

Advance Program

**2004 Korea-Japan Joint Conference on AP/EMC/EMT
(KJJC-AP/EMC/EMT 2004)**

**November 22-23, 2004
Convention Center, Hoam Faculty House
Seoul National University
Seoul, Korea**

Organized by

- Korea Electromagnetic Engineering Society (KEES)
- International Union of Radio Science (URSI) Korea Chapter
- Technical Group on Antennas and Propagation, IEICE
Communication Society (Japan)
- Technical Group on Electromagnetic Compatibility, IEICE
Communication Society (Japan)
- Technical Group on Electromagnetic Theory, IEICE Electronics
Society (Japan)

Sponsored by

- Institute of Information Technology Assessment, Korea
- Korea Research Foundation
- Korean Federation of Science and Technology Societies
- Anritsu, Ansoft Korea, Bellwave, EMF Safety, Gigalane, ICU RERC, YES INC.

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| Yoshio Karasawa | The University of Electro-Communications |

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PROGRAM SUMMARY

November 21 (Sunday)

| Faculty Club (Seoul National Univ.) | |
|-------------------------------------|-------------------|
| 17:00 – 20:00 | Registration |
| 18:00 – 20:00 | Welcome Reception |

November 22 (Monday)

| | Convention Center (Hoam Faculty House) | |
|---------------|--|----------|
| | <Room A> | <Room B> |
| 08:00 – 18:00 | Registration <1F Lobby> | |
| 08:30 – 09:45 | AP-1 | EMT-1 |
| 09:45 – 10:00 | Opening Ceremony <Room A> | |
| 10:00 – 12:05 | AP-2 | EMC-1 |
| 12:05 – 13:20 | Lunch <Room C> | |
| 13:20 – 15:00 | AP-3 | EMT-2 |
| 15:00 – 16:00 | Coffee Break, Poster Preparation | |
| 16:00 – 18:00 | Poster Session <Room A> | |
| 18:30 – 20:30 | Banquet <Room C> | |

November 23 (Tuesday)

| | | |
|---------------|-------------------------|-------|
| 08:00 – 17:00 | Registration <2F Lobby> | |
| 08:30 – 09:45 | EMT-3 | AP-4 |
| 09:45 – 10:00 | Coffee Break | |
| 10:00 – 12:05 | EMT-4 | EMC-2 |
| 12:05 – 13:20 | Lunch <Room C> | |
| 13:20 – 15:25 | EMT-5 | EMC-3 |
| 15:25 – 15:40 | Coffee Break | |
| 15:40 – 17:45 | AP-5 | EMC-4 |

Room A : Convention Hall(2F), Room B : Magnolia Hall(1F) in Convention Center

Room C : Crystal Hall(B1) in Main Building

Preparation Room : Peony Hall(2F)

Headquarters Room : Iris Hall (1F)

Exhibition : Nov. 22, 2F Lobby of Convention Center

Conference Site Map



Hoam Faculty House

| | |
|----|--------------------|
| 01 | Main building ✕ |
| 02 | Convention center |
| 03 | Guest house |
| 04 | Guestrooms house A |
| 05 | Guestrooms house B |
| 06 | Tennis court |
| 07 | Parking |

✕ 1F Lobby : Guest House Check In

Convention Center



1F

| | |
|----|------------|
| 01 | Camellia |
| 02 | Water lily |
| 03 | Magnolia |
| 04 | Iris |
| 05 | Orchid |
| 06 | rest room |



2F

| | |
|----|-----------------|
| 01 | Convention Hall |
| 02 | Peony |
| 03 | rest room |

TECHNICAL SESSIONS

November 22 (Monday)

08:00 – 18:00 Registration

09:45 – 10:00 Opening Ceremony

Room A

Session AP-1 (Co-Chairs: Mitsuo Taguchi, Kyeong-Sik Min)

Room A

1. 08:30 – 08:55

Experimental Study on Radiation Efficiency of Array Antenna for Mobile Handsets

H.Suzuki, R.Yamaguchi, S.Uebayashi : NTT DoCoMo, Inc.

