

## ★環境電磁工学研究会 (EMCJ)

専門委員長 曾根秀昭 副委員長 和田修己

幹事 森岡健浩・大坂英樹 幹事補佐 荻野良樹・勝部勇作・佐々木智江

日時 6月2日(木) 9:30~16:55

3日(金) 9:30~15:20

会場 BL-201, Department of Electrical Engineering, National Taiwan University (NTU) (<http://www.ee.ntu.edu.tw/en/> Tzong-Lin Wu)

議題 EMC Joint Workshop, 2016, Taipei

2日午前 一般講演 セッション1

EMCJ-1. Compact Spiral Patch EBG Structure with a Shunt Capacitor for Broadband SSN Suppression

○Chi-Kai Shen・Tzong-Lin Wu (NTU)

EMCJ-2. A TSV-Based Common-Mode Suppressing Filter in 3-D ICs

○Chi-Hsuan Cheng・Tzong-Lin Wu (NTU)

3. Shielding Effectiveness of Meltblown Non-Woven Fabric Type Non-Magnetic Noise Suppressor

Sho Muroga (National Inst. of Tech., Toyota College)・Jiang Fu・Masahiro Yamaguchi (Tohoku Univ.)・Tomoya Tanaka・Chie Okamura・Lumina Obi・Kazufumi Kato (Asahi Kasei)

一般講演 セッション2

EMCJ-4. Study on Conductive-Strip Grid-Pattern Characteristics and their Application as Absorber Material

○Kohei Tsuyoshi・Shinichiro Yamamoto・Kenichi Hatakeyama (Univ. of Hyogo)・Takanori Tsutaoka (Hiroshima Univ.)

EMCJ-5. An absorptive balanced bandpass filter based on slot couple lines

○Siu Huei Yang・Yang Chih Huang・Ting Yi Lin (NTU)

EMCJ-6. Elimination of Radiation on Cable-Attached High-Speed Interfaces

○Ying-Cheng Tseng・Po-Jui Li・Tzong-Lin Wu (NTU)

2日午後 ポスターセッション (13:30~)

EMCJ-7. [ポスター講演] Study on Side-Channel Analysis Based on Asynchronous Measurement

○Airi Sugimoto (Tohoku Univ.)・Yu-ichi Hayashi (Tohoku Gakuin Univ.)・Takaaki Mizuki・Hideaki Sone (Tohoku Univ.)

EMCJ-8. [ポスター講演] Investigation of Relationship between Signal-to-Noise Ratio of EM Information Leakage and Side-Channel Attacking Cost

○Yusuke Yano・Kengo Iokibe・Yoshitaka Toyota (Okayama Univ.)

EMCJ-9. [ポスター講演] An on-chip dual-mode rat-race coupler for closely-spaced two-element antenna arrays

○Huy Nam Chu・Wei-Shan Chung・Tzyh-Ghuang Ma (Taiwan Tech)

EMCJ-10. [ポスター講演] 共振のQに基づくオンボードRLスナバの最適値決定法の評価

○河田直樹・矢野佑典・五百旗頭健吾・豊田啓孝 (岡山大)

EMCJ-11. [ポスター講演] Characterization and Modeling of CMOS On-Chip Symmetric Coupled Transmission Lines

○Chien-Chang Huang・Wei-Che Lin (Yuan Ze Univ.)

EMCJ-12. [ポスター講演] A Broadband Filter Design for Common-Mode Noise Rejection with Multilayer Mushroom Structure in Differential Transmission Line

Ding-Bing Lin・○Yi-Chien Chen (NTUT)

EMCJ-13. [ポスター講演] Design and Application of Radio Frequency Current Probe for IC-EMI Measurement

Jeff Cheng・○Yen-Tang Chang (BSMI)・Han-Nien Lin (Feng-Chia Univ.)

EMCJ-14. [ポスター講演] Near-field to Far-field Transformation using Non-contacting Near-field Measurement with Kirchhoff Surface Integral Representation in the Frequency Domain

○Sung-Mao Wu・Li-Wen Lai・Jia-Yu Liu・Bang-Cheng Chiu・Mong-Hua Tu (NUK)・Cheng-Chang Chen・Ming-Shan Lin (BSMI)

15. [ポスター講演] A study on the relation between surface roughness of spherical electrode and amplitude of electromagnetic radiation due to ESD

Kenichiro Abe・Ken Kawamata・Shigeki Minegishi (Tohoku Gakuin Univ.)・Osamu Fujiwara (Nagoya Inst. of Tech.)

16. [ポスター講演] Measurement of current distribution on vertical coupling plane in the ESD immunity test

Ryuta Koike・Ken Kawamata・Shinobu Ishigami・Shigeki Minegishi (Tohoku Gakuin Univ.)

