

JCK workshop 2013 in Tohoku University
Center Hall, Aobayama Campus, Tohoku University
2013/10/29-30

TECHNICAL PROGRAM

2013/10/29

9:30 - 9:40
Opening address
Fumiyuki Adachi, *Tohoku University, Japan*

Session 1
9:40 - 10:40
Room: Center Hall
Session Chair: Jin-Ghoo Choi

[1-1]9:40 -10:10 [Invited Talk] "Space" The final frontier
Hirohito Yamada, *Tohoku University, Japan*

[1-2]10:10 -10:40 [Invited Talk] Ultra Wide Band (UWB) Based Precise Positioning and Its Applications
Jin Pan, *University of Electronic Science and Technology of China, China*

Coffee Break

Session 2
10:50 - 11:50
Room: Center Hall
Session Chair: Jin Pan

[2-1]10:50 - 11:20 [Invited Talk] 5G in Korea
Yongwan Park, *Yeungnam University, Korea*

[2-2]11:20 - 11:50 [Invited Talk] Active Plasmonics in Graphene for Terahertz Applications
○**Alexander Dubinov**, *Institute for Physics of Microstructures of Russian Academy of Sciences (RAS), RUS*

Lunch Time

Session 3

13:00 - 14:45

Room: 1A (in Temporary Lecture Rooms D07)

Session Co-Chairs: Tatsunori Tsuchiya, Zeyu Hao

- [3-1]13:00-13:15 [Evaluation of English Pronunciation Proficiency in a Singing Voice](#)
○**Kazumichi Yoshida, Akinori Ito**, *Tohoku University*
- [3-2]13:15-13:30 [Controlling Switching Pause using AR Agent for Interactive CALL System](#)
○**Naoto Suzuki, Yutaka Hiroi, Akinori Ito**, *Tohoku University*
- [3-3]13:30-13:45 [Intelligibility of Spoken Easy Japanese by non-native Japanese Speakers](#)
○**Hafiyah Prafianto, Akinori Ito**, *Tohoku University*
- [3-4]13:45-14:00 [The Separate Chaining Hashing Scheme with NAND Flash Memory](#)
Woong-Kyu Park, Sung-Chul Kim, Muhammad Omar, Gyu Sang Choi,
Yeungnam University
- [3-5]14:00-14:15 [The Matrix Transpose Scheme With NAND flash Memory](#)
Sung-Chul Kim, Woong-Kyu Park, Muhammad Zeeshan Jhandir,
Gyu Sang Choi, *Yeungnam University*
- [3-6]14:15-14:30 [Design of a Low-Voltage Logic Gate Based on Differential-Pair Circuitry](#)
○**Kiyohiro Kashiuchi, Masanori Natsui and Takahiro Hanyu**, *Tohoku University*
- [3-7]14:30-14:45 [Design of an Energy-Efficient Inter-Chip Data Transmission Circuit for an Asynchronous NoC Platform](#)
○**Yuma Watanabe, Hirokatsu Shirahama, Akira Mochizuki and Takahiro Hanyu**, *Tohoku University*

Session 4

13:00 - 14:45

Room: 2A (in Temporary Lecture Rooms D07)

Session Co-Chairs: Bunka Nishina, Masaki Nara

- [4-1]13:00-13:15 [Duobinary Partial Response Filtered Single-Carrier Transmission](#)
○**Kohei Abo, Amnart Boonkajay, Fumiyuki Adachi**, *Tohoku University*
- [4-2]13:15-13:30 [Single-carrier STBC Diversity Using Practical Channel Estimation](#)
○**Shohei Yoshioka, Shinya Kumagai, Fumiyuki Adachi**, *Tohoku University*
- [4-3]13:30-13:45 [Analog Signal Transmission using Frequency-domain Equalization](#)
○**Thanh Hai Vo, Shinya Kumagai, Tatsunori Obara, Fumiyuki Adachi**,
Tohoku University