2. 08:55 – 09:20

Patch Array Antennas for Home Network System

Kyeong-Sik Min¹, Dong-Jin Kim¹ and Youngmin Moon² : ¹Department of Radio Sciences and Engineering, College of Sciences and Engineering, Korea Maritime University, ²Comm. & Network Lab., Samsung Advanced Institute of Technology

3. 09:20 – 09:45

Analysis of Indoor Propagation by Ray Tracing Method and Bit Error Rate Estimation of OFDM

K.Uchida, H.Fujii, W.Adachi, M.Nakagawa : Fukuoka Institute of Technology

Session AP-2 (Co-Chairs: Hiroyuki Arai, Jeong Phill Kim)

Room A

4. 10:00 – 10:25

Analysis of Chip Antenna for 5.2 GHz Wireless LAN

Mitsuo Taguchi, Kazuhiro Ichikawa, Hideaki Shimoda, Kazumasa Tanaka : Dept. of Electrical & Electronic Eng., Nagasaki University

5. 10:25 – 10:50

Network Analysis and Design of Aperture-Coupled Cavity-Fed Microstrip Patch Antenna

Jong Woo Shin, Won Ho Kim, and Jeong Phill Kim : Microwave and Antenna Laboratory, Chung-Ang University

6. 10:50 – 11:15

FDTD Modeling of Planer Conductor on Thin Dielectric Substrate Using Quasi-Static Field Spatial Distribution

Takuij Arima and Toru Uno : Tokyo University of Agriculture and Technology

7. 11:15 – 11:40

Design of Small Tag Antennas for RFID Application

⁺*Chihyun Cho, ⁺Hosung Choo, and [^]Ikmo Park* : ⁺Department of Electronic and Electrical Engineering, Hongik University, [^]Department of Electrical and Computer Engineering, Ajou University

8. 11:40 – 12:05

FD-TD Analysis of Emission Suppression Method for Microstripline With EBG Structure

H. Hirayama, K. Sakakibara, N. Kikuma : Department of Computer Science and Engineering, Nagoya Institute of Technology

Session AP-3 (Co-Chairs: Hisashi Morishita, Ikmo Park)

Room A

9. 13:20 – 13:45

Characteristics of Dipole Antenna Delay

Y. Tanabe, T. Uwano, S. Goto, T. Ohtsuki, T. Baba : Graduate School of Information, Production and Systems, Waseda University

10. 13:45 – 14:10

Electromagnetically Coupled Small Broadband Monopole Antenna With Multiple Shorting Pins

Jong-Ho Jung¹, Youngmin Moon², Hosung Choo³, Young-Eil Kim², and Ikmo Park¹ : ¹Department of Electrical and Computer Engineering, Ajou University, ²Samsung Advanced Institute of Technology, ³Department of Electronic and Electrical Engineering, Hongik University

11. 14:10 – 14:35

A Study of Microstrip Dipole Antenna Having Ultra-Wideband Characteristics

M. Ameya, M. Yamamoto, T. Nojima, K. Itoh : Graduate School of Information Science and Technology, Hokkaido University

12. 14:35 – 15:00

Compact Frequency-Notched UWB Planar Monopole Antenna With a L-shape Ground Plane

Wang-Sang Lee and Jong-Won Yu : Korea Advanced Institute of Science and Technology (KAIST)

Session EMT-1 (Co-Chairs: Makoto Ando, Se-Yun Kim)

Room B

1. 08:30 – 08:55

Simplification of Ray Tracing Method by Neglecting Multiple Diffractions

K. Uchida, M. Nakagawa, H. Fujii, W. Adachi : Fukuoka Institute of Technology

2. 08:55 – 09:20

Virtual Ray of Diffraction for Composite Wedge

Se-Yun Kim : Korea Institute of Science and Technology

3. 09:20 – 09:45

Applicable Range of GTD in Asymptotic Analysis of Scattered Field by an Aperture in a Thin Screen

T. Kawano, T. Ishihara : Department of Communications Engineering, National Defense Academy

Session EMC-1 (Co-Chairs: Ryuji Koga, Hai-Young Lee)

Room B

4. 10:00 – 10:25

Chain-Matrix Expression for a Three-Conductor Transmission Line With a Ground Plane

