

## Conference at a Glance

November, 10 <sup>th</sup> , 2011 (Registration 8:30-17:00)			
Time		Hall 1	Hall 2
10:00	10:20	Opening Remarks	/
10:20	11:00	TH1-1 Special Talk	
11:00	11:10	Break	
11:10	12:10	TH1-2 Wireless Power Transfer System	/
12:10	13:30	Lunch	
13:30	14:45	TH1-3 High Power Circuits & Rectennas	TH2-3 Passive Components & HTS Filter
14:45	15:15	Coffee Break	
15:15	17:00	TH1-4 CMOS Circuits	TH2-4 Planar Filter
		TH1-5 Power Amplifier 1	TH2-5 Miniature & Low Profile Antennas 1
18:00	20:00	Social Program at <b>The Luigans</b>	

November, 11 <sup>th</sup> , 2011 (Registration 9:00-12:30)			
Time		Hall 1	Hall 2
9:30	11:00	FR1-1 Power Amplifier 2	FR2-1 Miniature & Low Profile Antennas 2
		FR1-2 Active Circuits & Devices	FR2-2 Antennas and Technologies for Near Field Communication
11:00	11:30	Coffee Break	
11:30	12:30	FR1-3 CRLH-TL & Artificial Dielectrics Applications	FR2-3 Wave Interaction
12:30	14:00	Lunch	
14:00	15:15	FR1-4 Stabilized Oscillators & Signal Generators	FR2-4 Sophisticated Antennas
15:15	15:45	Coffee Break	
15:45	17:00	FR1-5 Bio-medical Applications, Imaging & Radars	FR2-5 Propagation & Absorption
17:00	17:30	Closing Remarks	/



# TH1-2: Wireless Power Transfer System

Thursday, November 10<sup>th</sup>, 2011

Hall 1

**Session Chair** Toshio Ishizaki, Ryukoku University, Japan

**TH1-2-1** **Frequency Characteristics of Wireless Power Transfer System with a Human Body**

11:10-11:25 **Model between the Source and the Load Coils**

Yoon-Myoung Gimm, Young-Jun Ju, Yu-Ri Lee, Dong-Yeol Lee

Dankook University, Korea

**TH1-2-2** **Novel Mobile Wireless Power Transfer System based on Coupled-lines and**

11:25-11:40 **Coupled-line/resonator Structures**

Shigeo Yakuno<sup>1</sup>, Toshio Ishizaki<sup>1</sup>, Ikuo Awai<sup>2</sup>

<sup>1</sup>Ryukoku University, <sup>2</sup>Ryutech Corporation, Japan

**TH1-2-3** **Fundamental Study of a Power Collection Efficiency in Microwave Wireless Power**

11:40-11:55 **Transmission**

Goh Fukuda<sup>1</sup>, Masakazu Hori<sup>1</sup>, Hirofumi Noji<sup>1</sup>, Shigeo Kawasaki<sup>2</sup>

<sup>1</sup>Tokyo University of Science, <sup>2</sup>Japan Aerospace Exploration Agency, Japan

**TH1-2-4** **Efficiency Enhancement by Adaptive Frequency Control in HF-Band Wireless Power**

11:55-12:10 **Transfer System**

Byung-Jun Jang, Jae-Bong Lim

Kookmin University, Korea

# TH1-3: High Power Circuits & Rectennas

Thursday, November 10<sup>th</sup>, 2011

Hall 1

**Session Chair** Shigeo Kawasaki, JAXA, Japan

**TH1-3-1** **A Analysis of a 4-inputport Compact Circular Waveguide Combiner Operating at S-Band for Space Communications**  
13:30-13:45

Hirofumi Noji<sup>1</sup>, Goh Fukuda<sup>1</sup>, Masakazu Hori<sup>1</sup>, Shigeki Furuta<sup>2</sup>, Yukio Moriguchi<sup>2</sup>, Zen-ichi Yamamoto<sup>3</sup> and Shigeo Kawasaki<sup>3</sup>

