

## RFIT 2025 Technical Program

### Plenary Session

Date: Aug. 26<sup>th</sup>

Time: 08:30-10:00

Room: Pearl 4F

Session Chair: Prof. Kenjiro Nishikawa (Kagoshima University)

(1) Toward the Realization of the "New Silicon Island Kyushu"

--- To realize a vibrant regional economy and society with semiconductors from Kyushu ---

*Mr. Yoshinori Taguchi (Kyushu Bureau of Economy, Trade and Industry)*

(2) New Concept of Industry-Level Large-Scale Quantum Computer

*Dr. Masahiro Horibe (The National Institute of Advanced Industrial Science and Technology)*

### Oral Sessions

#### Session\_1: CMOS Amplifiers

Date: Aug. 26<sup>th</sup>

Time: 10:20-12:00

Room: Pearl 4F

Session Co-Chairs: *Prof. Nobuyuki Itoh (Okayama Prefectural University, Japan) and Prof. Tian-Wei Huang (National Taiwan University, Taiwan)*

(1) (Invited) Study on MOSFET's Operating Region for Fully-Integrated Sub-1-GHz LNA Under Scaling

*Nobuyuki Itoh, Kiyotaka Komoku, Jun Furuta and Yasunori Suzuki (Okayama Prefectural University, Japan)*

(2) (Invited) A 40.8% FBW Full D-Band Receiver Front-End Fabricated in 40 nm CMOS

*Yi-Wen Wang, Shih-Chun Yeh, Kai-Jie Chuang and Tian-Wei Huang (National Taiwan University, Taiwan)*

(3) A Ku-Band CMOS Power Amplifier with 37.6 % Peak PAE and 22.5 dBm P<sub>sat</sub> for 6G Applications

*Subin Lim, Wonseob Lee, Eunsu Mo and Euijin Oh (Chonnam National University, Korea); Sunwoo Kong (Electronics and Telecommunications Research Institute, Korea); Hui Dong Lee (Electronics and Telecommunications Research Institute,*

*Korea); Bonghyuk Park (ETRI, Korea); Seungchan Lee and Jinseok Park (Chonnam National University, Korea)*

- (4) A Wideband Bi-Directional Variable-Gain Amplifier with Low Phase Variation for Phased Array System

*Chun-Hsiang Yang and Tzyh-Ghuang Ma (National Taiwan University of Science and Technology, Taiwan); Kun-You Lin (National Taiwan University, Taiwan)*

- (5) A Miniaturized 31-69 GHz Wideband Amplifier with Multi-Band Gain Tuning in 40nm CMOS

*Zhen Yan, Satoshi Tanaka, Takeshi Yoshida and Minoru Fujishima (Hiroshima University, Japan)*

## **Session\_2: Device Characterization**

Date: Aug. 26<sup>th</sup>

Time: 10:20-12:00

Room: Iris 4F

Session Co-Chairs: *Dr. Osman Ceylan (Maury Microwave, USA) and Prof. Takuichi Hirano (Tokyo City University, Japan)*

- (1) (Invited) A Review of Test Fixtures for RF Device Characterization

*Osman Ceylan (Maury Microwave, USA)*

- (2) Frequency Dependence of Complex Permittivity in Commercial Dielectric Substrates for Millimeter-Wave Circuit Design

*Takashi Shimizu and Ryo Sakata (Utsunomiya University, Japan)*

- (3) Geometrical Optimization Approach of MSL Bend Shapes to Minimize Reflection Coefficient

*Yutaka Mimino and Takuichi Hirano (Tokyo City University, Japan); Shiro Ozaki (Fujitsu Limited, Japan)*

- (4) A Nonlinear Rectifying Diode Modeling Approach for High-Efficiency Single-Shunt Rectifier Design

*Qingkun Lyu and Kenjiro Nishikawa (Kagoshima University, Japan)*

- (5) A Novel Eight-Port Wave Probe for Closed-Loop Bi-Directional Reflection Coefficients

