

## URSI Commission C in Japan

21th URSI-C-Japan Chairperson Kenji ITOH

## 1. Domestic Activities

## 1.1 workshop (2 Sept., 2010)

i) Convener: Satoshi Tsukamoto, Advanced Telecommunications Research Institute International

ii) Date/time: 13:30 -17:30/19:00-20:00, September 2, 2010

iii) Venue: The 2nd floor, Kunugi Kaikan, Kumamoto National College of Technology (Kumamoto Campus, Koshi, Kumamoto, Japan)

iv) Registration fee: Free

v) Listed attendees: 20 persons

vi) Local arrangement: Professor Iyama and Dr. Narahashi.

vii) Session title: "Super-high-speed Radio Communication and realization of its dream"

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

(a) Our dream come true by satellite Maito-1 -- Real mission of the satellite is human resources development

Speaker: President Hideo SUGIMOTO, Dainichi Denshi Co., Ltd.

(b) Future perspective and problems of radio transceiver architecture for towards broadband communication: Feasibility of time and frequency domain limiter/AGC

Speaker: Professor Makoto TAROMARU, Fukuoka University

(c) Research and Development on Ultra High Speed Mobile Communications Systems Utilizing beyond 5GHz Frequency Bands

Speaker: Mr. Tomoyuki OHYA, NTT DOCOMO Inc.

(d) Research activity of next generation ultrahigh-speed wireless LAN -- Efforts toward standardizing IEEE 802.11ac

Speaker: Professor Kiichi MIYANAGA, Hokkaido University

ix). Banquet

Venue: Wasukitukasa-kan, Kumamoto, Japan

Attendees: 16 persons

x) The steering committee meeting took place from 11:30 to 12:00 on September 2, 2010.

xi) Concluding Remarks

This workshop aimed at problems and research trends on future wireless communication systems. The speakers introduced current topics on reconfigurable radio systems, utilization of higher frequency band, and sophisticated signal processing the research and development activities for highly efficient wireless communication systems.

In order to develop future wireless communication systems, it is important to improve the basic techniques such as analog circuit, RF and ASIC (Application Specific Integrated Circuit) design as well as the excellent engineers/ designers. One of the speakers pointed out that it is necessary to encourage young engineers and students in the field of radio systems by providing attractive visions on this field.

## 2. International Activities

## (1) AP-RASC2010 activities

URSI-C members organized and operated their relative sessions in AP-RASC2010.