<sup>1</sup>Tokyo University of Science, <sup>2</sup>NEC Network and Sensor Systems, <sup>3</sup>Japan Aerospace Exploration Agency, Japan

**TH1-3-2** **Study on the Specifications of Transmitters employing the Dynamic Power Supply Voltage Techniques**  
13:45-14:00

Takayuki Kato<sup>1</sup>, Yoshinori Kogami<sup>1</sup>, Atsushi Yamaoka<sup>2</sup>, Keiichi Yamaguchi<sup>2</sup>, Yasuhiko Tanabe<sup>2</sup>, Kevin morris<sup>3</sup>, Jiafeng Zhou<sup>3</sup>, Gavin Watkins<sup>4</sup>

<sup>1</sup>Utsunomiya University, Japan, <sup>2</sup>Toshiba Corporation, Japan

<sup>3</sup>University of Bristol, U.K., <sup>4</sup>Toshiba Research Europe, UK

**TH1-3-3** **A Wideband Negative Feedback Amplifier Using a Bandpass Phase-Lead Effect**

14:00-14:15

Naoko Matsunaga, Kenichi Horiguchi, Ryoji Hayashi, Morishige Hieda  
Mitsubishi Electric Corporation, Japan

**TH1-3-4** **Experiment Study of Rectenna Characteristics for Wireless Communication and Power Transmission**  
14:15-14:30

Masakazu Hori<sup>1</sup>, Goh Fukada<sup>1</sup>, Hirofumi Noji<sup>1</sup>, Shigeo Kawasaki<sup>2</sup>

<sup>1</sup>Tokyo University of Science, <sup>2</sup>Japan Aerospace Exploration Agency, Japan

**TH1-3-5** **Frequency Analysis of RF-DC Conversion Circuit for Rectenna on Equivalent Network**  
14:30-14:45

Makoto Saito, Kiyomichi Araki

Tokyo Institute of Technology, Japan

## **TH1-4: CMOS Circuits**

Thursday, November 10<sup>th</sup>, 2011

Hall 1

**Session Chair**      Kenjiro Nishikawa, Kagoshima University, Japan

**TH1-4-1**              **A Compact Low Noise Amplifier with Integrated Notch Filter using CMOS Active**

15:15-15:30          **Inductor for UWB Systems**

Nischal Koirala, Ramesh. K. Pokharel, Ahmed I.A. Galal, Haruichi Kanaya, Keiji Yoshida  
Kyushu University, Japan

**TH1-4-2**              **A Fully-Integrated CMOS Power Amplifier for 24 GHz FMCW Automotive Radar**

15:30-15:45          **Application**

Chenglin Cui<sup>1</sup>, Seong-Kyun Kim<sup>1</sup>, Jun-Kyung Cho<sup>2</sup>, Byung-Sung Kim<sup>1</sup>

<sup>1</sup>Sungkyunkwan University, <sup>2</sup>Eltronix Co., Inc., Korea

**TH1-4-3**              **Design of Wideband/High Efficiency CMOS Power Amplifier for Low Power**

15:45-16:00          **Application**

Junghee Choi, Jiyoung Chang, Sangwook Nam

Seoul National University, Korea

## **TH1-5: Power Amplifier 1**

Thursday, November 10<sup>th</sup>, 2011

Hall 1

**Session Chair** Makoto Taromaru, Fukuoka University, Japan

**TH1-5-1** **A Miniaturized 8 W 2.5 GHz GaN HEMT Power Amplifier Module using  
16:00-16:15** **Selectively Anodized Aluminum Substrate**

Hae-Chang Jeong, Kyung-Whan Yeom  
Chungnam National University, Korea

**TH1-5-2** **High-Efficiency, Low-Distortion Microwave Cascode Power Amplifier with  
16:15-16:30** **Independently Biased AlGaIn/GaN HEMTs**

Ryo Ishikawa, Yoichiro Takayama, Kazuhiko Honjo  
The University of Electro-Communications, Japan