*Yaun-Tzu Lee (National Yang Chiao Tung University, Taiwan); Robert (Shu-I) Hu (National Chiao Tung University, Taiwan); Ying Chen (University of California at Davis, USA)*

## **Session\_3: Si-Based Components**

Date: Aug. 26<sup>th</sup>

Time: 15:50-17:30

Room: Pearl 4F

Session Co-Chairs: *Dr. Tomoyuki Furuichi (Tohoku University, Japan) and Prof. Kyungsik Choi (Yonsei University, Korea)*

- (1) (Invited) A D-Band Low-Noise and High-Gain Receiver Front-End Adopting Gmax-Driven Active Mixer

*Kyungsik Choi (Yonsei University, Korea)*

- (2) A 66-82 GHz VCO with Dual-Tuning and Phase Noise Reduction Techniques in 40 nm CMOS

*Yi-Cheng Liu, Pei-Hsuan Wang, Yu-Yuan Huang and Tsung-Hsien Lin (National Taiwan University, Taiwan)*

- (3) A 5.8 dBm 55.2-67 GHz Frequency Sixtupler with 37 dB Conversion Gain in 130-nm SiGe BiCMOS

*Yu Zhu (Technische Universität Dresden & Chair of Circuit Design and Network Theory, Germany); Tilo Meister and Frank Ellinger (Technische Universität Dresden, Germany)*

- (4) A Q-Band -3dBm Output Power Tripler Using Self-Biased anti-Parallel Diode-Connected nMOS Transistor

*Ryunosuke Saito, Ryosei Miyagawa, Yuki Fujiya, Tomoyuki Furuichi and Noriharu Suematsu (Tohoku University, Japan)*

- (5) A Broadband Downconversion Mixer with Linearity-Improved Active IF Balun in 90-nm CMOS Process

*Xin-Hao Huang, Yunshan Wang and Huei Wang (National Taiwan University, Taiwan)*

#### **Session\_4: WPT and Sustainability**

Date: Aug. 26<sup>th</sup>

Time: 15:50-17:30

Room: Iris 4F

Session Co-Chairs: *Prof. Mamiko Inamori (Tokai University, Japan) and Prof. Tamami Maruyama (Hiroshima Institute of Technology, Japan)*

- (1) (Invited) Energy-Efficient Wireless Systems for Biomedical Applications

*Minyoung Song (Daegu Gyeongbuk Institute of Science and Technology, Korea)*

- (2) (Invited) Experimental Investigation of Underwater Wireless Power Transmission System

*Mamiko Inamori and Sora Anzai (Tokai University, Japan)*

- (3) (Invited) Effects of Metamaterial Applications on Microwave Snow Melting  
*Tamami Maruyama (Hiroshima Institute of Technology, Japan); Koyo Hatazawa (N.I.T Hakodate college, Japan); Kota Unyu (Muroran Institute of Technology, Japan); Masashi Nakatsugawa (National Institute of Technology, Hakodate College, Japan); Tsunayuki Yamamoto (National Institute of Technology, Tsuyama College, Japan); Keiichi Ito (National Institute of Technology, Akita College, Japan); Manabu Omiya (Hokkaido University, Japan); Noriharu Suematsu (Tohoku University, Japan)*
- (4) Battery-Free Smart Water Meter Powered by TV Broadcast EM Waves in Cast-Iron Box with Slit  
*Eiichi Tateishi (Kyushu University & Hinode Holdings Co. Ltd., Japan); Yuta Ide and Nobuhiro Kai (Hinode Holdings Ltd., Japan); Tatsuya Yamaguchi (HINODE, Ltd., Japan); Novuya Tagawa, Hayato Tanaka, Kaito Nakabuchi and Haruichi Kanaya (Kyushu University, Japan)*
- (5) Compact Decoupling Power Layout for High-Frequency CMOS Integrated Circuits  
*Yudai Miyoshi, Satoshi Tanaka, Takeshi Yoshida and Minoru Fujishima (Hiroshima University, Japan)*

