



**RAVTE**

Regional Association of Vocational  
and Technical Education in Asia

# RAVTE RESOURCES

## Curriculum Vitae



**Full name: Pakornkiat Sawetmethikul**

**Institute: Rajamangala University of Technology Thanyaburi**

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### Education Background:

- **B. S. in Ind. Ed. (Electrical Engineering, KMUTT, Thailand (1997))**
- **B. Eng. (Electronic and Telecommunication), RMUTT, Thailand (2002)**
- **M. Eng. (Electrical Engineering), KMUTNB, Thailand (2005)**
- **D. Eng. (Electrical Engineering), N.I.T., Japan (2010)**

**Expertise / Research Areas (identified by keywords):**

- **Communication System Engineering**
- **RF/Microwave Circuits Design**
- **Microstrip Antenna and Filter Design**
- **Optical Communication Engineering**
- **NDT using MW & Millimeter-Waves**

**Engagement (networks):**

- **Universiti Teknologi Malaysia (UTM), Malaysia**
- **Nippon Institute of Technology (N.I.T.), Japan**
- **Universitas Pendidikan Indonesia (UPI) , Indonesia**
- **Pro-En Corp., Thailand**
- **I-Connect Telecom Co., Ltd., Thailand**
- **PTW Technology Co., Ltd., Thailand**

**Publications:**

- (1) A microstrip narrow bandpass filter using folded cross-coupled four-pole resonators, (Aug. 2004), *1st KMITL IC-ISTSD*, Bangkok, Thailand.
- (2) A doubly-trident microstrip bandpass filter with folded cross-coupled four-pole resonators, (Oct. 2004), *ISCIT 2004*, Sapporo, Japan.
- (3) A microstrip bandpass filter using four-coupled modified meander resonators, (Nov. 2004), *EECON 27*, Khonkaen, Thailand.
- (4) A microstrip bandpass filter using four cross-coupled doubly trident resonators, (Mar. 2005), *The 2nd Rajamangala University of Technology National Conference*, Chiang Mai, Thailand.
- (5) A microstrip filter with compact miniaturized resonator for UMTS application, *IEICE-SANE 2006-140, vol. 106, no. 542, 2007*.
- (6) Imaging by V-band waveguide-type microscopic aperture probe, *IEICE-SANE 2006-143, vol. 106, no. 542, 2007*.
- (7) A compact modified meander resonator for microwave bandpass filter with harmonic suppression for 3G mobile communication system, (Mar. 2007), *IEEE-iWAT 2007*, Cambridge, U.K.
- (8) Development of 60 GHz-band Fabry-Parot resonator, (Aug. 2007), *PIERS 2007*, Prague, Czech Rep.
- (9) Simulation analysis on UWB characteristic of spherical monopole antenna, (Aug. 2007), *ISAP 2007*, Niigata, Japan.
- (10) In-depth measurement of 60 GHz band near-field and transmission mode microscopy, (Sept. 2007), *IRMMW-THZ 2007*, Cardiff, U.K.
- (11) Prospect of 40-170 GHz band spherical antenna, (Sept. 2007), *IRMMW-THz 2007*, Cardiff, U.K.

