Commission K (Electromagnetics in Biology & Medicine) Activity Report October 2016 – March 2017

March 20, 2017 Koichi Ito

1 Activity

4th meeting of Japanese URSI-Commission K for the 23rd term of the Science Council of Japan

- ◆ Date: January 23, 2017
- ◆ Place: Akihabara satellite campus of Tokyo Metropolitan University, Tokyo
- ◆ Topics:

The URSI sub-committee, Science Council of Japan, and URSI GASS 2017 were reported by Emeritus Prof. Ito.

Scientific symposium (Co-operated by Japanese Society for Electromagnetics in Biology and Medicine)

- One invited lecture and five research reports were presented with 37 participants.
 - > "Development of a transcranial magnetic stimulation coil absorbing navigation error for home care" by Kawasaki, Y. (Tokyo University) *et al*.
 - Acceleration of FEM calculation of induced electric field in human body due to low frequency magnetic field exposure" by Yoshikawa, Y. (Utsunomiya University) *et al.*
 - Development of scalpel using microwave and RF electric current" by Suzuki, S. and Saito, K. (Chiba University) *et al*.
 - ➤ "Test for electromagnetic interference with medical devices due to radio waves emitted by Wireless-LAN terminals" by Shimojima, S. (NTT DOCOMO, INC.) et al.
 - "Injury and disaster by static electricity in medical front" by Endo, Y. (JNIOSH) et
 - Invited lecture: "Dosimetry for biological effect exposed to electromagnetic field from low frequency to millimeter wave band and development of exposure apparatuses" by Suzuki, Y. (Tokyo metropolitan University)

2 Associated meetings

2.1 Past meetings

- Action and perception thresholds of static and ELF magnetic and electric fields and contact currents in humans, Federal Office for Radiation Protection, Oberschleissheim/Neuherberg, Germany, 26-27 October, 2016
- 2) 5th International Workshop on the Causes of Childhood Leukemia, Munich, Germany, 14-16 November, 2016, http://www.leukemia-workshop.de/
- 3) NICT/ICNIRP WS, Tokyo, Japan, 2 December 2016

2.2 Future meetings

- 4) BioEM2017, Hangzhou, China, 5-9 June 2017
- 5) IEEE MTT-S International Microwave Bio Conference (IEEE-IMBioC), Göteborg, Sweden, 15-17 May 2017, < http://www.imbioc-ieee.org/about>
- 6) IEEE EMBC2017, Jeju Island, Korea, 11-15 July 2017, http://embc.embs.org/2017/
- 7) Asian Electromagnetics Symposium, Karnataka State, India, 23-27 July 2017, http://www.asiaem2017.org/index.html>
- 8) URSI GASS2017, Montreal, Canada, 19-26 August 2017, http://www.ursi2017.org/
- 9) The 34th annual meeting of Japanese society for thermal medicine, Kyoto, Japan, 15-16 September 2017, http://web.apollon.nta.co.jp/jstm34/index.html