

<b>Tutorial Session</b> Thursday, August 6th, 2015, 09:50-12:00 2nd Floor Auditorium, Engineering 4 Building Faculty of Engineering, Chulalongkorn University		<b>Opening</b> 9:50	<b>Tutorial</b> Evolution toward 5G-Next Generation Mobile Network and Its Applications
Chairs:	Panuwat Janjugdee, Chulalongkorn Univ., Thailand	10:00	12:00 NTT DOCOMO, Japan

**THI: Young Researchers Session**

Thursday, August 6th, 2015, 13:00-14:00 (Oral), 14:00-15:30 (Poster)

Chair: Sarawuth Chaimool, Udorn Thani Rajabhat University, Thailand  
 Shoichi Narahashi, NTT DOCOMO, Japan

<b>THI-01</b>	<b>Okumura-Hata Model Optimization for DVB-T2 Propagation in Urban Area of Suratani, Southern Thailand</b>	<b>THI-10</b>	<b>A 24-GHz Low-Noise Amplifier in 180nm CMOS</b>	<b>THI-18</b>	<b>Maximum symbol rate feasible for LED visible light communication with low-frame-rate CMOS camera</b>	<b>THI-26</b>	<b>Evaluation Method of Transmission Loss Using Unloaded Q factor of Transmission Line</b>	<b>THI-34</b>	<b>Modeling of Grounded CPW Line with Anomalous Skin Effect in THz band.</b>
	Pitak Keawbunsong, Sathaporn Promwong  KMITL, Thailand		Yoshiaki Sato*, Yohei Kondo#, Kiyotaka Komoku*, Takayuki Morishita*, Nobuyuki Itoh*  * Okayama Pref. Univ., Japan, # Sharp Takaya, Japan		Tomoki Kondo, Ryotaro Kitaoka, Wataru Chujo  Meijo Univ., Japan		Yoshihiko Kamo, Futoshi Kuroki  NIT, Kure, Japan		Yuta Sakiyama, Masashi Muraguchi, Hiroto Sakaki, Kenjiro Nishikawa  Kagoshima Univ., Japan
<b>THI-02</b>	<b>Dual-band Dual-pole Antenna for compatibility of MPT with communication</b>	<b>THI-11</b>	<b>BAN-UWB Transmission Model for Wireless Body Area Network</b>	<b>THI-19</b>	<b>Truncated-Corner Loop Tag Antenna Radiating Circular Polarization for National UHF-RFID Standard</b>	<b>THI-27</b>	<b>A Study of Electromagnetic Wave Diffracted from Corners of Thin Material Coated Metallic Surface</b>	<b>THI-35</b>	<b>Radar Target Identification of Coated Object Using Cauchy Method</b>
	Naoki Hasegawa*, Hyeonjae Ju#, Satoshi Yoshida**, Akihira Miyachi##, Makoto Matsunoshita##, Kenjiro Nishikawa**, Shigeo Kawasaki##  * Kyoto Univ. Japan, # The Univ. of Tokyo, Japan, ** Kagoshima Univ., Japan, ## ISAS/JAXA, Japan		Phouthong Southisombath, Sanit Teawchim, Sathaporn Promwong  KMITL, Thailand		Arnon Sakonkanapong, Chuwong Phongcharoenpanich  KMITL, Thailand		Awika Pimpatang, Titipong Lertwiriayapra  KMUTNB, Thailand		Nattawat Chantansen, Akkarat Boonpoonga  KMUTNB, Thailand
<b>THI-03</b>	<b>Comparison on Optimization and Calibration Methods for DTTV Propagation in Urban Area of Suratani, Southern Thailand</b>	<b>THI-12</b>	<b>The 500MHz band low power rectenna with a high impedance antenna</b>	<b>THI-20</b>	<b>Flicker-free modulation technique for LED visible light communication with low-frame-rate CMOS camera</b>	<b>THI-28</b>	<b>Consideration on Wireless Power Transmission Efficiency in KHz Frequency Bands</b>	<b>THI-36</b>	<b>An RF Universal Board for SSOE Elements</b>
	Pitak Keawbunsong, Sathaporn Promwong  KMITL, Thailand		Takahiro Furuta, Motoki Ito, Kenji Itoh, Keisuke Noguchi, Jiro Ida  Kanazawa Institute of Tech., Japan		Ryotaro Kitaoka, Tomoki Kondo, Wataru Chujo  Meijo Univ., Japan		Katsuyoshi Aoki*, Kenji Shodai#, Kouichi Yamanoue**, Futoshi Kuroki*  *NIT, Kure, Japan, #Hiroshima Univ., Japan, **Imasen Co.Ltd, Japan		Motohiro Takayasu, Toshiaki Gonda, Yosuke Ishikawa, Hiroyuki Ito, Noboru Ishihara, Kazuya Masu  Tokyo Tech., Japan