- [4-4]13:45-14:00 [Energy Efficient Data Gathering with Mobile Sink in Wireless Sensor Networks](#)
Mamurjon Djuraev, Byoungchul Ahn, Chong Gun Kim, Yeungnam University
- [4-5]14:00-14:15 [Locating Access Point \(AP\) using Mobile Sensors in 802.11 WLAN](#)
Ki-Won Lee, You-Hyun Hur, Seung Yeob Nam, Yeungnam University
- [4-6]14:15-14:30 [Study on In-Band Spurious Suppression using Magnetic Thin Film Integrated onto RFIC](#)
○**Peng Fan, Sho Muroga, Yasushi Endo, Tetsuo Ito, Satoshi Tanaka, Motoki Murakami, Kazuaki Hori, Satoru Takahashi, Naoya Azuma, Makoto Nagata, Masahiro Yamaguchi, Tohoku University**
- [4-7]14:30-14:45 [Evaluation of Receiving Performance of Modulated Scattering Antenna Array](#)
○**Masatoshi Saitoh, Keisuke Konno, Qiang Chen, Tohoku University**
- Coffee Break

Session 5

15:00 - 16:45

Room: 1A (in Temporary Lecture Rooms D07)

Session Co-Chairs: Kiyohiro Kashiuchi, Thanh Hai Vo

- [5-1]15:00-15:15 [GPS Based on Prediction Methods of Traffic Lights Detection Region](#)
Changhwan Choi, Yongwan Park, Jin-Ghoo Choi, Yeungnam University
- [5-2]15:15-15:30 [Distance Matching by Comparing the Image Feature Points Using Database and Single Camera](#)
Jin-Seon Song, Yongwan Park, Hyun-Yeol Chung, Yeungnam University
- [5-3]15:30-15:45 [Automatic Generation of Kanji Fonts from Small-Size Samples](#)
○**Tatsunori Tsuchiya, Tomo Miyazaki, Yoshihiro Sugaya, Shinichiro Omachi, Tohoku University**
- [5-4]15:45-16:00 [A Video Coding Method for Preserving Character Region Quality](#)
○**Yosuke Nozue, Tomo Miyazaki, Yoshihiro Sugaya, Shinichiro Omachi, Tohoku University**
- [5-5]16:00-16:15 [A Study on Dimensionality Reduction for Similarity Search in Distributed Network](#)
○**Koh Motoyama, Yoshihiro Sugaya, Shinichiro Omachi, Tohoku University**

- [5-6]16:15-16:30 [An Improved Branch Cuts Algorithm for InSAR Data Processing](#)
Chaomeng Zhu, Xiaoling Zhang, Lei Zeng, *University of Electronic Science and Technology of China*
- [5-7]16:30-16:45 [A High-Accuracy Phase Unwrapping Algorithm for Multi-Baseline InSAR](#)
Daiqi Shi, Xiaoling Zhang, Jun Shi, Lei Zeng, *University of Electronic Science and Technology of China*

Session 6

15:00 - 16:45

Room: 2A (in Temporary Lecture Rooms D07)

Session Co-Chairs: Kohei Abo, Peng Fan

- [6-1]15:00-15:15 [Construction of Equivalent Source for Imaging Modulated Electromagnetic Radiation](#)
○**Bunka Nishina, Qiang Chen**, *Tohoku University*
- [6-2]15:15-15:30 [Numerical Analysis of Power Transfer Efficiency in Near-Field Power Transfer Using Multi-Port Scattering Parameters](#)
○**Yuki Ojiri, Wu Mingda, Qiang Chen**, *Tohoku University*
- [6-3]15:30-15:45 [Development of the Experimental Teaching Equipment for Electromagnetic Field and Wave](#)
○**Jianmin Zhu, Jin Pan, Deqiang Yang, Xiaoyan Yang**, *University of Electronic Science and Technology of China*
- [6-4]15:45-16:00 [Designing of Circularly Polarized RFID Antenna with a High Gain](#)
Jinwen Zhou, Jin Pan, Chaofeng Jia, Xiaoyan Yang, *University of Electronic Science and Technology of China*
- [6-5]16:00-16:15 [Multispectral Imaging in Visible Wavelength Utilizing Photonic Crystal wavelength filters](#)
○**Satoru Ito, Yasuo Ohtera, Hirohito Yamada**, *Tohoku University*
- [6-6]16:15-16:30 [Vertical Coupling Optical Interface for Single Lithography Silicon Photonics](#)
○**Masaki Nara, Tomohiro Kita, Hirohito Yamada**, *Tohoku University*
- [6-7]16:30-16:45 [Near-Infrared Spectroscopy Imaging Utilizing Photonic Crystal Wavelength Filters](#)
○**Masahiro Mitsuhashi, Yasuo Ohtera, and Hirohito Yamada**, *Tohoku University*