## **Session\_5:     Beamforming**

Date: Aug. 27th

Time: 08:00-09:40

Room: Pearl 4F

Session Co-Chairs: *Dr. Hiroyuki Takahashi (NTT Device Technology Laboratories, Japan) and Prof. Kyoya Takano (Tokyo University of Science, Japan)*

- (1) (Invited) Built-in Self Test and Calibration Techniques for Millimeter-Wave CMOS Transceivers  
*Ho-Jin Song (POSTECH, Korea)*
- (2) 1-Bit DAC for Image Enhancement of Q-Band Direct Digital RF Transmitter  
*Yuki Fujiya, Koki Furuuchi, Junhao Zhang, Tomoyuki Furuichi, Satoshi Tsukamoto and Noriharu Suematsu (Tohoku University, Japan)*
- (3) D-Band Beamforming Transceiver Modules Using Wafer-Level Packaging Technologies  
*Seung-Uk Choi and Sirous Bahrami (Pohang University of Science and Technology, Korea); Inho Choi (Pohang University of Science and Technology,*

*Korea); Jiwon Kang (Pohang University of Science and Technology, Korea);  
Seunghoon Lee and Ho-Jin Song (POSTECH, Korea)*

- (4) (Invited) A Ka-Band VGA and Its Application to Four-Element Beamforming IC for LEO Satellite Communication

*Hyeonwon Song, Wonseob Lee, Mingyu Lee and Hyungju Kim (Chonnam National University, Korea); Seunghun Wang and Hui Dong Lee (Electronics and Telecommunications Research Institute, Korea); Bonghyuk Park (ETRI, Korea);  
Seungchan Lee and Jinseok Park (Chonnam National University, Korea)*

- (5) A Ku-Band Beam-Steerable Linear-Polarized Transmitter with 29 dBW Peak EIRP for SATCOM Applications

*Yi-Fan Tsao, Heng-Tung Hsu and Jiun-Jie Huang (National Yang Ming Chiao Tung University, Taiwan); Arpan Desai (Pandit Deendayal Energy University, India); Hao-Yu Luo and Po-Han Chen (National Yang Ming Chiao Tung University, Taiwan);  
Hsi-Tseng Chou (National Taiwan University, Taiwan)*

## **Session\_6:      Advanced Theory and Technologies in RF to THz Devices and Antennas**

Date: Aug. 27th

Time: 08:00-10:00

Room: Iris 4F

Session Co-Chairs: *Dr. Satoshi Yoshida (Ryukoku University, Japan) and Prof. Chung-Tse Michael Wu (National Taiwan University, Taiwan)*

- (1) (Invited) Signal-Flow-Graph Representation of Weakly Nonlinear Networks and Its Applications

*Shuheii Amakawa (Hiroshima University, Japan)*

- (2) (Invited) Reflection-Mode Terahertz Imaging Using Concurrent Transceiver Pixel Arrays in CMOS

*Wooyeol Choi (Seoul National University, Korea); Kenneth O (The University of Texas at Dallas, USA)*

- (3) A 0.35-THz Binary Coding Metasurface Using Glass Integrated Passive Device Technology

*Shuping Li (Rutgers University, USA); Te-Yen Chiu (National Tsing Hua University, Taiwan); Chun-Hsing Li (National Taiwan University, Taiwan); Chung-Tse Michael Wu (Rutgers University, USA)*

- (4) (Invited) Smith Chart-Based Graphical Design of a Two-Section Transmission Line Matching Circuits

*Satoshi Tanaka, Takeshi Yoshida and Minoru Fujishima (Hiroshima University, Japan)*

- (5) (Invited) 600-GHz Scalable Modular CMOS Detector Arrays with Stitched Multiple Chips

*Jae-Sung Rieh (Korea University, Korea); Doyoon Kim (Samsung Electronics, Korea); Minje Cho (Anapass, Korea)*

- (6) An in-Line Coupling Based Microstrip Filtering Antenna Array with Transmission Zeros

*Masataka Ohira (Doshisha University, Japan); Chiharu Ikeda and Zhewang Ma (Saitama University, Japan); Hiroyuki Deguchi (Doshisha University, Japan)*

