

Joint Workshop TJMW&AWPT 2025 Program at a Glance

Date: October 15 (Wed), 2025

Thailand time		Speaker	Chair
9:30 - 9:45	Registration		
9:45 - 11:15	SDC1: Warming-up (Ice-breaking & Intro Hands-on)		Takayuki Matsumuro, ATR
11:15 - 12:15	Lunch Break		
12:15 - 12:45	Registration		
12:45 - 13:00	Opening Ceremony	Titipong Lertwiriaprapa, KMUTNB Danai Torrungrueng, KMUTNB Atsushi Sanada, The Univ. of Osaka Kenji Ito, KIT	
13:00 - 14:20	Plenary Session I 40 min. x 2 speakers	Prof. Sarawuth Chaimool, Khon Kaen University, Thailand Title: "Engineering Wireless Power Transfer Fields with MetaRadiator: From Nulls-Free Propagation to Localized Efficiency Hotspots" Dr. Masahiro Horibe, Deputy Director, Global Research and Development Center for Business by Quantum-AI Technology (G-QuAT), The National Institute of Advanced Industrial Science and Technology (AIST), Japan Title: "Japan's Quantum National Strategy and Ecosystem Creation"	Titipong Lertwiriaprapa, KMUTNB Atsushi Sanada, The Univ. of Osaka
14:20 - 14:30	Break		
14:30 - 15:30	SDC2: Tutorial Session		Takayuki Matsumuro, ATR
15:30 - 15:40	Break		
15:40 - 17:10	SDC3: Hands-on (Design, Implementation & Measurement)		Takayuki Matsumuro, ATR
17:10 - 19:10	Reception cocktails		

Joint Workshop TJMW&AWPT 2025 Program at a Glance

Date: October 16 (Thu), 2025

Thailand time		Speaker	Chair
9:30 - 10:00	Registration		
10:00 - 11:00	TH1: Technical Session I Passive Components & Others	Jiasen Weng (The University of Electro-Communications) Takashi Shimizu (Utsunomiya University) Hagio Fujita (Kanazawa Institute of Technology) Hiroshi Murakami (Tokyo Information Design Professional University)	Shuhei Amakawa, Hiroshima Univ.
11:00 - 11:10	Break		
11:10 - 11:55	TH2: Technical Session II Wireless Power Transfer	Naoki Hasegawa (SoftBank Corp.) Naoki Kojo (Kyushu Univ.) Takayuki Matsumuro (ATR)	Yasunori Suzuki, Okayama Pref. Univ.
11:55 - 13:00	Lunch		
13:00 - 14:00	TH3: Technical Session III Antennas & Measurements	Naphat Suwanritdej (King mongkut's institute of technology ladkrabang) Thanakorn Sutham (School of Engineering King Mongkut's Institute of Technology Ladkrabang) Wanchalerm CHANWATTANAPONG (King Mongkut's Institute of Technology Ladkrabang) Jirakit LOSAMLIT (Department of Electrical Engineering, College of Engineering, Rangsit University)	Ekasit Nugoolcharoenlap, RMUTR
14:00 - 14:10	Break		
14:10 - 15:30	YE1: Young Engineers Session I (3min. Short Presentation: Part 1)	25 presenters	Kyoya Takano, Tokyo Univ. of Science
15:30 - 15:35	Break		
15:35 - 16:50	YE2: Young Engineers Session II (3min. Short Presentation: Part 2)	23 presenters	Kyoya Takano, Tokyo Univ. of Science
16:50 - 17:00	Photo Session		
17:00 - 19:00	Banquet SDC Award Ceremony		