<b>THI-04</b>	<b>Study of Radio Wave Propagation for low-power Autonomous WSN -- Attenuation and Fading Modeling by Measurements --</b>	<b>THI-13</b>	<b>Coupled Slot Antenna for Mango Classification</b>	<b>THI-21</b>	<b>Integrated Antenna using a Magneto-Dielectric Substrate for DVB-H Application</b>	<b>THI-29</b>	<b>Study of Electromagnetic Absorber Made by Natural Rubber</b>	<b>THI-37</b>	<b>Analysis of Object Buried in Multi-layer Soil by using Matrix Pencil Method</b>
	Ryohai Yamane, Tatsuki Tokunou, Toshihiko Hamasaki  Hiroshima Inst. of Tech., Japan		Karn Sukpong*, Chayot Jatupornprasit*, Chayut Tripathumrat*, Chattapon Rienthong*, Paiboon Yooyod#, Monai. Krairiksh*  * KMITL, Thailand, # RSU, Thailand		Pipat Bumrungrakarn, Bancha Luadang, Chuwong Phongcharoenpanich  KMITL, Thailand		Kiaditsak Salayong, Titipong Lertwiriayapra  KMUTNB, Thailand		Lakkhana Bannawat, Cheepchanok Yochanang, Akkarat Boonpoonga  KMUTNB, Thailand
<b>THI-05</b>	<b>UHF RFID Reader using Slanted Slot Patch Metasurface on Microstrip Patch Antenna</b>	<b>THI-14</b>	<b>A study on LH ferrite waveguide using half mode waveguide</b>	<b>THI-22</b>	<b>Consideration on Mounting Structure for MEMS Switch at 60 GHz Band</b>	<b>THI-30</b>	<b>The far-carrier phase noise measurement of the RF oscillator</b>	<b>THI-38</b>	<b>Pattern Diversity Unidirectional Antenna using Elevated Strip on Rectangular Ground Plane for WLAN Applications</b>
	Pawares Vjitsulakkana*, Wanwisa Thaiwiro#, Sarawuth Chaimool#, Prayoot Akkarachhalin*  *KMUTNB, Thailand, # UDRU, Thailand		Sho Yasugi, Kensuke Okubo, Mitsuyoshi kishihara, Hironori Takimoto  Okayama Pref. Univ., Japan		Kengo Nakajima*, Futoshi Kuroki*, Masanori Eguchi#, Takeshi Yamakawa#  * NIT, Kure, Japan, # FLSI, Japan		Yasuhiro Tonomo, Kenji Itoh, Tetsuo Hirota, Keisuke Noguchi, Shigeru Makino  Kanazawa Institute of Tech., Japan		Sukumarn Sankaewhong, Sittichai Denti, Chuwong Phongcharoenpanich  KMITL, Thailand
<b>THI-06</b>	<b>Basic characteristics of the third order PLL oscillator</b>	<b>THI-15</b>	<b>Microwave Sensor for Defected-Fruit Classification</b>	<b>THI-23</b>	<b>The FOA Design for Linear Antenna Array Optimization Problem</b>	<b>THI-31</b>	<b>Design of a Low cost and Simple Wireless Battery Charging by using Repeater Antenna Technique</b>	<b>THI-39</b>	<b>A Dual-band Textile Antenna using Two Layers of Strip Line and Round-off Circular Patch</b>
	Junki Ogawa, Kenji Itoh, Keisuke Noguchi, Tetsuo Hirota, Shigeru Makino  Kanazawa Inst. of Tech., Japan		Prapan Leekul, Chinarong Kittiyanyunya, Sorawat Chivapreecha, Monai Krairiksh  KMITL, Thailand		Nattaset Mhudongon*, Chuwong Phongcharoenpanich*, Supakit Kawdungta#  * KMITL, Thailand, # RMUTL, Thailand		Warayut Samakkhee, Kittisak Phaebug, Titipong Lertwiriayapra  KMUTNB, Thailand		Warangkana Chaihongsa, Chuwong Phongcharoenpanich  KMITL, Thailand
