

ICSANE 2013

International Conference on Space, Aeronautical and Navigational Electronics 2013
VAST/VNSC and Melia Hotel Hanoi, Vietnam / December 2-3, 2013

PROGRAM

For ICSANE 2013, Version – November 28th, 2013

See bulletin board for more information on events and additional revisions.

Monday, December 2nd 2013 Room A (Main Hall, Building A1, VAST)

2 Dec. 2013 09:20 - 09:30 Opening Ceremony

Opening Remarks:

Pham Anh Tuan (VNSC, Vietnam)

Hirobumi Saito (JAXA, Japan)



2 Dec. 2013 09:30 - 11:30 UWB and Radar

- 1 (SANE2013-71) Measurement for Permittivity and Thickness of Multilayered Dielectric Plate
by Through Radar
○Hirokazu Kobayashi (Osaka Institute of Tech.)
- 2 (SANE2013-72) Accurate shape estimation method for multiple moving targets
with UWB Doppler radar interferometers
○Hiroki Yamazaki · Kenshi Saho · Toru Sato (Kyoto Univ)
- 3 (SANE2013-73) Target Detection Algorithm using Independent Component Analysis
for Pulse Doppler Radar
○Shuri Kondo · Shouhei Kidera · Tetsuo Kirimoto (UEC)
- 4 (SANE2013-74) Execution Time Estimation of Signal Processing for Passive Radar
○Tomoki Hori · Katsumi Takahashi · Atsuo Ozaki (Mitsubishi Electric)
- 5 (SANE2013-75) A Two-dimensional Decoupled Filter Using Position and Velocity Measurements
for a Transient Response
○Yoshio Kosuge (Nagasaki Univ.)
- 6 (SANE2013-76) Accurate coherent change detection method using full polarimetric SAR imagery
○Ryo Oyama · Shouhei Kidera · Tetsuo Kirimoto (UEC)

11:30-13:00 Lunch (90 min.)



- 7 (SANE2013-77) Experimental evaluation of a Radar Altimeter for an Unmanned Aerial Vehicle
Cruising in the Mars' Atmosphere
○Sho Yonemura (Tokyo Denki Univ.) · Atsushi Tomiki · Tomoaki Toda (ISAS/JAXA)
· Takehiko Kobayashi (Tokyo Denki Univ.)
- 8 (SANE2013-78) Detection of underwater laver cultivation fields by synthetic aperture radar:
Reappraisal
○Kazuo Ouchi · Chan-Su Yang (KIOST)
- 9 (SANE2013-79) The development of a local geoid model (Metro Manila, Philippines) using LSMSA
(Least Squares Modification of the Stokes' Formula with Additive Corrections)
○Rosalie B. Reyes · Masahiko Nagai (AIT) · Yoshikazu Kamiya (JAXA)
· Taravudh Tipdecho · Sarawut Ninsawat (AIT)
- 10 (SANE2013-80) Analysis of Land Deformation on Slope Area using PS InSAR. Case Study:
Bandung Area
○Dodi Sudiana · Rokhmatuloh · Mia Rizkinia · Ardiansyah · Rahmat Arief (Univ. Indonesia)
· Bambang Setiadi · Luhur Bayuaji · Josaphat Tetuko Sri Sumantyo (Chiba Univ.)
- 11 (SANE2013-81) Aboveground biomass study in Dipterocarp forest, Southeast Asia by ALOS
AVNIR-2 and PALSAR
○Chulinrak Natthasiree (WWF) · Yoshikazu Kamiya (JAXA) · Taravudh Tipdecho (AIT)
- 12 (SANE2013-82) Development of Precision Agriculture Monitoring System using Microwave Imaging
Sensor
○Chan Yee-Kit · Koo Voon-Chet · Chua Min-Yam (Multimedia University, Malaysia)

15:00-15:30 Break (30 min.)



