error Limited by Modifying the Parameters of Zernike Moments Computation in Duplicated Images	Prof. Thuong Le-Tien, HCMUT, Vietnam
14:50 ÷ 15:10	Trial of Scattering Media Tomography using Convolutional Neural Network	Prof. Shoshi Inoue, Hokkaido Uni. of Education, Japan

P-1: Power and Energy Systems – Room 402 B4

(Co-Chairs: Prof. Nguyen Van Nho and Prof. Dong-Choon Lee) – Time: 13:30 ÷ 15:10

13:30 ÷ 13:50	Research on Manufacturing and Application of Lithium-Ion Capacitor Module	Prof. Shouji Usuda, Osaka Electro-Communication University, Japan
13:50 ÷ 14:10	Diagnostic Experiment of Partial Discharge in Cast Resin Instrument Transformers	Mr. Nguyen Si Huy Cuong, HCMUT, Vietnam
14:10 ÷ 14:30	A Linear Generation Cost-Based Droop Control Method in DC Microgrid	Mr. Hoang Duc Khanh, University of Ulsan, Korea
14:30 ÷ 14:50	Investigation on Winding Type Possibilities in a Black-Box Power Transformer	Mr. Ly Truong Thinh, HCMUT, Vietnam
14:50 ÷ 15:10	Transient Stability Analysis of Power Systems with SVC using ETAP 14.0	Mr. Dang Tuan Khanh, HCMUT, Vietnam

P-1: Automation – Room 403 B4

(Co-Chairs: Prof. Huynh Thai Hoang and Prof. Ho Pham Huy Anh) – Time: 13:30 ÷ 15:10

13:30 ÷ 13:50	Two-Wheeled Self-Balancing Robot Moving on Inclined Plane and Preset Orbit	Mr. Duc To Nguyen, HCMUT, Vietnam
13:50 ÷ 14:10	A Novel Fuzzy Sliding Mode Approach for PMSM Vector Control	Mr. Pham Quoc Khanh, HCMUT, Vietnam
14:10 ÷ 14:30	Adaptive Inverse Multilayer Fuzzy Control of Single-Tank System Optimized with Differential Evolution Algorithm	Mr. Cao Van Kien, HCMUT, Vietnam
14:30 ÷ 14:50	Modeling of Nonlinear PAM Robot Arm System using Inverse Adaptive NARX Fuzzy Model Optimized with Differential Evolution Algorithm	Prof. Ho Pham Huy Anh, HCMUT, Vietnam
14:50 ÷ 15:10	A Study on Advanced Fuzzy-PID Speed Control for Underwater Thruster	Mr. Tran Quoc Tien Dung, HCMUT, Vietnam

N-1: NICT Workshop on short-range access communications and related technologies – Room 405 B4

Co-Chairs: Dr. Pham Tien Dat – Time: 13:30 ÷ 15:05

13:30 ÷ 13:40	Opening Address	Dr. Do Hong Tuan, HCMUT Dr. Naoya Wada, NICT
13:40 ÷ 13:45	Workshop Introduction	Dr. Pham Tien Dat, NICT
13:45 ÷ 14:05	Overview of Optical Wireless Communications	Prof. Mitsuji Matsumoto, Waseda University, Japan
14:05 ÷ 14:25	Hybrid VLC/WiFi Networks: CSMA/CA-based MAC Protocol Design and Performance Analysis	Assoc.Prof. Dang The Ngoc, PTIT, Vietnam
14:25 ÷ 14:45	Short-Range Visible Light Communication with Low-Cost Optoelectronic Devices for Smart Homes	Dr. Yusuf Nur Wijayanto, LIPI, Indonesia
14:45 ÷ 15:05	Pre-Emphasis Circuit for OLED VLC Systems	Dr. Pham Quang Thai, HCMUT, Vietnam
15:10 ÷ 15:30	Coffee break	

C-2: Communications – Room 401 B4**(Co-Chairs: Prof. Thuong Le-Tien and Prof. Kojima Toshiharu) – Time: 15:30 ÷ 17:10**

15:30 ÷ 15:50	Edges Sharpness Analysis to Improve the Accuracy and Processing Time in Image Forensics	Ms. Huynh Kha Tu, HCMUT, Vietnam
15:50 ÷ 16:10	Practical Usefulness of Wearable Electro-Oculogram for Measuring Intelligibility of Text	Prof. Kaei Washino, Gifu Shotoku Gakuen University, Japan
16:10 ÷ 16:30	Design of a DICOM Viewer Software with Enhanced Security for Telemedicine	Mr. Nguyen Thanh Tuan, HCMUT, Vietnam
16:30 ÷ 16:50	Simulation of Real-Time Heart Rate Detect using Webcam in Vietnam	Mr. Tran Thanh Dang Khoa, HCMUT, Vietnam
16:50 ÷ 17:10	Estimating Heart Rate via Depth Video Motion Tracking with Primesense Carmine 1.09	Mr. Le Trung Thang, HCMUT, Vietnam