**TH1-5-3** **X-Band 120W Internally Matched GaN Amplifier in Small Package**

16:30-16:45 Hiroaki Maehara, H. Uchida, H. Utsumi, J.Nishihara, H. Otsuka, K. Yamanaka,  
M. Nakayama, Y. Hiran  
Mitsubishi Electric Corporation, Japan

## **TH2-3: Passive Components & HTS Filter**

Thursday, November 10<sup>th</sup>, 2011

Hall 2

**Session Chair** Dong Chul Park, Chungnam National University, Korea

**TH2-3-1 Time-Domain Analysis and Voltage and Current Behavior on Modified Rat-Race**

13:30-13:45

**Couplers**

Kazuhito Murakami

Kinki University, Japan

**TH2-3-2 Highly Miniaturized on-chip Passive Dividers Employing Periodic Ground**

13:45-14:00

**Structure on RFIC for Application to Wireless Communication System**

Young Yun , Jang-Hyeon Jeong, Jeong-Gab Ju, Eui-Hoon Jang

Korea Maritime University, Korea

**TH2-3-3 A New Broadband Microstrip-to-SIW Transition using Parallel Half-Mode SIW**

14:00-14:15

Daekeun Cho, Hai-Young Lee

Ajou University, Korea

**TH2-3-4 Improved Power Handling Capability of HTS Filters By Expanding Width of**

14:15-14:30

**Microwave Strip line of Second Resonator**

Yuto Tanaka, Tsukasa Tatsunokuchi, Moritoshi Akiya, Atsushi Saito, Shigetoshi Ohshima

Yamagata University, Japan

**TH2-3-5 Dual-Band Circularly Polarized Microstrip RFID Reader Antenna Employing**

14:30-14:45

**Metamaterial Wilkinson Power Divider**

Youn-Kwon Jung, Bomson Lee

Kyung Hee University, Korea

## TH2-4: Planar Filter

Thursday, November 10<sup>th</sup>, 2011

Hall 2

**Session Chair** Jen-Tsai Kuo, Chang Gung University, Taiwan

**TH2-4-1 Design of an Offset Interdigital Filter Based on Multi-port EM Simulated**

15:15-15:30 **Y-parameters**

Seok-Jeong Lee, Hyun-Seok Oh, Hae-Chang Jeong, Kyung-Whan Yeom  
Chungnam National University, Korea

**TH2-4-2 Second-Order Microstrip Bandpass Filter With High Rejection in Extended Wide**

15:30-15:45 **Stopband**

Dian-Jing Chen<sup>1</sup>, Jen-Tsai Kuo<sup>2</sup>

<sup>1</sup>National Chiao Tung University, <sup>2</sup>Chang Gung University, Taiwan

**TH2-4-3 Bandpass Filter Synthesis With New Quadruple-Mode Ring Resonator**

15:45-16:00

Tsu-Wei Lin<sup>1</sup>, Jen-Tsai Kuo<sup>2</sup>, Mei-Han Wang<sup>2</sup>, Chun-Hung Lin<sup>2</sup>, Shyh-Jong Chung<sup>1</sup>

<sup>1</sup>National Chiao Tung University, <sup>2</sup>Chang Gung University, Taiwan

**TH2-4-4 Design on Fishbone Shaped Tri-plate Transmission Line Filter at Millimeter Wave**

16:00-16:15 **Length**

Yasuyoshi Okita, Futoshi Kuroki

Kure National College of Technology, Japan

**TH2-4-5 Comblne Dual-Band Bandpass Filter using Active Quarter-Wavelength Resonator with Series Resonator**

16:15-16:30

In-Sung Jeon, Young-Ho Cho, Sang-Won Yun

Sogang University, Korea



## **TH2-5: Miniature & Low Profile Antennas 1**

Thursday, November 10<sup>th</sup>, 2011

Hall 2

**Session Chair**      Bomson Lee, Kyung Hee University, Korea

**TH2-5-1**              **Low-profile of Circularly Polarized Slender Antenna with Helical Element**

16:30-16:45          Ye Zhang, Takeshi Fukusako  
Kumamoto University, Japan

**TH2-5-2**              **A Novel Low-Profile Electrically Small Meander Line Antenna for Gain**

16:45-17:00          **Improvement**  
Yoshiya Saito, Takeshi Fukusako  
Kumamoto University, Japan