### **Session\_7: Active Devices and Components**

Date: Aug. 27th

Time: 10:20-12:00

Room: Pearl 4F

Session Co-Chairs: *Prof. Ryo Ishikawa (The University of Electro-Communications, Japan) and Prof. Shinji Hara (Nagoya University, Japan)*

- (1) (Invited) Gain Drop Analysis of Electrically Long Gate Finger FETs and Its Improving Method

*Shinji Hara and Keiichi Sakuno (Nagoya University, Japan)*

- (2) (Invited) High Output Power and Efficiency GaN and InP-Based HEMTs for Sub-THz Power Amplifiers

*Toshihiro Ohki, Shiro Ozaki, Yusuke Kumazaki, Atsushi Yamada, Masaru Sato and Yasuhiro Nakasha (Fujitsu Limited, Japan)*

- (3) (Invited) Multistage 5.75-GHz High-Efficiency and High-Gain Amplifier as DC-RF Power Converter for SSPS

*Ryo Ishikawa (The University of Electro-Communications, Japan)*

- (4) A Highly Efficient Dual-Band Rectenna with a Double-Loop Antenna for Low Power Operation

*Taiki Hirase, Naoki Sakai and Kenji Itoh (Kanazawa Institute of Technology, Japan); Takeshi Yamagishi, and Satoshi Furuta (Samsung R&D Institute Japan, Japan)*

- (5) Linearly Controllable Infinite Phase Shifter Using Current Output DACs with Tapped Load Resistors

*Fuka Kamei, Asaka Kobayashi and Hideyuki Nosaka (Ritsumeikan University, Japan)*

## **Session\_8: Quantum Computing and Sensing**

Date: Aug. 27th

Time: 10:20-12:00

Room: Iris 4F

Session Co-Chairs: *Dr. Akinori Taira (Mitsubishi Electric Corporation, Japan) and Dr. Hiroyuki Kayano (Advanced Industrial Science and Technology, Japan)*

(1) (Invited) An Introduction to Superconducting Quantum Computer for Microwave Engineers

*Hidehisa Shiomi (Osaka University, Japan)*

(2) (Invited) Terahertz Wave Sensing Technology for Visualizing Hidden Objects

*Akinori Taira, Michiya Hayama, Kazuaki Ishioka, Satoshi Yoshima, Ichiro Somada and Akihito Hirai (Mitsubishi Electric Corporation, Japan)*

(3) A Cryogenic Up-Conversion Single Sideband IQ Mixer for Quantum Computing

*Yu-Shih Lin (National Taiwan University, Taiwan); Che-Hao Li (Industrial Technology Research Institute, Taiwan); Mian-Yu Wu (National Taiwan University, Taiwan); Chang-Sheng Chen and Shyh-Shyuan Sheu (Industrial Technology Research Institute, Taiwan); Yih-Peng Chiou (National Taiwan University, Taiwan)*

(4) Wideband Noise Spectroscopy of Very Shallow States in Cryogenic MOSFETs

*Kenji Ohmori (Device Lab Inc., Japan); Shuhei Amakawa (Hiroshima University, Japan); Michihiro Shintani and Kazutoshi Kobayashi (Kyoto Institute of Technology, Japan)*

(5) A Sub-THz Inductive Source Degeneration Harmonic Oscillator Using 0.12- $\mu$ m GaN HEMT Technology

*Jiayou Wang (University of Liverpool, United Kingdom (Great Britain) & National Tsing Hua University, Taiwan); Yin-Cheng Chang (Taiwan Semiconductor Research Institute, NIAR, Taiwan); Da-Chiang Chang (Chip Implementation Center, National Applied Research Laboratories, Taiwan); Shawn S. H. Hsu (National Tsing Hua University, Taiwan)*

## **Session\_9: GaN/Power Amplifiers**

Date: Aug. 27th

Time: 15:50-17:30

Room: Pearl 4F

Session Co-Chairs: *Dr. Kazuya Yamamoto (Mitsubishi Electric Corporation, Japan) and Prof. Yasunori Suzuki (Okayama Prefectural University, Japan)*