- 13 (SANE2013-83) A Combined Differential Navigation and Communication Scheme for Unmanned
Aerial Vehicles for Supporting Search and Rescue Activities at High-rise Buildings
○Do Trong Tuan · Ha Duyen Trung · Han Trong Thanh · Phuong Xuan Quang
· Nguyen Duy Hung · Pham Hoang Anh (HUST)
- 14 (SANE2013-84) Distribution Patterns of Sea Fog During the Daytime Using Geostationary Ocean
Color Imager (GOCI)
○Chan-Su Yang · Kazuo Ouchi (KIOST)
- 15 (SANE2013-85) Velocity Measurement of Internal Waves in the South China Sea by
Multi-Temporal and Multi-Sensor Satellite Images
○Dan-Bee Hong · Chan-Su Yang (UST) · Kazuo Ouchi (KIOST)

- 16 (SANE2013-86) A novel method to design notch filter for GNSS narrow band interference mitigation
 ○Tu Thi-Thanh Nguyen (NAVIS Centre) · Beatrice Motella (ISMB)
- 17 (SANE2013-87) ARM9 - Based Real-Time Positioning and Navigational System for Mobile Vehicles
 Ha Duyen Trung · ○Hoang Van Dung · Trinh Minh Chi · Le Truong
 · Nguyen Thi Nga · Ta Hai Tung (Hanoi Univ. of Sci. and Tech.)
- 18 (SANE2013-88) Improvement of positioning algorithm of moving objects applied for inertial
 navigation system using MEMS-based sensors combined with GPS technology
 ○Trieu Viet Phuong · Hoang Van Trong · Nguyen Thi Lan Huong · Trinh Quang Thong (HUST)



2 Dec. 2013 15:30-17:30 Satellite (Room B)

VNSC Meeting Room, 9th floor, Central Building

- 19 (SANE2013-89) Cryogenic CMOS analog switch for far-infrared image sensors
 ○Koichi Nagase (SOKENDAI) · Takehiko Wada · Hirokazu Ikeda (JAXA)
 · Yasuo Arai (KEK) · Morifumi Ohno (AIST)
- 20 (SANE2013-90) Analysis of thermal responses for a satellite with two-node model using
 the equivalent linearization technique
 ○Nguyen Nhu Hieu · Nguyen Dong Anh (IMECH., VAST)
 · Pham Ngoc Chung (Hanoi Uni. Min.&Geo.)
- 21 (SANE2013-91) Spectral and technical items for small satellites in the future observation
 applications -- L band SAR system mounted on small satellite --
 ○Korehiro Maeda (Tokyo Univ.)
- 22 (SANE2013-92) Development of a 20W class X-band Amplifier using GaN HEMT Technology for
 Space Use
 ○Mitsuhiro Nakadai · Johta Awano · Masaaki Shimada (JAXA)
 · Masahiro Funabashi (NTSpace)
- 23 (SANE2013-93) Hardware implementation and laboratory performances of X-band nano satellite
 high-speed downlink receiver based on turbo equalizer/decoder
 ○Naohiko Iwakiri (Tokyo Univ.), Hirobumi Saito (JAXA), Shinichi Nakasuka (Tokyo Univ.)
- 24 (SANE2013-94) New techniques of high-speed data processing for spacecraft observation data via
 NICT Science Cloud
 ○Ken T. Murata · Hidenobu Watanabe (NICT) · Yoshiya Kasahara
 · Daisuke Yagi (Kanazawa Univ.) · Yasuko Kasai · Shoken Ishii
 · Kazunori Yamamoto (NICT) · Eizen Kimura (Ehime Univ.)
 · Osamu Tatebe · Masahiro Tanaka (Univ. Tsukuba) · Kentaro Ukawa
 · Kazuya Muranaga · Yutaka Suzuki (SEC) · Hirotsugu Kojima (Kyoto Univ.)

