

2010/7/30

URSI Commission C in Japan

21th URSI-C-Japan Chairperson Kenji ITOH

1. Domestic Activities

1.1 workshop (12 Feb., 2010)

Session title: "Metamaterial Technologies for Antennas"

i) Rapporteur: Dr. Ryo Yamaguchi, NTT DOCOMO

ii) Date/time: 10:00 - 18:10, 12 February, 2010

iii) Venue: Kanazawa Institute of Technology, Kanazawa, Japan

iv) Registration fee: Free

v) Listed attendees: 53 persons in Tutorial Session

: 69 persons in Metamaterial Session and Special Session

vi) Local arrangement: Prof. Kenji Itoh, Dr. Ryo Yamaguchi

Program arrangement: Dr. Ryo Yamaguchi, NTT DOCOMO

vii) Session title: "Metamaterial Technologies for Antennas"

viii) Presentation: 50 min including Q&A for each speaker

- (Tutorial Talk) "Introduction of RF analog transmission line", Prof. Toshiyuki Yakabe, The University of Electro-Communications

- (Opening Talk) Prof. Kenji Itoh URSI-C-Japan, Chair

- (Keynote Talk) "Survey of metamaterial technologies for antennas and propagation", Prof. Toshikazu Hori, Fukui University

- "Electromagnetics for metamaterial technologies", Prof. Toru Uno, Tokyo University of Agriculture and Technology

- "Reflection characteristics of meta-materials and their applications to antenna systems", Prof. Shigeru Makino, Kanazawa Institute of Technology

- "Applications of metamaterial technology for vehicle antennas", Dr. Kazuo Sato, TOYOTA CENTRAL R&D LABS., INC.

- "Principle of metamaterials and challenge, possibility in antenna applications", Prof. Kunio Sakakibara

- (Special Talk) "Antennas for satellite communications", Prof. Shin-ichi Betsudan, Kanazawa Institute of Technology

ix) The steering committee meeting took place from 08:30 to 09:15 on 13 February, 2010.

1.2 workshop (4 June, 2010)

i) Convener: Dr. Kenjiro Nishikawa, NTT Network Innovation Laboratories, NTT Corporation

ii) Date/time: 13:30 – 18:00, 4-June.-2010

iii) Venue: Tokushima University, Tokushima, Japan

iv) Registration fee: Free

v) Listed attendees: 29 persons

- vi) Local arrangement: Prof. Yasuo Ohno (Tokushima University)
- vii) Session title: "High-speed/High frequency Packaging and Board Design Techniques"
- viii) Presentation: 50 min including Q&A for each speaker
 - Opening Talk, Dr. Kenji Itoh URSI-C-Japan, Chair
 - " Design, Modeling and Analysis Collaboration for SI (Signal Integrity) of high-speed signal transmission," Dr. Keitaro Yamagishi, Mitsubishi Electric Corp.
 - "EBG Structures for Reducing Electromagnetic Noises in PCB," Dr. Naoki Kobayashi, NEC
 - "Millimeter-wave On-chip/Package-integrated Antenna" Dr. Kenjiro Nishikawa, NTT Corporation
 - Tutorial presentation "GaN Power Device" Prof. Masaaki Kuzuhara, Fukui University
- ix) Reception and Lamp Session at Kanpo-no-yado Tokushima, Tokushima, Japan.
- x) The steering committee meeting took place from 08:00 to 9:00 on 5-June-2010
- xi) Concluding Remarks

This workshop was entitled " High-speed/High frequency Packaging and Board Design Techniques " and had three talks. Design techniques for high-speed board and millimeter-wave highly-integrated packaging with antennas were discussed. Tutorial talk for GaN power device was also presented. In the lamp session, we deeply discussed two-dimensional FD-TD method for analysis of planar circuits

2. International Activities

(1) AP-RASC2010 activities

URSI-C members encouraged to submit papers.

Also two additional invited speakers from Thailand and Philippines are involved into U-session.

(2) URSI-GA 2011 activities

Japanese URSI-C committee organized following sessions for the next URSI-GA in 2111.

C01 – Frequency Generation and Conversion

Monday, August 15, 0800 – 1040 (7 papers)

Conveners: Kenji Itoh itoh.kenji@ieee.org

Kenichi Tajima, Tajima.Kenichi@bp.MitsubishiElectric.co.jp

CD02a – Advanced Architectures of High-Performance Power Amplifiers for Mobile Communications Systems

Monday, August 15, 1340 – 1540 (6 papers)

Conveners: Shoichi Narahashi narahashi@nttdocomo.co.jp

Nobuyuki Itoh nobby.itoh@ieee.org

CD02b – Advanced RF Integrated Circuits

Monday, August 15, 1600 – 1720 (4 papers)

Conveners: Nobuyuki Itoh nobby.itoh@ieee.org

Shoichi Narahashi narahashi@nttdocomo.co.jp

CB03b – Radio Science for Information Security and Social Safety

Tuesday, August 16, 0940 – 1200 (5 papers)

Conveners: Takashi Ohira ohira@tut.jp

Masamune Takeda takeda3026@maspro.co.jp

Satoru Aikawa aikawa@eng.u-hyogo.ac.jp

C04 – Green Communications

Tuesday, August 16, 1340 – 1540 (6 papers)

Conveners: Jacques Palicot jacques.palicot@supelec.fr

Naoki Shinohara shino@rish.kyoto-u.ac.jp

CT – Six-Port Wave Correlator Theory and Practical Application to RF Network Analysis

Wednesday, August 17, 0940 – 1040 (C tutorial lecture)

Speaker: Toshiyuki Yakabe yakabe@ice.uec.ac.jp

CHGBDJK06 – Solar Power Satellites and Wireless Power Transmission

Wednesday, August 17, 1340 – 1540; 1600 – 1720 (10 papers)

Conveners: Naoki Shinohara shino@rish.kyoto-u.ac.jp

Kozo Hashimoto kozo@a00.mbox.media.kyoto-u.ac.jp

Kristian Schlegel schlkris07@email.de

C08 – Standardization Activities in Radio Science

Thursday, August 18, 1340 – 1540 (6 papers)

Conveners: Kenjiro Nishikawa nisikawa@ieee.org

Kenji Itoh itoh.kenji@ieee.org