<b>THI-07</b>	<b>Combination of Substrate Integrated Waveguide and Microstrip Structure for Controllable Wideband Bandpass Filters</b>	<b>THI-16</b>	<b>A numerical study on nonreciprocal transmission characteristics of antiparallel magnetized LH ferrite waveguide</b>	<b>THI-24</b>	<b>Equivalent Circuit Model of Multi-layered Coils at Mediate Frequencies</b>	<b>THI-32</b>	<b>Technique to expand power transfer area on short range wireless power transfer system</b>		
	Nonchanutt Chudpootti*, Sarawuth Chaimool#, Prayoot Akkarachhalin*  * KMUTNB, Thailand, #UDRU, Thailand		Taichi Adachi, Kensuke Okubo, Mitsuyoshi Kishihara, Hironori Takimoto  Okayama Pref. Univ., Japan		Kaiji Nakahara, Futoshi Kuroki  NIT, Kure, Japan		Tatsuro Kuwahara, Ryo Takamori, Kenjiro Nishikawa  Kagoshima Univ., Japan		
<b>THI-08</b>	<b>The Output Power Formulas of the Balanced Diode Mixer Driven by the Square Wave LO</b>	<b>THI-17</b>	<b>Bandwidth Enhancement of Unidirectional Bow Tie Antenna Using Incision Gap for Terrestrial Digital Video Broadcasting</b>	<b>THI-25</b>	<b>Perturbation of a Probe Excited Circular Ring Antenna above the Square Reflector with Inserted Slabs for Circularly Polarized Radiation</b>	<b>THI-33</b>	<b>Measurement for Radar Target Identification using Matrix Pencil Method</b>		
	Honami Hama, Kenji Itoh, Keisuke Noguchi, Tetsuo Hirota, Shigeru Makino  Kanazawa Inst. of Tech., Japan		Bancha Luadang, Chuwong Phongcharoenpanich  KMITL, Thailand		Rungsinee Sukamat, Nattaset Mhudongon, Chuwong Phongcharoenpanich  KMITL, Thailand		Feaveya Kheawprae, Akkarat Boonpoonga  KMUTNB, Thailand		

Plenary Session		FR1: Novel Passive Components and Technologies		FR2: Advanced Antenna Technologies		FR3: Advanced Measurement Techniques		FR4: Novel Radar and Sensor Systems	
Friday, August 7th, 2015, 9:00-10:20 2nd Floor Auditorium, 100 Year Anniversary Engineering Building Faculty of Engineering, Chulalongkorn University		Friday, August 7th, 2015, 10:40-12:15 2nd Floor Auditorium, 100 Year Anniversary Engineering Building Faculty of Engineering, Chulalongkorn University		Friday, August 7th, 2015, 13:15-14:45 2nd Floor Auditorium, 100 Year Anniversary Engineering Building Faculty of Engineering, Chulalongkorn University		Friday, August 7th, 2015, 15:05-16:30 2nd Floor Auditorium, 100 Year Anniversary Engineering Building Faculty of Engineering, Chulalongkorn University		Friday, August 7th, 2015, 16:50-17:40 2nd Floor Auditorium, 100 Year Anniversary Engineering Building Faculty of Engineering, Chulalongkorn University	
Chair: Kenjiro Nishikawa, Kagoshima Univ., Japan		Chair: Prayoot Akkarakethalin, KMUTNB, Thailand Masataka Ohira, Saitama Univ., Japan		Chairs: Chuwong Pongjaroonpanich, KMITL, Thailand Kunio Sakakibara, NITech., Japan		Chairs: Thitipong Lertwiryaprasa, KMUTNB Thailand Masahiro Horibe, NMI-AIST, Japan		Chairs: Panuwat Janpugdee, Chulalongkorn Univ., Thailand Hiroshi Okazaki, NTT DOCOMO, Japan	
Opening Remarks	Message from General Chair	FR1-01	[Invited] Low-loss Silica-Based Bandpass Filter for 60-GHz applications	FR2-01	A Multiband Antenna with Square Slots and Capacitive CPW Feed for LTE, WiMAX and WLAN Systems	FR3-01	[Invited] Measurement and Analysis of Nanoparticle Ferromagnetic Resonance -- Non-Resonant Transmission Line Technique --	FR4-01	[Invited] Ground Penetrating Radar (GPR) for Counter Improvised-Explosive Devices in Thailand