## **FR1-1: Power Amplifier 2**

Friday, November 11<sup>th</sup>, 2011

Hall 1

**Session Chair** Makoto Taromaru, Fukuoka University, Japan

**FR1-1-1** **Fundamental Study on Drain Efficiency of EDSM/EPWM Transmitter using Class- $E_M$  Amplifier**  
9:30-9:45

Makoto Taromaru<sup>1</sup>, Naoki Oyama<sup>1</sup>, Hiroo Sekiya<sup>2</sup>, Tadashi Suetsugu<sup>1</sup>

<sup>1</sup>Fukuoka University, <sup>2</sup>Chiba University, Japan

**FR1-1-2** **A 1.8 GHz Highly Efficient and Linear Class-E Power Amplifier using the Bandpass Filter Based on CRLH Structure**  
9:45-10:00

Hyoungjun Kim, Chulhun Seo, Seungin Yang

Soongsil University, Korea

## **FR1-2: Active Circuits & Devices**

Friday, November 11<sup>th</sup>, 2011

Hall 1

**Session Chair**     Jae-Sung Rieh, Korea University, Korea

**FR1-2-1**            **A Compact and Broadband MMIC Phase Shifter Using All-Pass/Capacitive  
-Coupled BPF**  
10:00-10:15

Ryota Komaru, Masatake Hangai, Morishige Hieda, Koichi Shigenaga, Mamiko Yamaguchi,  
Masatoshi Nakayama  
Mitsubishi Electric Corporation

**FR1-2-2**            **Efficiency Analysis of Class E and Inverse Class E Frequency Multiplier  
Considering FET Parasitics**  
10:15-10:30

Jae-Hyun Joo, Kyung-Heon Koo  
University of Incheon, Korea

**FR1-2-3**            **The Effect of Gate Metal Wiring Scheme and Number of Fingers on  $f_T$  and  $f_{max}$   
of Multi-finger RF MOSFETs**  
10:30-10:45

Yongho Oh, Jae-Sung Rieh  
Korea University, Korea

**FR1-2-4**            **Synchronized Dual-Band Push-Push Oscillator for Oscillator Array**

10:45-11:00        Kengo Kawasaki, Takayuki Tanaka, Masayoshi Aikawa  
Saga University

## **FR1-3: CRLH-TL & Artificial Dielectrics Applications**

Friday, November 11<sup>th</sup>, 2011

Hall 1

**Session Chair** Tadashi Kawai, University of Hyogo, Japan

**FR1-3-1** **CRLH Transmission Line to a CMOS Top Layer of a RF Signal Transmission**

11:30-11:45 **Network for Space Communication**

Daichi Hirahara, Makoto Mita, Shigeo Kawasaki

Japan Aerospace Exploration Agency, Japan

**FR1-3-2** **A Compact Broadband CRLH Leaky Wave Antenna Composed of Periodically**

11:45-12:00 **Arranged Mushrooms**

Takahiro Kawakami, Yasushi Horii

Kansai University, Japan

**FR1-3-3** **CRLH Rectangular Waveguide with Balanced Condition and Its Application to**

12:00-12:15 **Beam-Steering Leaky-Wave Slot Antenna**

Dong-Jin Kim, Jeong-Hae Lee

Hongik University, Korea

**FR1-3-4** **Compact Resonators made by Artificial Dielectrics Suitable for Base-station Filters**

12:15-12:30 Naoki Hama<sup>1</sup>, Toshio Ishizaki<sup>1</sup>, Ikuo Awai<sup>2</sup>

