

## Commission E (Electromagnetic Noise and Interference) Activity Report

March 2013 - June 2013

### Domestic academic activities:

The Technical Committee on Electromagnetic Compatibility (EMCJ) of the Institute of Electronics, Information and Communication Engineers (IEICE) had four monthly regular technical meetings in the period of March 2013 to June 2013, and 44 presentation including 3 special talks were presented. Selected special topics for the monthly meetings were broadcasting, EMC in printed circuit boards, information security, etc. The following "Special Talks" were presented;

- ( 1 ) Dr. Katsumi Nakamura, "EMC for Automotive Electrical Electronics System"
  - ( 2 ) Dr. Tetsuya Tominaga, " Trend for Standardization of Electromagnetic Security "
  - ( 3 ) Prof. Osami Wada, "EMC of Semiconductor Integrated Circuits – Macro-modeling and International Standardization –"
- ( <http://www.ieice.org/ken/program/index.php?instsoc=IEICE-B&tgid=IEICE-EMCJ> )

### International Conferences and Meetings:

The following conferences and meeting related to EMC was held;

1. 2013 Asia-Pacific International Symposium and Exhibition on EMC (APEMC 2013), May 20-23, 2013, Melbourne, Australia: <http://www.apemc2013.org/>
2. 2013 International Symposium on Electromagnetic Theory" (EMTS 2013), May 20-24, 2013, Hiroshima, Japan: <http://ursi-emts2013.org/>  
EMTS 2013 is organized by Commission B (Fields and Waves) URSI and IEICE. URSI-E Japan supported the following Sessions.
  - [21AM1F] Electromagnetic Compatibility/Electromagnetic Interference-1  
Chairs: Yoshitaka Toyota, Japan, Hiroshi Inoue, Japan (5 papers).
  - [21PM1F] Electromagnetic Compatibility/Electromagnetic Interference-2  
Chairs: Yoshitaka Toyota, Japan, Hiroshi Inoue, Japan (6 papers).
  - [23PM2D] Electromagnetic Modeling of Human Body and Its Application to Dosimetry  
Chairs: Akimasa Hirata, Japan, Bhaskar Gupta, India (4 papers).
  - [24PM2F] Recent Advances of Electromagnetics in Medicine  
Chairs: Akimasa Hirata, Japan, Takashi Hikage, Japan (4 papers).

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  - [Special Topics: S2]: Electromagnetic Modeling of Human Body and Its Application to Dosimetry, Akimasa Hirata (Japan), Joe Wiart (France).
  - [Special Topics: S18]: Recent Advances of Electromagnetics in Medicine, Akimasa Hirata (Japan)

Future International Conferences and Meetings:

1. "2013 International Symposium on Electromagnetic Compatibility", Aug. 5-9, 2013 Denver, Colorado. (<http://www.emc2013.org/>)
2. "EMC Europe 2013", Sept. 2-6, 2013, Brugge, Belgium. (<http://www.emceurope2013.eu/>)
3. "2013 IEEE Electrical Design of Advanced Packaging & Systems Symposium (EDAPS 2103)", Dec. 12-14 & 15, 2013, Nara, Japan. ( <http://www.edaps2013.org/> )
4. "The 9th International Workshop on Electromagnetic Compatibility of Integrated Circuits (EMC Compo 13)", Dec. 15-18, 2013, Nara, Japan. ( <http://www.edaps2013.org/> )
5. "2014 International Symposium on Electromagnetic Compatibility, Tokyo (EMC'14/Tokyo)".

It is a symposium of periodically held every five years in Japan. This will be held in May 13-16, 2014 in Tokyo. More than 450 audiences and 200 presentations are expected. Scopes are;

- 1) EMC Measurements,
- 2) High Power & High Voltage EMC: Lightning & Overvoltage Protection, Intentional EMI & EMP, Grounding Phenomena in Power Systems,
- 3) EMC Management & Standards,
- 4) Chip, Package, PCB & Cables, Semiconductor EMC,
- 5) Immunity / Susceptibility, ESD and Transients,
- 6) Shielding, Grounding & Materials, EM Absorber, Meta-materials,
- 7) Numerical Modeling: Computational Electromagnetics,
- 8) Biological Effects, EMF Safety & EMC in Medical Applications & Safety:
- 9) Power System EMC: Smart Grids, Power Quality Issues, EMC in Power Plants & Substations, Solar Power Systems, Wireless Power Transmission,
- 10) Power Electronics & Vehicles: Automotive EMC, Railway and Naval EMC, EMC in Space,
- 11) Communication System EMC: Wired & Wireless Communications, Antennas, Propagation and Scattering.

Paper submission dead line is Sep. 15. "Organized Sessions" are now planned.

(<http://www.ieice.org/~emc14/>)