Joint Workshop TJMW&AWPT 2025 Program at a Glance

Date: December 17 (Fri), 2025

Thailand time		Speaker	Chair
9:30 - 10:00	Registration		
10:00 - 12:00	YE3: Young Engineers Session III (Poster Presentation)	48 presenters	Kyoya Takano, Tokyo Univ. of Science Yasunori Suzuki, Okayama Pref. Univ.
12:00 - 13:00	Lunch		
13:00 - 14:20	Plenary Session II 40 min. x 2 speakers	Prof. Rardchawadee Silapunt, King Mongkut's University of Technology Thonburi, Thailand Title: "From Connectivity to Capacity: Enhancing Spreading Factor Allocation in LoRaWAN for Massive IoT" Prof. Toshio Ishizaki, Ryukoku University, Japan Title: "Progress in Research & Development for WPT Systems"	Danai Torrungrueng, KMUTNB Kenji Ito, KIT
14:20 - 14:30	Break		
14:30 - 15:00	Award Ceremony		Suramate Chalermwisutkul, KMUTNB Kensuke Okubo, Okayama Pref. Univ. Kenjiro Nishikawa, Kagoshima Univ.
15:00 - 15:10	Closing Session	Chuwong Phongcharoenpanich, KMITL Mamiko Inamori, Tokai Univ.	

Joint Workshop TJMW&AWPT 2025, Technical Session Program

Oct. 16, TH1: Technical Session I: Passive Components & Others

Chair: Shuhei Amakawa, Hiroshima Univ.

Thailand Time	Paper ID	Presentation Title	Authors
10:00 - 10:15	M001	A Verification of Grounding Structure for Short-Circuited Stub for Wideband Bandpass Filter in LMT-FINER	Jiashen Weng (Univ. of Electro-Comm., Japan), Taiyo Ushiyama (Univ. of Electro-Comm., Japan), Satoshi Ono (Univ. of Electro-Comm., Japan), and Takeshi Sakai (Univ. of Electro-Comm., Japan)
10:15 - 10:30	M120	Design and Realization of 100 GHz NRD-RWG Transition Horns	Takashi SHIMIZU (Utsunomiya University) and Yuki HOSHINO (Utsunomiya University)
10:30 - 10:45	M004	Development of a highly efficient microwave heating device using an elliptical chamber	Hagino FUJITA (Kanazawa Tech., Japan)
10:45 - 11:00	M101	Wireless Security Against Evil Twin Attacks	Hiroshi Murakami (Tokyo Information Design Professional University)

Oct. 16, TH2: Technical Session II: Wireless Power Transfer

Chair: Yasunori Suzuki, Okayama Pref. Univ.

Thailand Time	Paper ID	Presentation Title	Authors
11:10 - 11:25	W110	[Invited] Experimental Evaluation of WPT for Asset Management Devices with a Commercial Transmitter	Naoki HASEGAWA Yuta NAKAMOTO Takashi HIRAKAWA and Noriaki WATANABE (SoftBank Corp.)
11:25 - 11:40	W001	Shielded-Capacitive Power Transfer for EVs : Matching and Peak Width Improvement	Naoki Kojo (Kyushu Univ.,Japan), Kousei Kamazuka (Kyushu Univ.,Japan), Hao Chen (Kyushu Univ.,Japan), Haruichi Kanaya (Kyushu Univ.,Japan), Eiichi Tateishi (Hinode Holdings,Japan), Nobuhiro Kai (Hinode Holdings,Japan), Toru Hashimoto (Hinode Holdings,Japan), Kota Uchio (Hinode Holdings,Japan), Yuta Ide (Hinode Holdings,Japan), Tatsuya Yamaguchi (Hinode Ltd,Japan), Hussein Mahdi (Uit Univ.,Norway), and Reiji Hattori (Kyushu Univ.,Japan)
11:40 - 11:55	W108	Accuracy Evaluation of Phase-Conjugated Wave Generation Using a Low-Cost SDR	Takayuki Matsumuro (ATR, Japan), Ryo Goto (ATR, Japan), Susumu Ano (ATR, Japan), and Satoru Shimizu (ATR, Japan)