- (1) (Invited) High-Efficiency Wideband GaN Power Amplifier MMICs for 6G and SATCOM  
*Takuma Torii, and Shintaro Shinjo (Mitsubishi Electric Corporation, Japan);  
 Chenhao Chu, and Hua Wang (ETH Zurich, Switzerland)*
- (2) (Invited) Extremely Low Power Consumption of Linear Power Amplifier for Base Station  
*Yasunori Suzuki (Okayama Prefectural University, Japan)*
- (3) An X-Band over 250 W GaN-on-GaN HEMT Power Amplifier with PAE of Higher than 50%  
*Kenji Mukai, Jun Kamioka, Shintaro Shinjo, Tsutomu Matsuura, Shingo Tomohisa, and Yagyu Eiji (Mitsubishi Electric Corporation, Japan)*
- (4) A Low Noise High Gain Amplifier MMIC for Wideband Satellite Application  
*Zhijian Chen, Yang Li, Fengyuan Mao, Bin Li, Zhao Hui Wu and Quansheng Guan (South China University of Technology, China); Xiaoling Lin (China Electronic Product Reliability and Environmental Testing Research Institut, China)*
- (5) A Ku-Band GaN MMIC Power Amplifier with a 47.4% Large-Signal Fractional Bandwidth  
*Tsai-Rung Hu (National Tsing Hua University, Taiwan); Hsin-Chieh Lin (Taiwan Semiconductor Research Institute, Taiwan); Yin-Cheng Chang and Da-Chiang Chang (Taiwan Semiconductor Research Institute, NIAR, Taiwan); Shawn S. H. Hsu (National Tsing Hua University, Taiwan)*

## **Session\_10: Sub-THz Experiments and Devices**

Date: Aug. 27th

Time: 15:50-17:30

Room: Iris 4F

Session Co-Chairs: *Prof. Hiroshi Okazaki (Tokyo Information Design Professional University) and Prof. Hideyuki Nosaka (Ritsumeikan University, Japan)*

- (1) (Invited) 160-Gb/s RF Front-End and Metasurface Beamforming: Toward Practical Wireless Systems at 300 GHz  
*Hiroyuki Takahashi, Hiroshi Hamada, Adam Pander and Teruo Jyo (NTT Device Technology Laboratories, Japan)*
- (2) (Invited) Experimental Demonstrations of Long-Range Wireless Communication Using the 100 GHz Band  
*Tetsuya Kawanishi (Waseda University & National Institute of Information and Communications Technology, Japan)*



- (3) 28 GHz Direct-Conversion Transmitter with I/Q Imbalance Correction  
*Seunghoon Lee, Inho Choi and Sangcheol Jeon (POSTECH, Korea); Sungbeom Kim (Samsung Electronics, Korea); Donghun Lee (LIG Nex1, Korea); Ho-Jin Song (POSTECH, Korea)*
- (4) A Low-Loss High-Isolation Crossover Design for D-Band Phased Arrays  
*Leshan Xu, Satoshi Tanaka, Takeshi Yoshida and Minoru Fujishima (Hiroshima University, Japan)*
- (5) Beam Steering Characteristics of a 300 GHz Stretchable RIS with Dual-Polarization Capability  
*Eiru Morimoto and Kento Seki (The University of Osaka, Japan); Yuto Kato (National Institute of Advanced Industrial Science and Technology, Japan); Yosuke Nakata and Atsushi Sanada (The University of Osaka, Japan)*

## Poster Sessions

Date: Aug. 26<sup>th</sup>

Time: 13:50-15:10

Room: Pearl 4F Foyer

Session Co-Chairs: *Dr. Shintaro Shinjo (Mitsubishi Electric Corporation, Japan) and Prof. Yasunori Suzuki (Okayama Prefectural University, Japan)*