Tuesday, December 3rd 2013 Melia Hotel Hanoi



3 Dec. 2013 09:30-10:30 Small satellite

- 25 (SANE2013-95) Random vibration analysis of the F-2 nanosatellite structure
○Thuong Nguyen Van · Hung Nguyen Viet
· Khanh Nguyen Phu · Tuan Le Anh (HUST)
- 26 (SANE2013-96) TSUBAME Microsatellite: Design, Development and Verification of Attitude
Determination and Control System
○Le Xuan Huy · Kamiya Takashi · Hao Ting · Kawajiri Shota (TITECH)
· Matunaga Saburo (TITECH/ISAS/JAXA)
- 27 (SANE2013-97) BepiColombo MMO Development Status
○Hironori Maejima · Hajime Hayakawa · BepiColombo Project (JAXA)

10:30-10:45 Break (15 min.)



3 Dec. 2013 10:45-12:25 Small satellite

- 28 (SANE2013-98) Towards Virtualization Technology on Satellite On-board Computer System
with Hardware Redundancy, Software Rejuvenation and Virtual Machine Live Migration Techniques
-- Modeling, Analysis and Implementation Proposal --
Tuan Anh Nguyen · ○Dohwan Lee · Jong Sou Park (KAU)
- 29 (SANE2013-99) An application to the wild fire detection of the uncooled micro bolometer camera
onboard a small satellite
○Tetsuya Fukuhara (Hokkaido Univ.)
- 30 (SANE2013-100) Small Synthetic Aperture Radar Satellite Micro X SAR
○Hirobumi Saito · Atsushi Tomiki · Prilando Rizki Akbar
· Takashi Ohtani · Kunitoshi Nishijo (JAXA) · Jiro Hirokawa
· Makoto Ando (Tokyo Institute of Technology)
- 31 (SANE2013-101) Preliminary Study on MicroXSAR Mission using SDS Bus System
Takashi Ohtani · Hiroyuki Morishita · Moto Takai
· Koichi Fujihira · ○Yoshiyuki Miura · Yuta Nakajima
· Naoki Nishimura · Koichi Inoue · Hirobumi Saito (JAXA)
- 32 (SANE2013-102) Development of the X-band High Speed Downlink Transmitter for Nano Satellite
Tomoya Fukami · Hiromi Watanabe (Tokyo Univ.)
· Atsushi Tomiki (JAXA) · Naohiko Iwakiri (Tokyo Univ.)
· ○Hirobumi Saito (JAXA) · Shinichi Nakasuka (Tokyo Univ.)

12:25-13:30 Lunch (65min.)



3 Dec. 2013 13:30-14:50

Positioning and navigation

33 (SANE2013-103) Ionospheric Activity in the South East Asian Region

J. Miguel Juan · ○Jaume Sanz (gAGE/UPC) · Roberto Prieto · Stefan Schlueter (ESA)

34 (SANE2013-104) A Vehicle Monitoring and Navigation System Design based on Android

Smartphone

○Ha Duyen Trung · Do Trong Tuan · Hoang Van Dung

· Phuong Xuan Quang · Pham Tien Hung

· Ta Hai Tung (Hanoi Univ. of Sci. and Tech.)

35 (SANE2013-105) Demonstration of Multi-GNSS Advanced RAIM Algorithm using GPS and Galileo

Signals

○Hieu Tran Trung (NAVIS Centre) · Letizia Lo Presti (Polito)

36 (SANE2013-106) Experiments on the Ionospheric Models in GNSS

○La The Vinh · Phuong Xuan Quang (HUST) · Jose M. Juan Zornoza

· Jaume Sanz Subirana · Alberto Garcia Rigo (UPC)

3 Dec. 2013 14:50-15:10

Closing

Young Scientist Award Ceremony

Closing Address



Space, Aeronautical and Navigational Electronics

<http://www.ieice.org/cs/sane/eng/>

The Institute of Electronics, Information and Communication Engineer

<http://www.ieice.org/eng/index.html>

一般社団法人電子情報通信学会 通信ソサエティ 宇宙・航行エレクトロニクス研究専門委員会

November 28th, 2013