Oct. 16, TH3: Technical Session III: Antennas & Measurements

Chair: Ekasit Nugoolcharoenlap, RMUTR

Thailand Time	Paper ID	Presentation Title	Authors
13:00 - 13:15	M005	3D Geospatial Visualization for Antenna Deployment in Mobile Communication Systems	Naphat Suwanritdej (KMITL), Watid Phakphisut (KMITL), Thongchai Witjittpornchai (AIS), Tanun Jaruvitayakovit (AIS), Tanutsorn Wongphatcharatham (KMITL), and Passawee Sombunwanich (KMITL)
13:15 - 13:30	M003	Dual-Band Textile Antenna for Low Energy Bluetooth and WLAN Communications	Thanakorn Sutham (KMITL, Thailand), Chawalit Rakhuea (RMUTT, Thailand), and Chuwong Phongcharoenpanich (KMITL, Thailand)
13:30 - 13:45	M130	TEXTILE ANTENNA FOR 5G COMMUNICATION	Vanvisa CHUTCHAVONG (KMITL, Thailand), Wanchalerm CHANWATTANAPONG (KMITL, Thailand), Chawalit RAKLUEA (RMUTT, Thailand), Norakamon WONGSIN (RMUTT, Thailand), Thinnawat JANGJING (RMUTT, Thailand), Paitoon RAKLUEA (RMUTT, Thailand), Nipont TANGTHONG (RMUTT, Thailand), and Maleeya TANGJITJESADA (RMUTSB, Thailand)
13:45 - 14:00	M002	Paddy Moisture Content Determination with Reflection Measurement	Jirakit LOSAMLIT (Rangsit Univ., Thailand) and Paiboon YOIYOD (Rangsit Univ., Thailand)

Joint Workshop TJMW&AWPT 2025, Young Engineers Session Program

Oct. 16, YE1: Young Engineers Session I

Chair: Kyoya Takano, Tokyo Univ. of Science

Thailand Time	Paper ID	Presentation Title	Authors
14:14 - 14:17	M001	A Verification of Grounding Structure for Short-Circuited Stub for Wideband Bandpass Filter in LMT-FINER	Jiashen Weng (Univ. of Electro-Comm., Japan), Taiyo Ushiyama (Univ. of Electro-Comm., Japan), Satoshi Ono (Univ. of Electro-Comm., Japan), and Takeshi Sakai (Univ. of Electro-Comm., Japan)
14:17 - 14:20	M002	Paddy Moisture Content Determination with Reflection Measurement	Jirakit LOSAMLIT (Rangsit Univ., Thailand) and Paiboon YOYOD (Rangsit Univ., Thailand)
14:20 - 14:23	M003	Dual-Band Textile Antenna for Low Energy Bluetooth and WLAN Communications	Thanakorn Sutham (KMITL, Thailand), Chawalit Rakluea (RMUTT, Thailand), and Chuwong Phongcharoenpanich (KMITL, Thailand)
14:23 - 14:26	M005	3D Geospatial Visualization for Antenna Deployment in Mobile Communication Systems	Naphat Suwanritdej (KMITL), Watid Phakphisut (KMITL), Thongchai Witjitpornchai (AIS), Tanun Jaruvitayakovit (AIS), Tanutsorn Wongphatcharatham (KMITL), and Passawee Sombunwanich (KMITL)
14:26 - 14:29	M102	Consideration of Groundwater Detection by Using Cost-effective VNA	Shudai IZUMI (National Institute of Technology, Kure College, Japan), Takato SHINHAMA (National Institute of Technology, Kure College, Japan), and Futoshi KUROKI (National Institute of Technology, Kure College, Japan)
14:29 - 14:32	M103	Consideration on Sensor Buried in Soil for Estimation of Soil Moisture Content	Natsuki Sato and Futoshi Kuroki (NIT Kure College, Japan)
14:32 - 14:35	M104	Beam Scanning Antenna Using LSE-NRD Guide Radiator Array in Sub-THz	Yoshinari Demoto (NIT Kure College), and Futoshi Kuroki (NIT Kure College)
14:35 - 14:38	M105	Design of a Super-elliptical Cross-section Waveguide Bend Mode Converter for Dual-polarized Horizontally Omni-directional Antennas	Renshi Funabiki (Institute of Science Tokyo), Jiro Hirokawa (Institute of Science Tokyo), Takashi Tomura (Institute of Science Tokyo)
14:38 - 14:41	M106	Digital predistortion of IM3 for an even harmonic quadrature mixer	Takaaki Michishita, Kosuke Ito, Masaomi Tsuru, Naoki Sakai, and Kenji Itoh (Kanazawa IT, Japan)
14:41 - 14:44	M107	Loss Analysis of Wireless Power Transmission System Using Litz Wire in Seawater	Sora Anzai (Tokai Univ., Japan), Yutaro Watanabe (Tokai Univ., Japan), and Mamiko Inamori (Tokai Univ., Japan)
14:44 - 14:47	M108	Diode characteristics by using steep slope "Dual-Gate PN-Body Tied SOIFET"	Ryotaro Ito(Knazawa Institute of Technology), Takayuki Mori(Knazawa Institute of Technology) and Jiro Ida(Knazawa Institute of Technology)
14:47 - 14:50	M109	Novel ACMRC-Based Partially-Reflective-Surface (PRS) Design for Wideband Gain Enhancement	Asawin Nunchbang (iDEMT KMUTNB., Thailand), Jirayu Thetains (iDEMT KMUTNB., Thailand), Asawin Nunchbang (iDEMT KMUTNB., Thailand), and Danai Torrungrueng (iDEMT KMUTNB., Thailand)
14:50 - 14:53	M110	Design of a Passive Metasurface for Anomalous Reflection at 24 GHz	Saowarat Prengsri (KMUTNB Univ., Thailand) and Akkarat Boonpoonga (KMUTNB Univ., Thailand)
14:53 - 14:56	M111	A New Neuro Forward Model of Microwave Filters and Its Efficient Training-Data Generation Approach	Ryota Maezaki, Masataka OHIRA (Doshisha Univ. Japan), Rui Kuramochi, Zhewang Ma (Saitama Univ. Japan), and Hiroyuki DEGUCHI (Doshisha Univ. Japan)
14:56 - 14:59	M112	Application of Quantum Linear Solvers to Null Steering in Large-Scale Antenna Arrays	Ximing Zhou (Utokyo, Japan), Zhengdong Lin (Utokyo, Japan), Hiroyuki Morikawa (Utokyo, Japan), and Yoshiaki Narusue (Utokyo, Japan)