<sup>1</sup>Ryukoku University, <sup>2</sup>Ryutech Corporation, Japan

## **FR1-4: Stabilized Oscillators & Signal Generators**

Friday, November 11<sup>th</sup>, 2011

Hall 1

**Session Chair** Takayuki Tanaka, Saga University, Japan

**FR1-4-1 Experimental Confirmation of Phase Noise Dependency on Oscillator's Q Factor**

14:00-14:15 Tomoya Morimasa<sup>1</sup>, Kenji Itoh<sup>1</sup>, Shin-ichi Betsudan<sup>1</sup>, Shigeru Makino<sup>1</sup>, Tetsuo Hirota<sup>1</sup>,

Keisuke Noguchi<sup>1</sup>, Takashi Ohira<sup>2</sup>, Masaomi Tsuru<sup>3</sup>, Hiroshi Ikematsu<sup>3</sup>

<sup>1</sup>Kanazawa Institute of Technology, <sup>2</sup>Toyohashi University of Technology,

<sup>3</sup>Mitsubishi Electric Corporation, Japan

**FR1-4-2 Theoretical and Experimental Investigation on Band-stop Type of Self-injection**

14:15-14:30 **Locked NRD Guide Gunn Oscillator**

Tomohiro Tanaka, Futoshi Kuroki

Kure National College of Technology, Japan

**FR1-4-3 Analysis on Band Stop Type of Self-injection Locked NRD Guide Gunn Oscillator**

14:30-14:45 **with Two Output Ports at 60 GHz**

Shota Nakashima, Futoshi Kuroki

Kure National College of Technology, Japan

**FR1-4-4 A Novel Active Fast-Lock Loop Filter for an X-Band Frequency Synthesizer**

14:45-15:00 Yun-Seong Heo, Hyun-Seok Oh, Hae-Chang Jeong, Kyung-Whan Yeom

Chungnam National University, Korea

**FR1-4-5 Terahertz Wave Generation Using Optical Semiconductor Switches**

15:00-15:15 Tomoki Yamashita, Hiroyoshi Nagai, Jongsuck Bae

Nagoya Institute of Technology, Japan

# **FR1-5: Bio-medical Applications, Imaging & Radars**

Friday, November 11<sup>th</sup>, 2011

Hall 1

**Session Chair** Akimasa Hirata, Nagoya Institute of Technology, Japan

**FR1-5-1** **Calculation of the Effective Resistance of Human Models Grounded at Respective Resonance Frequencies**

15:45-16:00

Kazuya Yanase, Akimasa Hirata

Nagoya Institute of Technology, Japan

**FR1-5-2** **Microwave Computer Tomography with Plane Wave Illumination**

16:00-16:15

Soichiro Yamaguchi<sup>1</sup>, Naoya Kitade<sup>1</sup>, Masora Kishimoto<sup>1</sup>, Atsushi Kawabata<sup>1</sup>,  
Makoto Asakawa<sup>1</sup>, Teruki Nishimura<sup>2</sup>, Daisuke Kuwahara<sup>3</sup>, Yoshio Nagayama<sup>2</sup>

<sup>1</sup>Kansai University, <sup>2</sup>National Institute for Fusion Science, <sup>3</sup>Tokyo Institute of Technology,  
Japan

**FR1-5-3** **Noninvasive Temperature Measurement by Longitudinal Relaxation Time of Proton Using Magnetic Resonance Imaging**

16:15-16:30

Suguru Nakamura<sup>1</sup>, Masamichi Nakamura<sup>2</sup>, Eiichi Maeda<sup>3</sup>, Yoshio Nikawa<sup>1</sup>

<sup>1</sup>Kokushikan University, <sup>2</sup>Tokyo Therapeutic Institute, <sup>3</sup>Okinawa College of Integrative  
Medicinem, Japan