Yoshio Kami, Fengchao Xiao : University of Electro-Communications

5. 10:25 – 10:50

Modified Coupled Transmission Line Cell For Immunity Test of Audio and Video Equipment

°Taeseung Song, Wonseo Cho*, Jaehoon Yun*** : Korea Testing Laboratory*, Electronics and Telecommunications Research Institute**

6. 10:50 – 11:15

EMC Macro-Modeling of IC/LSI: Linear Equivalent Circuit and Current-Source Models

Ryuji Koga, Osami Wada : Okayama University

7. 11:15 – 11:40

Investigation of Interconnection Between PCB and Chassis With Screw for Power Bus Noise

Woo-sin Choi, Shin-young Yi**, Chang-Woo Ko***, Joon-Ho Choi***, Hai-Young Lee** : *Department of Electronics Engineering Ajou University, **Hynix Semiconductor Inc., ***Samsung Electronics Co., Ltd,

8. 11:40 – 12:05

Index for Normal-Mode Radiation From Signal Line Driven by Digital IC

*Chiharu Miyazaki**, *Naoto Oka**, *Yuichi Sasaki**, *Masamitsu Tokuda*** : *Mitsubishi Electric Co., **Musashi Institute of Technology

Session EMT-2 (Co-Chairs: Kazunori Uchida, Il-Suek Koh)

Room B

9. 13:20 – 13:45

Uniform Asymptotic Solutions for Scattering by a Thin Cylindrically Curved Conducting Surface

K. Goto, T. Ishihara, C. Irimia : Department of Communications Engineering, National Defense Academy

10. 13:45 – 14:10

Approximate PTD Analysis of Scattering by Resistive Half-Plane for TM Wave Incidence

Il-Suek Koh : The Graduate School of Information Technology and Telecommunication Inha University

11. 14:10 – 14:35

Modified Edge Representation Line Integrals for PO Diffraction and Geometrical Optics From Curved Surfaces

Luis Rodriguez and Makoto Ando : Department of Electrical and Electronic Engineering, Tokyo Institute of Technology

12. 14:35 – 15:00

Extended UTD Solution for High-Frequency Scattered Electromagnetic Fields by Lossy Dielectric Cylinder

T.Ida, T.Ishihara : Department of Communications Engineering, National Defense Academy

Poster Session (16:00 – 18:00)

Room A

P-AP-1 Four-Component Scattering Model for Polarimetric SAR Image Decomposition

Y. Yamaguchi, T. Moriyama, M. Ishido, H. Yamada : Department of Information Engineering, Niigata University

P-AP-2 Effect of Polarization Utilization on SDMA System

H. Kuwahara, N. Takemura, T. Hori, M. Fujimoto : Faculty of Engineering, University of Fukui

P-AP-3 Equivalent SNR Expression for Location Error of Circular Array on MUSIC Algorithm

N. Ishiura, T. Hori, M. Fujimoto : Faculty of Engineering, University of Fukui

- P-AP-4** On Performance Comparison of the Method for Realizing Uniform Planar Array
A. Hirota, H. Arai, M. Nakano : Department of Electrical and Computer Engineering, Yokohama National University
- P-AP-5** Beam-Space MUSIC DOA System Using Phase Shifter
S. Nah, H. Arai : Department of Electrical and Computer Engineering, Yokohama National University
- P-AP-6** A Consideration on Estimation of Propagation Delay Time and Direction of Arrival of Multipath Waves With MUSIC Algorithm in CDMA Communications
K. Ando, N. Kikuma, K. Sakakibara, H. Hirayama : Department of Computer Science and Engineering, Nagoya Institute of Technology
- P-AP-7** Performance Evaluation of MMSE Adaptive Array Using FPGA
A. Nakajima, M. Kim, H. Arai : Graduate School of Engineering, Yokohama National University
- P-AP-8** Analysis of DGS(Defected Ground Structure) for Its Slow and Fast Wave Effects
Bom Seon Lee : Kyunghee University
- P-AP-9** The Design of X-Band Cassegrain Reflector Antenna for Spill-Over Suppression
*Woo Sang Lee, Young Joong Yoon, Joon Ho So** : Dept. of Electrical & Electronic Eng., Yonsei Univ.,
 *Agency for Defense Development
- P-AP-10** Propagation Prediction Model Which Takes into Account Building Transmission Loss
Myung-Sun Choi, Yoon-Hyung Huh**, Han-Kyu Park*, Noh-Hoon Myung**** : *EE Dept., Yonsei Univ.,
 Telecomm. R&D Center Samsung Electronics Co., Ltd., *EE Dept., KAIST,
- P-EMT-11** An Iterative FEM With Fast Multipole Updates for Scattering From an Electrically Large Object
Jongkuk Park, Jungwon Lee**, Sangwook Nam*** : *Nex1Future Co., Ltd., **School of electrical engineering, Seoul National University
- P-EMT-12** Measurement of Complex Permittivity of Thin PCB Substrate Using Open-Ended Coaxial Probe
J. H. Jung, Y. S. Jo, and S.Y. Kim : Imaging and Media Research Center, Korea Institute of Science and Technology