P-2: Power and Energy Systems – Room 402 B4**(Co-Chairs: Prof. Nguyen Huu Phuc and Prof. Shouji Usuda) – Time: 15:30 ÷ 17:10**

15:30 ÷ 15:50	Simulation of Neutral Earthing and Impact of Distributed Energy Source on Conductor Size in Microgrid	Mr. Bui Huy Anh, HCMUT, Vietnam
15:50 ÷ 16:10	A Single Source Fed Three-Level T-Type Inverter Based on Voltage Quasi-Switched Boost	Mr. Do Duc Tri, HCMUTE, Vietnam
16:10 ÷ 16:30	Investigation of Simulation Approaches on Frequency Responses of a Power Transformer	Mr. Nguyen Trung Duy, HCMUT, Vietnam
16:30 ÷ 16:50	Study on Single-Stage Fly-Back Converter for LED Driver with Dimable Control	Mr. Ngo Thanh Tung, TU, Vietnam
16:50 ÷ 17:10	A Configuration Of Hybrid Energy Storage System (HESS) to Compensate the Load Transients and Multiple Cooperate in DC Microgrid	Mr. Dam Duy Hung, University of Ulsan, Korea

I-1: Advanced Technologies for IoT Applications – Room 403 B4

(Co-Chairs: Dr. Truong Quang Vinh and Prof. Shoshi Inoue) – Time: 15:30 ÷ 17:10

15:30 ÷ 15:50	A Framework of Smart Street Lighting System using LOWPAN/IPv6 Networks	Dr. Vo Que Son, HCMUT, Vietnam
15:50 ÷ 16:10	Applications of Intelligent Transport Systems using VANET for Driving Safety Support System	Dr. Vo Que Son, HCMUT, Vietnam
16:10 ÷ 16:30	Issue of Applications for Smart Devices in Regional Vitalization	Prof. Kohei Tahata, Kyoto Sangyo University, Japan
16:30 ÷ 16:50	Localization Algorithms for 6LoWPAN Networks	Mr. Dang Vo Hoang Anh, HCMUT, Vietnam

N-2: NICT Workshop – Room 405 B4

Co-Chairs: Dr. Atsushi Kanno – Time: 15:30 ÷ 17:10

15:30 ÷ 15:50	Future Computing Systems: Von Neuman and Beyond	Prof. Khaled Nabil Salama, KAUST, Saudi Arabia
15:50 ÷ 16:10	Demonstration of Receiver Generated Optical Doubinary and VSB-NRZ for Next-Generation PON	Assoc. Prof. Sevia Idrus, UTM, Malaysia
16:10 ÷ 16:30	A Study on WiFi Hotspot Model for Vietnam Cities	Assoc. Prof. Vo Nguyen Quoc Bao, PTIT, Vietnam
16:30 ÷ 16:50	Converged Fiber-Wireless Technologies for Future Access and Radar Systems	Dr. Atsushi Kanno, NICT, Japan
16:50 ÷ 17:00	Closing Remarks	

Thursday (November 30th, 2017)

P-3: Power and Energy Systems – Room 401 B4

(Co-Chairs: Prof. Hong-Hee Lee and Prof. Phan Quoc Dung) – Time: 08:00 ÷ 10:20

8:00 ÷ 8:20	Model Predictive Voltage Control of DC-DC Converters for Battery Energy Storage Systems	Mr. Dung Duc Le, Yeungnam University, Vietnam
8:20 ÷ 8:40	Penetration Impacts of DFIG-Based Wind Power Plants on EVN-SPC Power Grid	Prof. Nguyen Huu Phuc, HCMUT, Vietnam
8:40 ÷ 9:00	Control in Degraded Mode of Two 6-Phase Machines Connected in Series	Dr. Nguyen Ngac Ky, Arts et Métiers Paristech, France
9:00 ÷ 9:20	DSOGI-FLL Based Sensorless Control of Variable Speed Engine-Generator Systems	Mr. Ngoc Dat Dao, Yeungnam University, Korea
9:20 ÷ 9:40	Ranking the Power Buses with Respect to the Transient Stability for Power System Planning	Mr. Luu Huu Vinh Quang, HCMUT, Vietnam
9:40 ÷ 10:00	A New PWM Algorithm for Single-Phase Cascaded H-Bridge Quasi-Switched Boost Inverter	Mr. Tran Van Thuan, Telecom University, Vietnam
10:00 ÷ 10:20	A New Formula of TEM Assessing The Transient Stability to Rank the Transmission Lines Of 500KV In Southern Vietnam Power System	Mr. Luu Huu Vinh Quang, HCMUT, Vietnam

C-3: Communications – Room 402 B4

(Co-Chairs: Dr. Do Hong Tuan and Prof. Kaei Washino) – Time: 08:00 ÷ 10:20

8:00 ÷ 8:20	Obtaining Human Behavior Information from Movies with Cameras using Image Analysis	Prof. Satoshi Itou, Gifu Gakuen University, Japan
8:20 ÷ 8:40	Secure Transmission in Cognitive Radio Systems under Effect of Co-Channel Interference With Jamming	Prof. Khuong Ho Van, HCMUT, Vietnam
8:40 ÷ 9:00	Optimized Energy Efficiency for Multicell MIMO Cooperative Systems	Mr. Phan Huu Chi, HCMUT, Vietnam