**FR1-5-4** **Detection of Distance and Velocity Using NRD Guide Pulse Radar at 60 GHz**

16:30-16:45

Kento Ichinose, Futoshi Kuroki

Kure National College of Technology, Japan

**FR1-5-5** **Evaluating Performance of Monostatic Millimeter-Wave Imaging Radar**

16:45-17:00

Jun Tsumochi, Hirokazu Kamoda, Fumiyasu Suginoshta

Japan Broadcasting Corporation (NHK), Japan

## **FR2-1: Miniature & Low Profile Antennas 2**

Friday, November 11<sup>th</sup>, 2011

Hall 2

**Session Chair** Sangwook Nam, Seoul National University, Korea

**FR2-1-1** **Beam Control of Low Profile Antenna Using Dogbone Structure**

9:30-9:45 Yuta Tanogashira, Takeshi Fukusako

Kumamoto University, Japan

**FR2-1-2** **Multiband Miniature FPCB Antenna for the Mobile Phone**

9:45-10:00 Taeho Son, Youngmin Jo

SoonChunHyang University and Skycross Korea Co., Korea

## **FR2-2: Antennas and Technologies for Near Field Communication**

Friday, November 11<sup>th</sup>, 2011

Hall 2

**Session Chair** Takeshi Fukusako, Kumamoto University, Japan

**FR2-2-1 L-Probe Fed Stacked Rectangular Microstrip Antenna combined with Ring**

10:00-10:15 **Antenna for Triple Band (GPS/VICS/ETC) Operation in ITS**

Takafumi Fujimoto, Daisuke Tanaka, Takashi Takenaka

Nagasaki University, Japan

**FR2-2-2 Modified Folded-slot Antenna for 2.4GHz Zigbee Applications**

10:15-10:30 Jin Ha Yoo, Sung Kyun Lim, Young Soon Lee

Kumoh National Institute of Technology, Korea

**FR2-2-3 A Small-Sized Monopole Antenna for UWB Application**

10:30-10:45 Lingsheng Yang, Kuniaki Yoshitomi

Kyushu University, Japan

**FR2-2-4 Solutions to Suppressing Common-mode Noise In Near Field Coupling**

10:45-11:00 **Communication**

<sup>1</sup>Tatsuya Kusunoki, <sup>1</sup>Taku Kobase, <sup>1</sup>Ryoji Nagai, <sup>1</sup>Masashi Takahashi, <sup>1</sup>Hitoshi Shimasaki,

<sup>1</sup>Yuichi Kado, <sup>2</sup>Mitsuru Shinagawa

<sup>1</sup>Kyoto Institute of Technology, <sup>2</sup>Hosei University, Japan



## **FR2-3: Wave Interaction**

Friday, November 11<sup>th</sup>, 2011

Hall 2

**Session Chair** Jong-Gwan Yook, Yonsei University, Korea

**FR2-3-1**                    **Optimum Scaling Factors of 1D FDTD for Wideband Analysis in Weakly Ionized Plasma**  
11:30-11:45

Il-Young Oh<sup>1</sup>, Deok-Kyu Kim<sup>2</sup>, Jong-Gwan Yook<sup>1</sup>

<sup>1</sup>Yonsei University, <sup>2</sup>Agency for Defense Development, Korea

**FR2-3-2**                    **Electromagnetic Modeling of High Altitude Electromagnetic Pulse Coupling into Large-Scale Structures**  
11:45-12:00

Hee-do Kang<sup>1</sup>, Il-Young Oh<sup>1</sup>, Jung Ho Kim<sup>2</sup>, Jong-Gwan Yook<sup>1</sup>

<sup>1</sup>Yonsei University, <sup>2</sup>Electronic Warfare R&D Lab., LIG NEX1, Korea

**FR2-3-3**                    **Study on the Modeling for Effective Path Length in Satellite Communication Link in Korea**  
12:00-12:15

Ji-Ho Yoo<sup>1</sup>, Woo-Geun Kang<sup>1</sup>, Min-Kyeong Seo<sup>1</sup>, Su-Il Kim<sup>2</sup>, In-Kyum Kim<sup>2</sup>, Jeong-Ki Park<sup>1</sup>