P-EMC-13 Improving Lightning Surge Protection Using a Surge Protective Device Between Telecommunications lines

Shoichi Kuramoto, Shigeo Chikai, and Yasuhiko Tada : NTT East Co.

P-EMC-14 Modulated Scattering Technique Based Method for Measuring Electromagnetic Field Simultaneously

Qiang Chen, Kunio Sawaya : Tohoku Univ.

P-EMC-15 A Study of the Current Distribution on the Surface of a Micro-Strip Line by Using Green's Function

Ifong Wu, Shinichiro Nishizawa, Osamu Hashimoto : Aoyama Gakuin University

P-EMC-16 Optical Probe for Simultaneous Measurements of Electric and Magnetic Fields

*Eiji Suzuki, Satoru Arakawa, Hiroyasu Ota, Ken Ichi Arai, Risaburo Sato and *Kiyoshi Nakamura* : NICT ,
*Tohoku University

P-EMC-17 Dynamic Band Selection Technique for Dual-Band Wireless LAN System

Satoru Harada, Shinichi Miyamoto : Osaka University

P-EMC-18 Forced Resonant Type Cutoff Cavity-Backed Slot Antennas Loaded With a Single External Reactance

*Ki-Chai Kim, Sung Min Lim, and Kazuhiro Hirasawa** : Yeungnam University, Korea , *University of Tsukuba, Japan

P-EMC-19 Analysis of Random Rough Surface Scattering With Respect to Slope Angle Using a Gaussian Spectrum

Kwang-yeol Yoon : Keimyung University

P-EMC-20 Design of Scannable Non-Uniform Planar Array Structure for Maximum Side-Lobe Reduction

Kyung-Tae Kim : School of Electrical Engineering and Computer Science, Yeungnam University

November 23 (Tuesday)

Session EMT-3 (Co-Chairs: Toyohiko Ishihara, Hyeongdong Kim)

Room A

1. 08:30 – 08:55

A Simple Model for Microwave Backscattering From a Forest Canopy

Yisok Oh and Sung-Hwa Lee : Department of Radio Science and Communication Engineering, Hongik University

2. 08:55 – 09:20

Transmission Characteristics of a Two-Dimensional Object Composed of Left-Handed Material

A.Kusunoki, Y.Yamamoto, H.Ohmagari, M.Tanaka : Department of Electrical and Electronic Engineering, Oita University

3. 09:20 – 09:45

3D ADI-FDTD Algorithm for Dispersive Debye Media in GPR Applications

*Wonsok Jeon, Woonsik Yeo, Jungsik Moon, Hyeongdong Kim** : Dept. of Electronic Communication & Radio Science Eng., Hanyang University, *Dept. of Electrical & Computer Eng., Hanyang University

Session EMT-4 (Co-Chairs: Mitsuru Tanaka, Taek-Kyung Lee)

Room A

4. 10:00 – 10:25

A Monte-Carlo FDTD Technique For Electromagnetic Wave Scattering From a Perfectly Conducting Pierson-Moskowitz Surface