9:00 ÷ 9:20	ICT Learning Support Material in Technical High School of Japan	Mr. Masanobu Nagata, IPIT, Japan
9:20 ÷ 9:40	Modeling and Analysis of a Wi-Fi Access Method with Presence Of An Active Eavesdropper	Mr. Pham Minh Quang, PTIT, Vietnam
9:40 ÷ 10:00	Precoder Design for Spectral Efficiency Maximization in Full Duplex MIMO Wireless Systems	Mr. Xuan Xinh Nguyen, HCMUT, Vietnam
10:00 ÷ 10:20	A Proposed Algorithm Applied the MI-KSVD for Digital Image Denoising	Mr. Tuan Nguyen Thanh, HCMUT, Vietnam
<p>M-1: Microelectronics and Embedded Systems – Room 403 B4 (Co-Chairs: Dr. Huynh Phu Minh Cuong and Prof. Nicolas Constantin) – Time: 8:20 ÷ 10:20</p>		
8:20 ÷ 8:40	Portable Real-Time Lane Detection System using ARM Processor	Dr. Truong Quang Vinh, HCMUT, Vietnam
8:40 ÷ 9:20	Invited Talk: Energy-Efficient Interface Circuits for Low-Energy Sensor Nodes	Prof. Khaled Salama, KAUST, Saudi Arabia
9:20 ÷ 9:40	The Design of a Wideband, Low Phase Noise and Low Power Consumption CMOS Voltage Controlled Oscillator for VHF Frequency Synthesizer	Mr. Phan Trong Khoi, HCMUT, Vietnam
9:40 ÷ 10:00	An RF Tracking Filter for CMOS Digital TV Tune	Mr. Nguyen Tan Phat, HCMUT, Vietnam
10:00 ÷ 10:20	Development Of a USB Set-Top Box for DVB-T2 Television	Mr. Tran Nhat Hoai Bao, HCMUT, Vietnam
10:20 ÷ 10:40	Coffee break	

P-4: Energy and Power Systems – Room 401 B4

(Co-Chairs: Dr. Nguyen Quang Nam and Dr. Nguyen Ngac Ky) – Time: 10:40 ÷ 12:00

10:40 ÷ 11:00	Control Strategy of PMSG Wind Turbine System under Unbalanced Grid Voltage	Mr. Nguyen Chan Viet, HCMUT, Vietnam
11:00 ÷ 11:20	A Single Phase Grid-Connected Photovoltaic Converter with Simple but Effective Control Algorithm	Mr. To Huu Phuc, HCMUT, Vietnam
11:20 ÷ 11:40	Modeling and Simulation Method of Buck – Base LED Driver using PSIM	Mr. Nguyen Chan Viet, HCMUT, Vietnam
11:40 ÷ 12:00	VFTO Analysis for 220KV Gas-Insulated Substation	Dr. Nam Nguyen, HCMUT, Vietnam
12:00 ÷ 12:20	Maximum Torque per Ampere Control of SynRMs Based on ANN Considering Cross Magnetic Saturation and Iron Losses	Dr. Truong Phuoc Hoa, Vietnam

C-4: Communications – Room 402 B4

(Co-Chairs: Dr. Trinh Xuan Dung and Dr. Tran Trung Duy) – Time: 10:40 ÷ 12:00

10:40 ÷ 11:00	Smart Subtitling for Better Readability	Mr. Le Tuan Vu, HCMUT, Vietnam
11:00 ÷ 11:20	A Channel Estimation Scheme for Helicopter Satellite Communications based on Pseudo Bit Error Rate	Mr. Shunpei Katsukake, University of Electro-Communications, Japan
11:20 ÷ 11:40	Improving Information Security in Cognitive Radio Networks with Relay Selection	Prof. Khuong Ho Van, HCMUT, Vietnam
11:40 ÷ 12:00	Detecting and Counting Eyes Blink using Haar Cascade. A Handy Way to Diagnose Dry Eyes Disease	Mr. Nguyen Dinh Nguyen, HCMUT, Vietnam

C-5: Communications – Room 403 B4

(Co-Chairs: Prof. Ho Van Khuong and Dr. Vo Que Son) – Time: 10:40 ÷ 12:00

10:40 ÷ 11:00	Shape Representation of Rice Seed Accession Based on Chain Code	Ms. Tran Thi Kim Nga, HCMUT, Vietnam
11:00 ÷ 11:20	Microscope Cellular Image Segmentation via Superpixel Ranking	Mr. Vo Khac Long, HCMUT, Vietnam
11:20 ÷ 11:40	Modified MHD using Binary Tree Search for Face Recognition	Mr. To Nguyen Phuoc Vinh, HCMUT, Vietnam
11:40 ÷ 12:00	A Research on Level Sensing for Petroleum Management System in Vietnam	Mr. Vuong Phat, HCMUT, Vietnam

Closing session – Hall B4 – Time: 12:20