

Commission D (Electronics and Photonics) Activity Report

August 2014-November 2014

December 8, 2014

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1. Commission Activities

URSI GASS 2014: Two sessions proposed by Commission D of Japan were held as follows:

- 1) DC01 Broadband Ubiquitous Network with Wired and Wireless convergence (Katsumi Iwatsuki, Yuichi Kado, and Katsutoshi Tsukamoto) scheduled on 13:40 - 15:40, Tuesday August 19, 2014. (5 invited papers were presented)
- 2) DFC01 Trends in THz Communications (Tadao Nagatsuma, Ci-Ling Pan, and Thomas Kuerner) scheduled on 16:00 - 17:40, Friday August 22, 2014. (2 invited and 4 contributed papers were presented)

2. Domestic activities related to areas covered by Commission D

Technical Committee on Microwave Photonics (IEICE): Following technical meeting was held on specific subjects including regular contributions. November 5, 2014 (Sendai); Resilient ICT research activities, Seamless Optical and Radio Transmission System, Disaster Resiliency and Access Technology of Optical Networks, microwave photonic functional devices based on optical modulators, photonic generation of millimeter-wave signals, optical waveguide and fibers, radio-over-fiber.

IEICE Society Conference: Following technical meeting was held in the session of Microwave Photonics (C-14) at the IEICE society conference: September 23-26, 2014 (Tokushima); 17 papers were presented, which cover signal generation, electronic and photonic devices for microwave photonics applications, system applications including radio-over-fiber links, radars, imaging and wireless communications.

3. International activities related to areas covered by Commission D

2014 International Topical Meeting on Microwave Photonics / The 9th Asia-Pacific Microwave Photonics Conference (MWP / APMP 2014):

The conference was held on October 21-23, 2014 in Sapporo. Plenary speeches were on Advanced Radio over Fiber System Technologies (Dr. Dalma Novak, Pharad, LLC, USA.), Design Aspects of Multicore Optical Fibers for High-capacity Long-haul Transmission (Professor Masanori Koshiba, Hokkaido University, Japan), and Optical Techniques for Gbit/s Wireless Indoor Access (Professor Ton Koonen, Eindhoven University of Technology, Netherlands). Various topics covered by Commission D were discussed including MWP integrated devices, MWP sensing technologies, THz technologies, High-speed photo detector & Optical modulator, and RoF for mobile communication systems.