- (1) Multi-Path Fading Measurement of 2.4 GHz/5 GHz Band with Real-Time Wideband Spectrum Monitor  
*Tomoyuki Furuichi, Eisai Nagahari, Takashi Shiba and Noriharu Suematsu (Tohoku University, Japan)*
- (2) An Indoor Positioning Method Based on Distributed Single-Frequency Continuous Wave Radars  
*Ruoxi Cai, Yue Yu and Lixin Ran (Zhejiang University, China)*
- (3) An Approach for Estimation of Soil Moisture Content Using Coil at HF Band  
*Natsuki Sato, Takato Shinhama and Futoshi Kuroki (National Institute of Technology, Kure College, Japan)*
- (4) A 35% Radiation Efficiency W-Band H-Shaped on-Chip Slot Antenna  
*Yu-Shao Shiao, Jia-Bin Qian, Wen-Lin Chen and Kun-Ming Chen (Taiwan Semiconductor Research Institute, Taiwan); Guo-Wei Huang (Taiwan Semiconductor Research Institute & National Yang Ming Chiao Tung University, Taiwan)*

- (5) Derivation of Forward and Reverse Loop Gains for Closed-Loop Circuit Stability Analysis  
*Yaun-Tzu Lee (National Yang Chiao Tung University, Taiwan); Robert (Shu-I) Hu (National Chiao Tung University, Taiwan); Ying Chen (University of California at Davis, USA)*
- (6) Grounded CPW with a Longitudinal Slot at Bottom Ground for Low Loss at the Sub-THz Band on Glass IPD  
*Ruei-Ze Lin, Zhi-Ting Yang and Hsin-Chia Lu (National Taiwan University, Taiwan)*
- (7) Recent Experiments on Switchable Reflective Polarizer in Conformal Configuration  
*Dwi Andi Nurmantris (Telkom University, Indonesia); Sabrina Megumi Ahmad (Inha University, Korea) & Wireless Communication Research Laboratory, Korea)); Achmad Munir (Institut Teknologi Bandung, Indonesia)*
- (8) A Study on Dispersion Characteristics of a Gyrator-Loaded CRLH-TL with an Even Number of Unit Cells  
*Kensuke Okubo, Mitsuyoshi Kishihara and Koichiro Sakaguchi (Okayama Prefectural University, Japan)*
- (9) Four 2-D Rhombic Distributed TL Models Related by 90-Degree Rotations for Topological Waveguides  
*Tsutomu Nagayama (Kagoshima University, Japan)*
- (10) Full D-Band Waveguide-to-Microstrip Transitions on Low-Cost PCBs  
*Chi-An Lin and Yu-Hsiang Cheng (National Taiwan University, Taiwan)*
- (11) Low-Power Miniaturized Wideband Quadrature Differential Power Detector  
*Xiao Tan (Sanechips Technology Co. Ltd, China); Jian Fu and Jianqiang Zhang (Sanechips, China); Jie Yang (Sanechips Technology Co. Ltd, China); Jie Hu (Sanechips Technology Co., Ltd, China & State Key Laboratory of Mobile Network and Mobile Multimedia Technology, China); Guangxiang Zhang, and Qi Xiao (Sanechips Technology Co. Ltd, China); Jinjie Zhang (Sanechips, China)*

Date: Aug. 27th

Time: 13:50-15:10

Room: Pearl 4F Foyer

Session Co-Chairs: *Dr. Shintaro Shinjo (Mitsubishi Electric Corporation, Japan) and Prof. Yasunori Suzuki (Okayama Prefectural University, Japan)*

- (1) A D-Band down-Conversion Mixer Using Transformer-Coupling Cascode Topology in 40-nm CMOS

*Jin-Hui Li, Chung-Yao Lu, Yi-Qi Lin and Yu-Hsiang Cheng (National Taiwan University, Taiwan)*

- (2) Sub-6GHz Band Frequency Synthesizer with Automatic Frequency Calibration Technique

*Xin-Yu Chang (National Taipei University, Taiwan); Yue-Fang Kuo (Yuan Ze University, Taiwan)*

- (3) Subharmonic Injection-Locked Push-Push Oscillator Using Two-Wavelength Ring Resonator