14:59 - 15:02	M113	Clustering Analysis for FMCW Radar Systems	Nutcha Krudpun (King Mongkut's University of Technology North Bangkok, Thailand) and Akkarat Boonpoonga (King Mongkut's University of Technology North Bangkok, Thailand)
15:02 - 15:05	M114	The mmWave Radar Imaging Using MIMO Digital Beamforming	Sirisak NONGPROMMA (KMUTNB, Thailand) and Akkarat BOOMPOONGA (KMUTNB, Thailand)
15:05 - 15:08	M115	A Dual-Band DNG Metamaterial Based on Split Ring Resonator with Double Interdigital and Tri-Section Step-Impedance	Naruepol Limsomboon (ECE., KMUTNB), P. Chomtong (TE., KMUTNB) and P. Akkaraekthalin (ECE., KMUTNB)
15:08 - 15:11	M116	Automatic Design of Microstrip BPF with Transmission Zeros Using Deep Reinforcement Learning Approach	Ryota Kawasaki (Doshisha Univ., Japan), Masataka Ohira (Doshisha Univ., Japan), and Hiroyuki Deguchi (Doshisha Univ., Japan)
15:11 - 15:14	M117	A Dual-Band DNG Meta Materials Reflector Base on Jerusalem With Double interdigital Technique	Natchamongkol Kakam (KMUTNB,Thailand)
15:14 - 15:17	M118	A DUAL BAND DNG METAMATERIAL REFLECTOR USING FRACTAL WITH DOUBLE INTERDIGITAL TECHNIQUE	Kunawut Wangnayunut (ece,kmutnb,thailand), Pongsathorn Chomtong(ece,kmutnb,thailand), and Prayoot Akkaraekthalin (ece,kmutnb,thailand)
15:17 - 15:20	M119	A Miniaturized Dual Band DNG Metamaterial Using SRR with Double Interdigital Technique	Sukreechat Yenmee (ECE, KMUTNB, Thailand), Pongsathorn Chomtong (FTE, KMUTNB, Thailand), and Prayoot Akkaraekthalin (ECE, KMUTNB, Thailand)
15:20 - 15:23	M121	Stability-Factor Extremum-Based Design of Inter-Stage Matching in Two-Stage CMOS Amplifiers	Leshan Xu (Hiroshima Univ., Japan), Satoshi Tanaka (Hiroshima Univ., Japan), Takeshi Yoshida (Hiroshima Univ., Japan), and Minoru Fujishima (Hiroshima Univ., Japan)
15:23 - 15:26	M122	A 20-to-10 GHz Injection-Locked Divide-by-2 Divider with Wide Tuning Range using PMOS Varactor in 0.18 μm CMOS	Ryui Hashimoto (Tokyo University of Science) and Kyoya Takano (Tokyo University of Science)
15:26 - 15:29	M123	Toward Analytic Uncertainty Evaluation of Weakly Nonlinear Power Meters	Sakae Ito (Hiroshima Univ., Japan), Shinichi Nishizawa (Hiroshima Univ., Japan), and Shuhei Amakawa (Hiroshima Univ., Japan)