9:00	Tuptim Angkaew	10:40	Yusuke Uemichi*, Osamu Nakaga*, Kei Nakamura*, Xu Han*, Ryouhei Hosono*, Ning Guan*, Shuhei Amakawa#	13:15	P. Singura, P. Chomong, S. Meesomkin, P. Akkarakethalin	15:05	Khattiya Chalapat*, Jaakko Timonen#, Maija Huopola#, Lari Koponen#, Christoffer Johans#, Robin Ras#, Olli Ikkala#, Markku Oksanen**, Eira Sepp***, Sorin Paraoanu#	16:50	Akkarat Boonpoonga
9:10	Chulalongkorn Univ., Thailand	11:00	* Fujikura Ltd., Japan, # Hiroshima Univ., Japan	13:30	KMUTNB, Thailand	15:25	* KMITL, Thailand, # Aalto University, Finland, ** Nokia Research Center, Finland	17:10	KMUTNB, Thailand
Plenary	Wireless Smart-city Technologies Launched from Asian Activities	FR1-02	On the Design Method of Microstrip Filtering Antennas Using Only Amplitude Property of Input Reflection Responses	FR2-02	Fundamental Study of the Helmet Antenna for Disaster Prevention	FR3-02	[Invited] A Reflectometer with Beam Switching Capability	FR4-02	ZigBee Sensor Network Installed with Ultrasonic Radar Sensor for Care Environment -- Comparison to Millimeter-Wave Radar --
9:10	Futoshi Kuroki	11:00	Masataka Ohira, Zhewang Ma	13:30	Hisashi Morishita, Naoto Nishiyama, Naobumi Michishita	15:25	Chainarong Kittiyapunya, Monai Krairiksh	17:10	Mitsutaka Hikita, Takeo Sato, Yukari Kaneda
9:45	NIT, Kure, Japan	11:15	Saitama Univ., Japan	13:45	National Defense Academy, Japan	15:45	KMITL, Thailand	17:25	Kogakuin Univ., Japan
Keynote	Convergence of radio and optical technologies for high resolution imaging	FR1-03	A Fourth Band BPF using Interdigital and Step-Impedance Techniques for 4G, WiMAX and WLAN Systems	FR2-03	Development of a Microstrip Antenna for In-Vehicle Digital Television Reception	FR3-03	Permittivity measurement of low-loss material by installation into microwave cavity	FR4-03	Field trial of radio-over-fiber based high-resolution radar
9:45	Tetsuya Kawanishi	11:15	Mr. Pongpat Ketkuntod	13:45	Teeapong Pratumsiri, Panuwat Janpugdee	15:45	Yuto Kato, Masahiro Horibe	17:25	Tetsuya Kawanishi*, Atsushi Kanno#, Nobuhiko Shibagaki**, Naruto Yonemoto##, Tuptim Angkaew†, Panuwat Janpugdee†
10:20	Waseda Univ., Japan	11:30	KMUNB, Thailand	14:00	Chulalongkorn Univ., Thailand	16:00	AIST, Japan	17:40	* Waseda Univ., Japan, # NICT, Japan, ** Hitachi, Japan, ## ENRI, Japan, † Chulalongkorn Univ., Thailand
		FR1-04	Study of influences of underfill material on CPW type millimeter-wave MMIC by flip chip packaging	FR2-04	Self Resonant Characteristics of Normal-Mode Helical Antennas Embedded in Dielectric or Magnetic Materials	FR3-04	Impact of Adaptor on Impedance Measurement at RF Frequency		
		11:30	Takashi Shimizu*, Yoshinori Kogami*, Yasutake Hirachi#	14:00	Nguyen Thanh Tuan*, Yoshihide Yamada*, Nguen Quoc Dinh#	16:00	Ryoko Kishikawa, Masahiro Horibe		
		11:45	* Utsunomiya Univ., Japan, # Tokyo Tech., Japan	14:15	* MJIT, Malaysia, # Le Quy Don Technical University, Vietnam	16:15	AIST, Japan		
		FR1-05	Planar Waveguide-to-Microstrip Transition with Multiple Microstrip-line Output Ports	FR2-05	Dispersion and Far-Field Analysis of a Hertzian Dipole Embedded in Multiple Periodic Structures of Lossless Multilayer Slabs Using the Equivalent CCITL Model	FR3-05	Comparing Measurement Results between Waveguide Vector Network Analyzer Measurement System with Different Cable Setup		