Dong-Muk Choi, Che-Young Kim, Dong-Il Kim*** : Research Institute of Industry Technology, Korea Maritime University, *School of Electrical Engineering and Computer Science, Kyungpook National University, **Department of Radio Science & Engineering, Korea Maritime University

5. 10:25 – 10:50

Scattering of Electromagnetic Wave by Inhomogeneous Dielectric Gratings With Perfectly Conducting Cylinders

T. Yamasaki, T. Hinata, T. Hosono : Department of Electrical Engineering, College of Science and Technology, Nihon University

6. 10:50 – 11:15

A Coaxially FED Monopole in a Shorted Parallel-Plate Waveguide

Mi Y. Park and Hyo J. Eom : Department of Electrical Engineering and Computer Science

7. 11:15 – 11:40

Method of Integral Functional in Problems of Electromagnetic Wave Scattering by Doubly-Periodic Magnetodielectric Structures

V. Yachin, N. Sidorchuk, K. Yasumoto : Yasumoto Lab., Department of Computer Science and Communication Engineering, Kyushu University

8. 11:40 – 12:05

Fast Characterization of Microstrip Antenna Using Green's Function From Real-Axis Integration Method

Seok-Chang Han, Seung-Woo Yang, and Taek-Kyung Lee : School of Electronics, Telecommunication and Computer Engineering, Hankuk Aviation University

Session EMT-5 (Co-Chairs: Tsuneki Yamasaki, Young-Ki Cho)

Room A

9. 13:20 – 13:45

The Method of Auxiliary Sources for Two Dimensional Transient Scattering Analysis

Jungwon Lee and Sangwook Nam : School of Electrical Engineering and Computer Science Seoul National University

10. 13:45 – 14:10

Fast Image Reconstruction of a Dielectric Cylinder Using a Novel Regularization Method

M. Tanaka, H. Yoshida, R. Kurogi, A. Kusunoki : Department of Electrical and Electronic Engineering, Oita University

11. 14:10 – 14:35

Aperture Antenna Analysis Using Generalized Scattering Matrix

Haengseon Lee : Sogang University

12. 14:35 – 15:00

Fade Slope Analysis at 12GHz in Kyushu Island, Japan

F.F. Franklin, K. Fujisaki, T. Matsuoka, M. Tateiba : Tateiba Lab., Graduate School of Information Science and Electrical Engineering, Kyushu University

13. 15:00 – 15:25

Novel Millimeter-Wave Near-Field Scanning Microscope

Jong-Ig Lee¹, Mahesh P. Abegaonkar², Young-Ki Cho² : ¹Division of Information System Eng., Dongseo University, ²School of Electrical Eng. and Computer Science, Kyungpook National University

Session AP-5 (Co-Chairs: Masaharu Takahashi, Jeong-Hae Lee)

Room A

14. 15:40 – 16:05

Wireless Bio-Signal Sensing System Using a Circular Polarization

Young-Bae Kwon, Jung-Min Park, Jung-Hwan Choi, Seong-Ook Park, and Osami Ishida : School of Engineering, University of Information and Communications, Korea

15. 16:05 – 16:30

Combined FDTD and Circuit Analysis of Self-Oscillating Mixer With Electromagnetically Coupled Antenna Element

N. Michishita, H. Arai : National Defense Academy

16. 16:30 – 16:55

Compact Partial H-Plane Filters

Jeong-Hae Lee and Dong-Won Kim : Dept. of Radio Science & Communication Engineering, Hongik University

17. 16:55 – 17:20

A Study on the Relation Between Surface Wave Component and Received Signal Level of the Wearable Device Using the Human Body as a Transmission Channel

K. Fujii, R. Kurosawa, M. Takahashi, K. Ito, K. Hachisuka, Y. Terauchi, Y. Kichi, K. Sakai, K. Itao : Graduate School of Science & Technology, Chiba University

18. 17:20 – 17:45

A New Microstrip Phase Shifter Design Using Switches on the EBG Ground

Dowon Kim, Moonil Kim : Radio Communication Engineering Department, Korea University

Session AP-4 (Co-Chairs: Keizo Cho, Soeng Ook Park)