Oct. 16, YE2: Young Engineers Session II

Chair: Kyoya Takano, Tokyo Univ. of Science

Thailand Time	Paper ID	Presentation Title	Authors
15:35 - 15:38	M124	Q-Factor Requirements for Base-Emitter Transformer-Feedback LNAs at 150 GHz	Tokun Akiya (Tokyo University of Science) and Kyoya Takano (Tokyo University of Science)
15:38 - 15:41	M125	A 0.18- μ m CMOS Differential Bidirectional Amplifier with Low-Wiring-Loss Layout	Yuto Hino (Tokyo University of Science) and Kyoya TAKANO (Tokyo University of Science)
15:41 - 15:44	M126	Broadband Distributed Differential Amplifier Using a 0.18 μ m CMOS Process	Shotaro Yaritani (Tokyo University of Science) and Kyoya Takano (Tokyo University of Science)
15:44 - 15:47	M127	Evaluation results of the 0.2 μ m low-threshold GaAs E-pHEMT GAD	Yusuke Sato (Kanazawa Institute of Technology., Japan), Naoki Sakai (Kanazawa Institute of Technology., Japan) and Kenji Itoh(Kanazawa Institute of Technology., Japan)
15:47 - 15:50	M129	A stacked layer type spiral inductor for miniaturization of RF-ICs	Yamato Takahashi, Masaomi Tsuru, and Naoki Sakai, Kenji Itoh(Kanazawa Institute of Technology.,Japan)
15:50 - 15:53	M131	Wideband Transparent Antenna For MIMO Communication	Butsayakorn Runguthai (RMUTT. Univ., Thailand), Patchadaporn Sangpet (RMUTT. Univ., Thailand), and Chawalit Rakluea (RMUTT. Univ., Thailand)
15:53 - 15:56	M132	Dual-Band Transparent Monopole Antenna for Satellite Internet Aboard Aircraft	Supphakon Khongchon (Rajamangala University of Technology Thanyaburi)
15:56 - 15:59	M133	The Octagonal Slot Antenna Improvement with A Circular Stub on A Textile Substrate for 4G/5G and UWB Communication Systems	Chayapol Sangmook (Rajamangala University of Technology Thanyaburi)
15:59 - 16:02	W001	Shielded-Capacitive Power Transfer for EVs : Matching and Peak Width Improvement	Naoki Kojo (Kyushu Univ.,Japan), Kouhei Kamazuka (Kyushu Univ.,Japan), Hao Chen (Kyushu Univ.,Japan), Haruichi Kanaya (Kyushu Univ.,Japan), Eiichi Tateishi (Hinode Holdings,Japan), Nobuhiro Kai (Hinode Holdings,Japan), Toru Hashimoto (Hinode Holdings, Japan), Kota Hekio (Hinode Holdings, Japan), Yuta Ide (Hinode Holdings, Japan)
16:02 - 16:05	W101	Antenna Evaluation for Wireless Power Transfer System in Seawater	Yutaro Watanabe (Tokai Univ., Japan), Sora Anzai (Same affiliation), and Mamiko Inamori (Same affiliation)
16:05 - 16:08	W102	Study on a Low-Loss Small-Size 360° Phase Shifter for 5.8-GHz Wireless Power Transfer	Tomoki Yoshida (Kyoto Univ., Japan), Bo Yang (Kyoto Univ., Japan), Tomohiko Mitani (Kyoto Univ., Japan), and Naoki Shinohara (Kyoto Univ., Japan)
16:08 - 16:11	W103	Research and development of slot array antenna with variable waveguide width for beamforming	Shunta Kameo (Kyoto Univ., Japan), Naoki Shinohara (Kyoto Univ., Japan), Bo Yang (Kyoto Univ., Japan), and Tomohiko Mitani (Kyoto Univ., Japan)
16:11 - 16:14	W104	Considerations on Load Power Consumption in Series and Parallel Connections of Current and Voltage Sources for Hybrid Energy Harvester	Hiromu Furukawa (Ryukoku Univ., Japan) and Satoshi Yoshida (Ryukoku Univ., Japan)