		11:45	Kunio Sakakibara, Nobuyoshi Kikuma	14:15	Supakit Kawdungta*, Danai Torrungrueng#	16:15	Masahiro Horibe, Ryoko Kishikawa, Yuto Kato		
		12:00	NITech, Japan	14:30	* RMUTL, Thailand, # Asian University, Thailand	16:30	NMI-AIST, Japan		
		FR1-06	Geometrical interpretation of edge states in transmission lines	FR2-06	Experimental study of an improved mono-pulse DOA estimation antenna by integrating microwave circuits				
		12:00	Kei Sawada	14:30	Eisuke Nishiyama, Ryo Tanaka, Ichihiko Toyoda				
		12:15	RIKEN, Japan	14:45	Saga Univ., Japan				

SA1: Special Session: RF Power Devices and Its Applications		SA2: Advanced Millimeter Wave Device and Systems		SA3: Advanced CMOS Technologies		Closing Session	
Saturday, August 8th, 2015, 10:00-11:30 2nd Floor Auditorium, 100 Year Anniversary Engineering Building Faculty of Engineering, Chulalongkorn University Chairs: Thitipong Lertwiriayaprasa, KMUTNB Thailand Kenji Itoh, Kanazawa Inst. of Tech., Japan		Saturday, August 8th, 2015, 13:00-13:55 2nd Floor Auditorium, 100 Year Anniversary Engineering Building Faculty of Engineering, Chulalongkorn University Chairs: Sarawuth Chaimool, Thailand Koji Yamanaka, Mitsubishi Electric Corp., Japan		Saturday, August 8th, 2015, 14:15-15:25 2nd Floor Auditorium, 100 Year Anniversary Engineering Building Faculty of Engineering, Chulalongkorn University Chairs: Panuwat Jangpuddee, Chulalongkorn Univ., Thailand Minoru Fujishima, Hiroshima Univ., Japan		Saturday, August 8th, 2015, 15:10-15:20 2nd Floor Auditorium, 100 Year Anniversary Engineering Building Faculty of Engineering, Chulalongkorn University Chair: Tuptim Angkaew, Chulalongkorn Univ	
SA1-01	[Invited] Microwave high power devices for social infrastructure systems in south east Asia	SA2-01	[Invited] The Three-Dimensional MMIC and Its Evolution to Wafer-Level Chip Size Package MMIC	SA3-01	[Invited] Innovation challenges from materials, devices and circuits in IoT/IoE era	Closing Remarks	
10:00	Koji Yamanaka, Kazuhiro Iyomasa, Shintaro Shinjo, Masatake Hangai	13:00	Tsuneo Tokumitsu	14:15	Kazuya Masu	15:10	Kenjiro Nishikawa
10:40	Mitsubishi Electric Corp., Japan	13:20	SEI Japan	14:35	Tokyo Tech., Japan	15:20	Kagoshima Univ.
SA1-02	[Invited] An X-band Dual-Polarimetric Doppler Weather Radar System as Applications of Microwave Circuits and Its Observation Examples	SA2-02	[Invited] A 60GHz Band 3-D Phased Array Antenna Module for Beam Forming W-PAN receivers	SA3-02	[Invited] Present Status of Characteristics Variability in Scaled MOS Transistors		
10:50	Takuo Kashiwa, Toshiaki Takaki, Masahiro Minowa, Yuta Ishigaki	13:20	Noriharu Suematsu, Mizuki Motoyoshi, Satoshi Yoshida, Yuya Suzuki, Wenying Ye, Surugu Kameda, Tadashi Takagi, Kazuo Tsubouchi	14:35	Toshiro Hiramoto		
11:30	Furuno Electric, Japan	13:40	Tohoku Univ., Japan	14:55	Univ. of Tokyo, Japan		
		SA2-03	Research on a Millimeter-Wave Close Proximity High-Speed Data Transfer System	SA3-04	Power line decoupling up to 325 GHz in CMOS		
		13:40	Tadao Nakagawa*, Hideki Toshinaga*, Toshimitsu Tsubaki*, Tomohiro Seki#, Ken Hiraga*, Masashi Shimizu*	14:55	Shuhei Amakawa, Ryuhei Goda, Kosuke Katayama, Kyoya Takano, Takeshi Yoshida, Minoru Fujishima		
		13:55	* NTT, Japan, # Nihon Univ., Japan	15:10	Hiroshima Univ., Japan		

Date of issue: August 6, 2015