Room B

1. 08:30 – 08:55

An Experimental Investigation of PCB Integrated Filtering Antenna With Different Feeding Structure at Millimeter-Wave

**Jae W. Lee, **Bong S. Kim, and **Myung S. Song* : *School of Electronics, Telecommunication and Computer Engineering, Hankuk Aviation University, **Radio Technology Research Group, Electronics and Telecommunications Research

2. 08:55 – 09:20

FDTD Analysis of Fermi Array Antenna for Passive Millimeter Wave Imaging

H. Sato, K. Sawaya, Y. Wagatsuma, K. Mizuno : Graduate School of Engineering, Tohoku University

3. 09:20 – 09:45

Grooved Waffle Waveguide for Terahertz Applications

Osami Ishida and Seong Ook Park : Information and Communications University

Session EMC-2 (Co-Chairs: Hiroshi Yamane, Jong-Gwan Yook)

Room B

4. 10:00 – 10:25

1-D FDTD Equations for Calculation of Crosstalk on a PCB Having a Guard Trace With Vias

Jae Cheol Ju, Sang Wook Park, Jae Hyun Lee, and Dong Chul Park : Chungnam National University, Dept. of Radio Science and Engineering

5. 10:25 – 10:50

Attenuation Band Characteristics of Choke Inserted a Metal Piece in the Groove

Yasuke Kusama, Hidenori Mine and Osamu Hashimoto : Aoyama Gakuin University

6. 10:50 – 11:15

Optimal Position of Via Holes in the Ground Area-Fills on a Motherboard

¹Seung-Joo Lee, ²Jong-Hum Baek, ¹Jung-Min Kim and ¹Jong-Gwan Yook : ¹Department of Electrical and Electronic Engineering, Yonsei Univ., ²Haedong IT System, Technology Center, Kwangwoon University

7. 11:15 – 11:40

Effectiveness of Using Common-mode Choke Coils as a Countermeasure Against Emission

From Broadband Access Systems

Ryuichi Kobayashi, Shinji Goto, and Yasuhiko Tada : NTT East Co.

8. 11:40 – 12:05

Via: A Source of Simultaneous Switching Noise Generation, Coupling, and Edge Radiation in High-Speed Multi-Layer Digital PCB

Jongbae Park, Jun So Pak, Hyungsoo Kim, and Joungho Kim : Terahertz Interconnection and Package Lab. Division of Electrical Engineering, Dept. of Electrical Engineering and Computer Science, KAIST

Session EMC-3 (Co-Chairs: Qiang Chen, Jeong-Ki Pack)

Room B

9. 13:20 – 13:45

Adaptive Packet Transmission Technique for 2.4GHz-Band Wireless LAN System Under Bluetooth Coexistence Environment

**Tomoko Sakai, *Shinichi Miyamoto, **Norihiko Morinaga* : *Osaka University, **Hiroshima International University

10. 13:45 – 14:10

Linearity Characteristics of the Detection Voltages of an E-field Sensing Probe in SAR Measurement System

¹Gimm, Youn Myoung, ²Lee, Seung Bae, ³Kim, Kee Hoe : ¹Dankook University, EMF Safety Inc., ²EMF Safety Inc., ³Dankook University, Radio Research Laboratory

11. 14:10 – 14:35

Estimation of Source Location by Using Spherical Microwave Holography

Jin Kashiyama, Kazumasa Taira, Kunio Sawaya, and Risaburo Sato : NICT

12. 14:35 – 15:00

Empirical Study of Raindrop-Size Distribution

*Nyamjav Jambaljav**, ⁰Yong-Ho Park*, Jeong-Ki Pack*, Chea-Ok Ko** : *Dept. of Radio Science & Engineering, Chungnam Nat'l University, **Dept. of Electronics, Mongolia Nat'l University, Mongolia

13. 15:00 – 15:25

Influence of k-Vector Divergence of Short Focus Beam on the EM-Wave Absorber Evaluation

Nishikata Atsuhiko, Konishi Takaaki : Tokyo Institute of Technology

Session EMC-4 (Co-Chairs: Youji Kotsuka, Jae Ick Choi)