一般講演 セッション3

EMCJ-17. Identifying Dominant Factor of EMI of Asymmetrical Differentia-Paired Lines with Different Termination Condition

○Yoshiki Kayano (UEC)・Hiroshi Inoue (The Open Univ.)

EMCJ-18. Calculating EMS and EMI for Volumes of Microstrip Lines by Analytical Formula

○Chun-Te Wu (DYU Univ.) • Cheng-Nan Chiu (Yuan Ze Univ.) • Han-Chang Hsieh (BSMI)

EMCJ-19. Efficiency Enhancement of Near Field Coupled Antenna Pair Using Reflectors for Wireless Power Transmission  
Ding-Bing Lin • ○Pei-Chuan Huang (National Taipei Univ. of Tech.)

**招待講演**

EMCJ-20. [招待講演] Modeling and Measuring Vertical Interconnects with Impedance Control Over a Wide Frequency Range  
Tzyy-Sheng Horng (National Sun Yat-sen Univ.)

**3日午前 一般講演 セッション4**

1. An experimental investigation on conducted emission characteristics of SiC MOSFET in a DC-DC boost converter  
Takaaki Ibuchi • Tsuyoshi Funaki (Osaka Univ.)

EMCJ-2. Research of Antenna with Finite Sized Artificial Magnetic Structure in Wireless Device

○Chung-Yuan Liu • Chi-Kai Shen • Shih-Yuan Chen • Tzong-Lin Wu (NTU) • Jinjia Chang • Bin-Chyi Tseng • Jackson Yen (ASUSTeK)

EMCJ-3. Metal Meshed Antenna on the Novel Ultra-Slim Flexible Glass Substrate

Chia-Ying Tseng • ○Yi-Jiun Chen (National Taiwan Univ.) • Kai-Jiun Wang (ITRI) • Jen-Chieh Lin • Sean Garner • Scott Pollard • Kuan-Ting Kuo (Corning) • Kao-Der Chang • Hung-Yi Lin • Yu-Ming Wang (ITRI) • Hoang Yan Lin (National Taiwan Univ.)

**一般講演 セッション5**

EMCJ-4. A study on system characterization of an optical E-field probe

○Takehiro Morioka • Satoru Kurokawa (AIST) • Jun Ichijo • Yoshikazu Toba (SEIKOH GIKEN)

EMCJ-5. Experimental Calibration of Radiation Pattern Distortion from Phased Array Antennas due to Implementation Errors  
Hsi-Tseng Chou (National Taiwan Univ.) • ○Dun-Yuan Cheng (Yuan Ze Univ.)

EMCJ-6. Design Considerations of Multi-Column and Multi-Band LTE Base Station Antennas to Reduce the High-Order Harmonic Signals

○Sheng-Ju Chou (Yuan Ze Univ.) • Hsi-Tseng Chou (National Taiwan Univ.) • Li-Ruei Kuo (Whayu Industry)

**3日午後 招待講演 (13:20~)**

EMCJ-7. [招待講演] EM Information Security of Tablet PCs in Public Space

Yu-ichi Hayashi (Tohoku Gakuin Univ.)

**一般講演 セッション6**

EMCJ-8. A Prediction Method of The Substrate Noise and The SI Issues in 3-D ICs Based on Modified 3-D TLM Method  
○Yi-An Hsu • Chi-Hsuan Cheng • Tzong-Lin Wu (NTU)

EMCJ-9. Study on Fault Sensitivity Analysis of Cryptographic Device under IEMI

○Itoh Takuya (Tohoku Univ.) • Yu-ichi Hayashi (Tohoku Gakuin Univ.) • Takaaki Mizuki • Hideaki Sone (Tohoku Univ.)

◎Technical visit

◆電気学会；電磁環境技術委員会／マグネティックス研究会連催， Taiwan Electromagnetic Industry-Academia Consortium (TEMIAC)， IEEE EMC Society Taipei Chapter， IEEE EMC Society Sendai Chapter， IEEE EMC Society Japan Joint Chapter， and IEICE Taipei Section 協賛

◎1日（水）午後には研究施設の見学を予定しています。

◎事前登録，見学などの詳細はワークショップ特設ページを御覧下さい。

<http://j.mp/emcj-ws>

◎このプログラムは予告なく変更になる場合がございます。

☆EMCJ研究会今後の予定 [ ] 内発表申込締切日

7月15日（金） 機械振興会館 [締切済] テーマ：放電， EMC 一般

8月 休会

9月16日（金） 兵庫県立大 [7月14日（木）] テーマ：吸収体・シールド， EMC 一般

**【発表申込先】** 下記研究会発表申込システムからお申込み下さい。

<http://www.ieice.org/jpn/ken/kenmoushikomi.html>

**【問合先】**

萱野良樹（電通大）

E-mail： [emcj@mail.ieice.org](mailto:emcj@mail.ieice.org)