<sup>1</sup>Chungnam National University, <sup>2</sup>Agency for Defense Development, Korea

**FR2-3-4**                    **Analysis of Hertzian Dipole Radiation in Cylindrical EBG Structures**  
12:15-12:30

Vakhtang Jandieri<sup>1</sup>, Kiyotoshi Yasumoto<sup>2</sup>, Young-Ki Cho<sup>1</sup>

<sup>1</sup>Kyungpook National University, Korea, <sup>2</sup>Fukuoka Institute of Technology, Japan

## FR2-4: Sophisticated Antennas

Friday, November 11<sup>th</sup>, 2011

Hall 2

**Session Chair** Eisuke Nishiyama, Saga University, Japan

**FR2-4-1 Octagonal ESPAR with Cone Reflector**

14:00-14:15 Shizuo Mizushina<sup>1</sup>, Takashi Watanabe<sup>2</sup>

<sup>1</sup>Professor Emeritus, Shizuoka University, <sup>2</sup>Shizuoka University, Japan

**FR2-4-2 Reduction of Higher Order Mode in Circularly Polarized Waveguide Antenna for Wideband Characteristics**

14:15-14:30

Shingo Yamaura, Takeshi Fukusako  
Kumamoto University, Japan

**FR2-4-3 Vertical Strip Transmission Line Primary Radiator with Tapered Reflection Plate for Pencil-beam Antennas at 60GHz**

14:30-14:45

Tomonori Morita, Futoshi Kuroki  
Kure National College of Technology, Japan

**FR2-4-4 Optimal Low Noise Design for Single Front-end Receiver with PAE**

14:45-15:00

Jaeho Jeong, Yinpei Miao, Kei Sakaguchi, Kiyomichi Araki  
Tokyo Institute of Technology, Japan

**FR2-4-5 Very Compact RF Module using Orthogonal Linear Polarizations for FM-CW Sensor**

15:00-15:15

Hayato Nishimura, Eisuke Nishiyama, Masayoshi Aikawa  
Saga University, Japan

## **FR2-5: Propagation & Absorption**

Friday, November 11<sup>th</sup>, 2011

Hall 2

**Session Chair** Jeongki Pack, Chungnam National University, Korea

**FR2-5-1 Performance Evaluation Method for Body Area Networks Based on**

15:45-16:00 **Nakagami-m Channel Simulation**

Shintaro Oguchi, Kiyomichi Araki

Tokyo Institute of Technology, Japan

**FR2-5-2 Throughput Analysis for MIMO Antenna Including Human Body Effect at 2 GHz**  
16:00-16:15 **and 800 MHz Bands**

Takahide Yoshida<sup>1</sup>, Akira Miyata<sup>1</sup>, Masanori Sakurai<sup>2</sup>, Eiji Hankui<sup>1</sup>

<sup>1</sup>NEC Corporation, <sup>2</sup>NEC CASIO Mobile Communications, Ltd., Japan

**FR2-5-3 Dipole Antenna Above EBG Substrate for Local SAR Reduction in Human Head**

16:15-16:30

Ryo Ikeuchi, Akimasa Hirata

Nagoya Institute of Technology, Japan

**FR2-5-4 Maximum EIRP and EMF Measurements of WCDMA Base Station using a Pilot**  
16:30-16:45 **Channel**

Byung-Jun Jang<sup>1</sup>, Hyungoo Yoon<sup>2</sup>

<sup>1</sup>Kookmin University, <sup>2</sup>Myongji College, Korea

**FR2-5-5 Near-Field Characteristics Evaluation for Wave Absorber**

16:45-17:00

Ryo Yoshiike<sup>1</sup>, T.Yasuzumi<sup>1</sup>, H.Terasaki<sup>1</sup>, R.Suga<sup>1</sup>, Y. Maeda<sup>2</sup>, M. Uno<sup>2</sup>, and O. Hashimoto<sup>1</sup>

<sup>1</sup>Aoyama Gakuin University, <sup>2</sup>WICERA Co., Ltd., Japan