- (12) Near-field transmission imaging by 60 GHz band waveguide-type microscopic aperture probe, *IEICE Trans. Ant. Propaga.*, vol.90-B, no.9, 2007.
- (13) Void and pore detection by the scanning near-field millimeter-wave microscopy aperture probe, (Dec. 2007), *APMC 2007*, Bangkok, Thailand.
- (14) Designing of spherical monopole antenna for UWB, *IEICE-SANE 2007-96*, vol. 107, no. 407, Saitama, 2007.
- (15) A microstrip bandpass filter with ultra wide stopband using folded stepped-impedance resonators, *IEICE-MW 2008-80*, vol. 108, no. 195, 2008.
- (16) Microscopic structure imaging with phase analysis at 60 GHz band, (Sept. 2008), *IRMMW-THz 2008*, C.A., U.S.A.
- (17) SIR type bandpass filter with wide suppression band width, *IEICE-MW 2008-189*, vol. 108, no. 452, 2009.
- (18) Microstrip bpf using SIRs with wide and deep harmonics suppression band, (Oct. 2009), *ISAP 2009*, Bangkok, Thailand.
- (19) Design of microstrip bandpass filters using SIRs with even-mode harmonics suppression for cellular system, *IEICE Trans, Elect.*, vol. 93-C, no. 6, 2010.
- (20) A compact microstrip bandpass filter using stepped-impedance resonators with two transmission zeros enabling and even-mode harmonics suppression techniques, (Dec. 2010), *EECON 33*, Chiangmai, Thailand
- (21) Design of a 900-MHz Stepped-Impedance Resonator Filter for Electromagnetic Intensity Instrument Application, (Jul. 2011), *4th NCTechEd*, Bangkok, Thailand.
- (22) An investigation of unloaded quality factor of  $\lambda/2$  and  $\lambda/4$  resonators, (Sept.2011), *PIERS 2011*, Suzhou, China.
- (23) An investigation of second-harmonic shifting characteristic of stepped-impedance resonators, (Sept. 2011), *PIERS 2011*, Suzhou, China.
- (24) Design of a 1800-MHz Microstrip Stepped-Impedance Resonator Bandpass Filter, (Dec. 2011), *EECON34*, Chonburi, Thailand.
- (25) The study and analysis on air-interface problems over GSM cellular network in central Pattaya area, *Procedia Engineering*, vol.32, pp.336-341, 2012.
- (26) A compact planar bandpass filter using triangular resonator, (Aug. 2012), *TJMW2012*, Bangkok, Thailand.
- (27) Study of second harmonic suppression with a stepped-impedance triangular resonator for enhancing planar bandpass filter performance, (Dec. 2012), *EECON35*, Nakhon Nayok, Thailand.
- (28) Development of a 1800-MHz Electromagnetic Intensity Instrument, (Nov. 2013), *6th NCTechEd*, Bangkok, Thailand.
- (29) Development of a Low-Cost Unmanned Aerial Vehicle for Military Purpose, *RMUTP Journal*, 2014.
- (30) A 2-GHz diplexer for RF/microwave applications, (Dec. 2013), *I-SEEC2013*, Kanchanaburi, Thailand.
- (31) Performance of Traffic Light System, (Mar. 2014), *Rajabhat Chom Bueng Conference*, Ratchaburi, Thailand.
- (32) Microwave Bandpass Filters for Modern Wireless Communication, (Dec. 2013), *Journal of Technical Education – RMUTT*.
- (33) A microstrip diplexer using folded single stepped-impedance resonator for 3G microcell station, *IJIEE*, vol. 6, no. 3, 2016.
- (34) Non-destructive inspection of reinforced concrete using high frequency probe, (May 2016), *EENET 2016*, Phuket, Thailand
- (35) A Flower-like shaped monopole antenna for UWB applications, (Jun. 2016), *TJMW 2016*, Bangkok, Thailand
- (36) A spherical monopole ultra-wideband antenna with cross-aperture technique, (Jul. 2016), *ECTI-CARD 2016*, Hua-Hin, Thailand.

REMARK: Please send it in PDF format to secretariat.

- (37) Detection for Bending Steel Bar of Reinforced Concrete using Electromagnetic Testing Technique, *B-Inno 2016*, Nakhon Pathom, Thailand.
- (38) An ultra-wideband monopoles antenna corolla shape antenna. (Sept. 2016), *ICETC 2016*, Singapore.
- (39) Detection of foreign bodies in food using thermal imaging technique, *ECTI-CARD 2017*, Leoi, Thailand.
- (40) Multi-Wireless Mobile Charging Device, *RMUTCON 2017*, Bangkok, Thailand.
- (41) Classification of Paddy Moisture using a Simple Microwave Probe with Reflection Mode, *ECTI-CARD 2018*, Pitsanulok, Thailand.
- (42) A Research Project for Precision Agriculture Enhancement: A Water Treatment Machine using Fine Filtration and Ultrasonication Techniques, *ICIET 2019*, Pattaya. Thailand.
- (43) Non-Destructive Classification of Thai Cha-Nee Durian Maturity with Near-Field Relection Mode Measurement using a 3.4-GHz Microwave Sensor, Proc. TVET 2020, Part of Book Series of Advances in Social Science, Education and Humanities Research, vol. 520, 2021.

#### **Award / Research Grants:**

- (1) Design and Development of a 1920-1980 MHz/2110-2170 MHz Diplexer Device for 3G Cellular Network System, 2013.
- (2) Development of a Compact UAV for Ground Survey, 2013.
- (3) Development of an Ultra-Wideband Antenna for Modern Wireless Communication Technology for Competition in Telecommunication Equipments R & D in ASEAN Region, 2014.
- (4) Development of a Portable Short-Range Cellular Jammer for Special Action in Southern Border Provinces, 2015.
- (5) Study of Bending Steels Testing Method with High-Frequency Technique, 2015.
- (6) Development of Dielectric Testing System for Homogeneous and Non-Homogeneous Materials with a New Frequency Variation Technique, 2016.
- (7) The Comparative Study of Quality Fast-Testing of High-Moisture Paddy with Microwave, Infrared and Optical Bands, 2017.
- (8) The Prototype of a Wastewater Treatment Machine without Ponds Type, Case Study: Agricultural Applications, 2017.
- (9) Research Project of an On-Field Anti-Birds Toolkit for Enhancing of High Quality Thai Rice Production, 2018.
- (10) A Research Project of a Simple Durian Maturity Fast-Tester for Enhancing of Thai Agricultural Product Testing Standard to World Market Competition, 2018.
- (11) Smart Reskill & Upskill Development for Vocational Teacher/Educator and Skill Workforce with Local Area-Based Collaboration involving Industry 4.0, 2020.