Room B

14. 15:40 – 16:05

Studies on the Microwave Absorbers Prepared With Cast Alnico Magnets

Jae Man Song*, Dong Il Kim, Seung Jae Shin, Sang Hyun Moon : *Research Institute of Industrial Technology, Korea Maritime University, Department of Electronics & Engineering, Korea Maritime University

15. 16:05 – 16:30

Temperature Distribution Analysis of One-Layer EM-Absorber Using FDTD and Simple Method

Shinya Watanabe, Kota Saito, Osamu Hashimoto : Aoyama Gakuin University

16. 16:30 – 16:55

Hybridization of Oxidized MWNT and Silver Powder in Polyurethane Matrix for Electromagnetic Shielding Application

*Ho Gyu Yoon, Yoon Jin Kim, Kyung Jin An, *Yeon-Choon Chung* : Department of Materials Science and Engineering, Korea University, *Department of Information and Communication, Seokyeong University

17. 16:55 – 17:20

Large-Scale Numerical Analysis of the EMF in Actual Train Carriages

*Yuki Sumi, Takashi Hikage, Toshio Nojima, Manabu Omiya, *Soichi Watanabe, Takashi Shinozuka* : Hokkaido Univ., *NICT

18. 17:20 – 17:45

Development of Simulation Tool for Analyzing EMI/EMC Properties of Shielding Enclosure With Apertures and Cables

Jong Hwa Kwon, Hyung Do Choi, Jae Ick Choi : Radio Technology Group, Digital Broadcasting Research Division

TRANSPORTATION

Conference Site

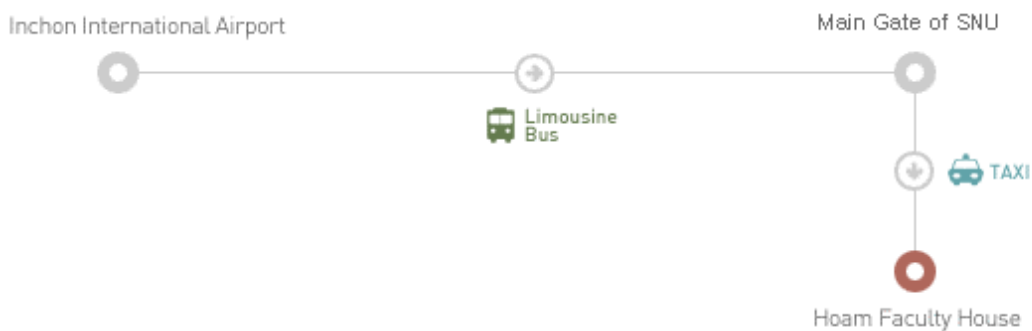
Hoam Convention Center (in Hoam Faculty House), Seoul National University

Incheon International Airport(IIA) or Gimpo Airport to Conference Site

1. Airport Limousine Service (Bus Stop: 6B, 13A)

1) Take airport limousine bus (# 603) via Gimpo Airport and get off in front of main gate of Seoul National University(SNU). The fare is 6,500 Won (4,500 Won from Gimpo) and it takes about 80 minutes under normal traffic condition. Service is available every 20 minutes from 5 am to 8 pm at IIA. There is no extra charge for normal amount of baggage.

2) At main gate of SNU, take a taxi to Hoam Faculty House. The fare is approximately 2,000 Won and it takes less than 10 minutes.



2. Taxi Service

If you take a regular taxi, it costs approximately 40,000 Won and takes about one hour under normal traffic condition. Service is available for 24 hours everyday. Toll fee(~10,000 Won) shall be paid by passenger.

