2015.4.10

23rd URSI-C Chair
Nobuyoshi Kikuma

Activity Report of URSI-C Committee

- The 1st scientific workshop of the 23rd URSI-C in Japan -

1. Session title: "Wireless technologies on 5G systems (Part 1: Antenna Propagations and Hardwares)"

2. Convener: Dr. Kentaro Nishimori, Niigata University

3. Date/time: 13:00 - 17:00, March 27th, 2015

4. Venue: Nagoya Institute of Technology at Nagoya city, Aichi pref.

5. Registration fee: Free

6. Listed attendees: 39 persons

7. Local arrangement: Dr. Eiji Okamoto (Nagoya Institute of Technology)

8. Presentation:

- •13:00 - 13:10 Opening Remarks, Prof. Nobuyoshi Kikuma, Chair, Commission C of URSI-JNC
- •13:10 - 14:00 "Small cell concept and propagation characteristics on high frequency band", Mr. Tetsuro Imai (NTT docomo)
- •14:00 - 14:50 "Analog beam-forming MIMO technology for the 5G wireless access", Mr. Akihiro Okazaki (Mitsubishi Electric Co.)
- •14:50 - 15:10 Coffee Break
- •15:10 - 16:00 "Channel sounder using 24 x 24 multiple antennas", Dr. Minsoku Kim (Niigata University)

•16:10 - 16:50 "Calibration techniques for massive MIMO", Dr. Kentaro Nishimori (Niigata University)

9. Reception: Attendance 24 persons at Café Sala in Nagoya Institute of Technology

10. The steering committee meeting took place from 11:45 to 12:45 on March 27th, 2015.

11. Concluding Remarks

We had four interesting talks about five generation (5G) mobile communication systems which have been attracting much attention as one of hot topics. Propagation characteristics using quasi-millimeter frequency bands, analog-digital hybrid beamforming method for massive MIMO, configuration of channel sounder using massive array, and calibration method for massive MIMO have been presented by four presenters. Moreover, fruitful discussion has been held in which present and future works were provided. We had valuable discussion and obtained meaningful information about techniques on 5G systems.