16:14 - 16:17	W105	A DC output combining circuit for multiple rectennas with the constant input resistance DC/DC converters	Kazuki Ishizuka, Naoki Sakai, and Kenji Itoh (Kanazawa IT., Japan)
16:17 - 16:20	W106	Broad Stopband Acoustic Metamaterials Using Helmholtz Resonators and Chebyshev Filter structure	Ryo Mashiba (Okayama Prefectural Univ., Japan), Koichiro Sakaguchi (Okayama Prefectural Univ., Japan), Hiroki Katagiri (Okayama Prefectural Univ., Japan), Mitsuyoshi Kishihara (Okayama Prefectural Univ., Japan), and Kensuke Okubo (Okayama Prefectural Univ., Japan)
16:20 - 16:23	W107	Acoustic Metamaterials with Periodically Arranged Coupled Helmholtz Resonators	Hiroki Katagiri (Okayama Prefectural Univ., Japan), Koichiro Sakaguchi (Okayama Prefectural Univ., Japan), Ryo Mashiba (Okayama Prefectural Univ., Japan), Mitsuyoshi Kishihara (Okayama Prefectural Univ., Japan), and Kensuke Okubo (Okayama Prefectural Univ., Japan)
16:23 - 16:26	W109	Harmonic-Controlled Inverse Class-F Rectenna with Voltage Doubler for High-Efficiency Low-Power Rectenna at 2.45 GHz	Pichayut PONGCHAREE (Khon Kaen Univ., Thailand) and Sarawuth CHAIMOOL (Khon Kaen Univ., Thailand)
16:26 - 16:29	W111	Adaptive Null Constraint Design Using Cosine-Sum Windows for Microwave Power Transfer	Zhengdong Lin (Utokyo, Japan), Hiroyuki Morikawa (Utokyo, Japan), and Yoshiaki Narusue (Utokyo, Japan)
16:29 - 16:32	W112	Business card-sized 28GHz band GaAs rectenna array (6x10 elements)	Yudai Tondokoro (Kanazawa Institute of Technology., Japan), Akinobu Kobayashi (Kanazawa Institute of Technology., Japan), Naoki Sakai (Kanazawa Institute of Technology., Japan), and Kenji ITOH (Kanazawa Institute of Technology., Japan)
16:32 - 16:35	W113	Semi-AI Approach for RSRP Prediction with Closed-Form Coverage Preservation in Cellular Networks	Passawee Sombunwanich (King Mongkut's Institute of Technology Ladkrabang), Watid Phakphisut (King Mongkut's Institute of Technology Ladkrabang), and Tanun Jaruvitayakovit (Advanced Wireless Network Company Limited)
16:35 - 16:38	W114	Area-Efficient Architecture for QC LDPC Decoder	Anusorn Wongsa (KMITLE, Thailand) and Watid Phakphisut (KMITLE, Thailand)
16:38 - 16:41	W115	Suppression of Short-Channel Effect in AlGaIn/GaN HEMTs by Employing an AlGaIn Back Barrier	Yuuki Sugitani (Kumamoto.Univ., Japan) and Akio Wakejima (Kumamoto.Univ., Japan)
16:41 - 16:44	W116	Observation of Gate Leakage in GaN-on-GaN and GaN-on-SiC by Thermal Lock-in	Sota Kaneko (Kumamoto Univ., Japan) and Akio Wakejima (Kumamoto Univ., Japan)