*Elton De Nascimento Lima, Takayuki Tanaka and Ichihiko Toyoda (Saga University, Japan)*

- (4) System and Circuit Level Design Aspects of mmWave SPDT Switches on CMOS SOI

*Mikko Hietanen and Aarno Pärssinen (University of Oulu, Finland)*

- (5) Broadband GaAs-mHEMT LNA and DA Design for Fusion Hot-Electron Plasma Detection

*Yaun-Tzu Lee, National Yang Chiao Tung University, Taiwan*

- (6) GaN HEMT Low Noise Amplifier with an 8 Shaped Inductor for 5G Application

*Sheng-Lyang Jang, National Taiwan University of Science and Technology, Taiwan*

- (7) Design and Implementation of CMOS Negative Capacitors for X-Band Applications

*Nikita Kalmykov, Saint Petersburg Electrotechnical University, Russia*

- (8) A 23-33 GHz GaN HEMT LNA with High Linearity for UAV Radar Applications

*Yuan-Hung Huang, Shao-Chun Huang and Chao-Hsin Wu (National Taiwan University, Taiwan)*

- (9) A 0.8-V 80.7-GHz Dual-Core-Coupled Triple-Mode VCO in 40-nm CMOS

*Yu-Yuan Huang, Pei-Hsuan Wang, Yi-Cheng Liu and Tsung-Hsien Lin (National Taiwan University, Taiwan)*

- (10) Broadband X-Band GaN MMIC High Power Amplifier and Driver Amplifier Chipset

*Kento Saiki (Mitsubishi Electric, Japan)*

- (11) A Ka-Band CMOS Switchless Low-Noise High-Responsivity Receiver for Sensing Applications

*Yu-Chia Su, Yi-Fu Chen and Hong-Yeh Chang (National Central University, Taiwan)*

- (12) A 47 GHz-Bandwidth/47 mW LO-Split Up-Conversion Mixer for 300-GHz Self-Heterodyne Transceivers

*Taiga Noguchi and Kyoya Takano (Tokyo University of Science, Japan)*

- (13) Microwave Characterization CPW Lines Using Copper Ink Based Printed Electronics  
*Shin Yokomura and Daisuke Yasunobu (Kagoshima University, Japan); Hiroto Sakaki (Mitsubishi Electric Corporation, Japan); Kenjiro Nishikawa (Kagoshima University, Japan)*
- (14) Characterization of Transmission Properties of Infrared Filters and Attenuators Up to 125 GHz  
*Junta Igarashi, Kosuke Mizuno, Ryo Ito, Shota Norimoto, Toyofumi Ishikawa, Kunihiro Inomata, Noriyoshi Hashimoto, Nobu-hisa Kaneko and Tomonori Arakawa (National Institute of Advanced Industrial Science and Technology, Japan)*
- (15) A 96-GHz 15.9-dB Gain 20.7 dBm PSAT Power Amplifier in 60-nm GaN-on-Si HEMT  
*Tsai-Rung Hu (National Tsing Hua University, Taiwan); Hsin-Chieh Lin (Taiwan Semiconductor Research Institute, Taiwan); Yin-Cheng Chang and Da-Chiang Chang (Taiwan Semiconductor Research Institute, NIAR, Taiwan); Shawn S. H. Hsu (National Tsing Hua University, Taiwan)*
- (16) A Method for Reducing Learning Time in ARVTDNN for NN-DPD Applications  
*Yudai Shiota (Kagoshima University, Japan); Hiroto Sakaki (Mitsubishi Electric Corporation, Japan); Kenjiro Nishikawa (Kagoshima University, Japan)*

## **Closing Session**

Date: Aug. 27th

Time: 18:00

Room: Pearl 4F

Session Co-Chairs: *Dr. Shintaro Shinjo (Mitsubishi Electric Corporation, Japan) and Prof. Yasunori Suzuki (Okayama Prefectural University, Japan)*

- (1) Award Ceremony
- (2) Introduction of the RFIT 2026
- (3) Closing Remarks