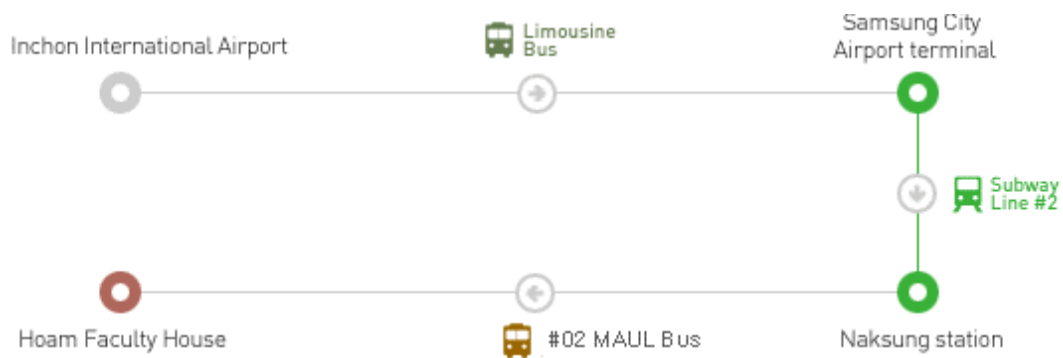
3. Subway Service

From Airport to Naksungdae Station

Way 1

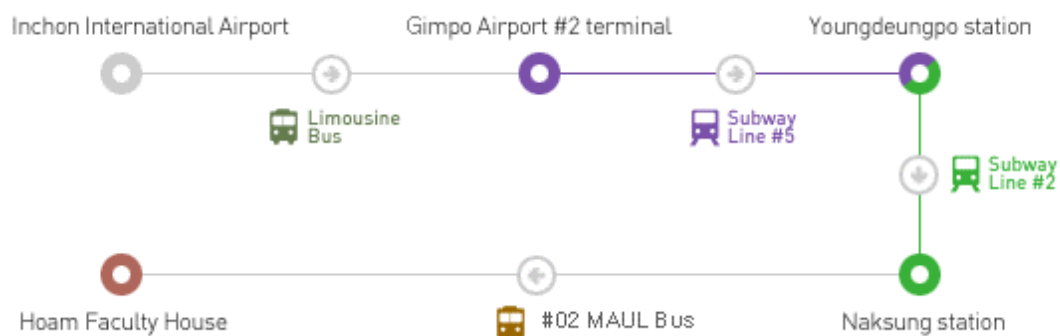
1) Take airport limousine bus from Incheon Int'l Airport and get off at Samsung City Airport Terminal.

2) Take subway #2 line toward Sindorim at Samsung Station and get off at Naksungdae Station and follow exit .



Way 2

- 1) Take airport limousine bus at Incheon Int'l Airport to Gimpo Airport Terminal.
- 2) Take Subway #5 line at Gimpo Airport and transfer to #2 line toward Kyodae(Education College) at Youngdeungpo-Gu Office Station and get off at Naksungdae Station and follow exit .



From Naksungdae Station Exit to Hoam Faculty House

Take MAUL bus # 02 in front of Jean Blanc Bakery just across from LG gas station toward Seoul National University campus via rear gate(The MAUL bus # 02 runs every 1 to 3 minutes). Get off in front of Hoam Faculty House.

Links to Related Sites

Seoul National University Link: <http://www.snu.ac.kr>

Hoam Faculty House Link: <http://hoam.ac.kr/english>

Incheon Int'l Airport Link: <http://www.airport.or.kr/Eng/home.jsp>

<http://www.airport.or.kr/Jpn/home.jsp>

WELCOME RECEPTION

The Welcome Reception will be held at 6 pm, November 21 (Sunday) at Faculty Club of Seoul National University(SNU). All registered participants and accompanying persons are invited. The registration begins at 5 pm and the registration desk will be located in front of Welcome Reception Hall. To get to the Faculty Club,

- (1) if you start from Hoam Faculty House, you can either walk 25 minutes or use a 9-passenger vehicle which starts at the parking lot of Hoam Faculty House every 30 minutes from 5 pm to 7 pm. Hopely, some passenger cars will also be available.
- (2) if you start from Naksungdae Station, take MAUL Bus #02, get off at the Building “Advanced Computer Technology(Korean Pronunciation : Computer Sin Gi Sul Gong Dong Youn Gu So)” and walk 2 minutes.
- (3) if you start from the main gate of SNU., take a taxi(It takes less than 10 min.).

After 7:10 pm there will be a frequent vehicle service from Faculty Club to Hoam Faculty House.

Welcome Reception Site Map

Faculty Club of SNU.

