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EDUCATION

Ph.D. Degree Doctor of Philosophy (Electrical Engineering), Heriot-Watt University, Edinburgh,

United Kingdom

Master Degree Master of Engineering (Electrical Engineering), King Mongkut's Institute of

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Bachelor Degree Bachelor of Engineering (Electrical Engineering), Rajamangala Institute of

Technology, Thailand

RESEARCH INTERESTS

Computational Electromagnetics

Microsystems and MEMS

Metamaterial-Antenna-Absorber-Based Sensor Devices

Microfabrications and Flexible Electronics

Cyber-Physical Systems

RESEARCH PROJECTS

Research Projects

- 1) "MultiWaveS" The European Commission under the FP7 Project
- 2) "The VHF Band and Smart Meters" GB1412827.6 filed
- 3) "The Asymmetric Resonance for Sensing Applications" PSU Support Grants

TEACHING

977-352 Cyber-Physical Systems

977-342 Intelligent Conneted Objects

977-114 Digital and Logic Design

977-103 Physics for Engineers

240-441 Multicore Programming and Architecture

242-341 Embedded Systems Design

242-441 Advantage Computer Architecture and Organization

240-303 Ethical, Legal and Social Issues

240-631 Computer Arithmetic

242-480/240-480 Priciple of Robotics

242-401 Computer Enginring Project I

242-402 Computer Enginring Project II

240-308 Computer Enginring Project Preparation

INTERNATIONAL JOURNAL ARTICLES

Komsan Kanjanasit, Tanatorn Tantipiriyakul and Changhai Wang, Thin Film Resonant Metasurface Absorbers Using Patch-Based Arrays on Liquid Crystal Polymer Substrates for Centimeter-Wave Applications, Heliyon, 9, e35399, doi: https://doi.org/10.1016/j.heliyon.2024.e35399.

3/2024

Komsan Kanjanasit, Pracha Osklang, Terapass Jariyanorawiss, Akkarat Boonpoonga, and Chuwong Phongcharoenpanich, "Artificial Magnetic Conductor as Planar Antenna for 5G Evolution," Computers, Materials & Continua, vol. 74, no. 1 pp. 503–522, Jan, 2023

1/2023

Tanatorn Tantipiriyakul and **Komsan Kanjanasit,** "Design and Simulation of Chessboard Coding Wave Artifacts," Journal of Information Science and Technology (JIST), vol. 13, no. 2 pp. 62–68, Dec, 2023

iii 12/2023

Terapass Jariyanorawiss, Komsan Kanjanasit and Wachira Chongburee, "Creation of Rigorous Human Head

Model from MRI Images with Reports on SAR Caused by 2.6 GHz 5G Mobile Handset Radiation," The ECTI Transactions on Electrical Engineering, Electronics, and Communications, Vol. 20, No.3, pp.461-470, Oct, 2022

Komsan Kanjanasit and Changhai Wang, "A Wideband Resonant Cavity Antenna Assembled Using a Micromachined CPW Fed Patch Source and a Two-Layer Metamaterial Superstrate," IEEE Transactions on Components, Packaging and Manufacturing Technology, Vol.9, No.6, pp.1142-1150, Jun,2019 (Impact Factor 1.66; ISI)

6/2019

Irina Vendik, Alexander Rusakov, **Komsan Kanjanasit,** Jiasheng Hong, Dmitry Filonov, "Ultra-Wideband (UWB) Planar Antenna with Single-, Dual-, and Triple-Band Notched Characteristic Based on Electric Ring Resonator," IEEE Antennas and Wireless Propagation Letters, Vol. 16, pp.1597-1600, Jun, 2017 (Impact Factor 2.533; ISI)

6/2017

Komsan Kanjanasit and Changhai Wang, "Fano Resonance in a Metamaterial Consisting of Two Identical Arrays of Square Metallic Patch Elements Separated by a Dielectric spacer," Applied Physics Letters, Vol. 102, p. 251108, 2013 (Impact Factor 3.515; ISI)

6/2013

INTERNATIONAL PROCEEDINGS

- T. Tantipiriyakul and K. Kanjanasit, "A Binary Hexagon Stripe Metamaterial Antenna," 2024 21st International Conference on Electrical Engineering/Electronics, Computer, Telecommunications and Information Technology (ECTI-CON), Khon Kaen, Thailand, 2024, pp. 1-4, doi: 10.1109/ECTI-CON60892.2024.10594859.
- 5/2024
- T. Tantipiriyakul and **K. Kanjanasit**, "A Binary Metamaterial for Planar Antennas," The 7th International Conference on Information Technology (InCIT 2023), Mae Fah Luang University, Chiang Rai, Thailand, 15th-17th November 2023.
- 11/2023
- K. Kanjanasit and T. Jariyanorawiss, "A Broadband Resonant Cavity Antenna Using Tapered Two-Identical-Layer Metamaterial," Proceedings of The 19th International Conference on Electrical Engineering/Electronics, Computer, Telecommunications and Information Technology (ECTI-CON 2022), Hua-Hin, Thailand, 24–27 MAY. 2022, pp. 1-4
- Y. Keaomanee, T. Kliangsuwan, **K. Kanjanasit**, "A Study of Lightweight Dynamic Algorithm of Power Management System for Small Satellite Applications," Innovation Aviation & Aerospace Industry International Conference 2021 (IAAI-2021), Princess Sirindhorn AstroPark, Chiang Mai, Thailand, 28th-30th June 2021
- iii 6/2021
- **K. Kanjanasit**, I. B. Vendik, and A. Rusakov, "A Double Band-Notched UWB Antenna Based on Complementary ERR-Defected Ground," The 26th International Symposium on Antennas and Propagation, ISAP 2021, Taipei, Taiwan, 19–22 OCT 2021
- 10/2021
- **K. Kanjanasit**, T. Jariyanorawiss and P. Osklang, "High-Directivity Planar Antenna Based on AMC Metamaterials," The 2021 ECTI Workshop on Biomedical Electricals-Electronics and Communications Engineering (BEC 2021), Thailand, 10 DEC 2021

12/2021

T. Jariyanorawiss, **K. Kanjanasit** and W. Chongburee, "Computational Modeling of Human Head for 700 MHz Test with 5G Smart Phone," The 2021 ECTI Workshop on Biomedical Electricals-Electronics and Communications Engineering (BEC 2021), Thailand, 10 DEC 2021

12/2021

K. Kanjanasit, S. Sanesaowarod and N. Homsup, "A High-Gain Antenna Based on Ultrathin Planar-Feed Air-Filled Resonant Cavity," Proceedings of The 2020 International Electrical Engineering Congress (iEECON2020), Chiang Mai, Thailand, 4–6 MAR. 2020, pp. 1-4

3/2020

K. Kanjanasit, S. Sanesaowarod and N. Homsup, "EIT-Like Effect in Metamaterials Based on Two-Layer Arrays for High-Gain Antennas," Proceedings of The 17th International Conference on Electrical Engineering/Electronics, Computer, Telecommunications and Information Technology (ECTI-CON 2020), Phuket, Thailand, 24–26 JUN. 2020, pp. 304-307

6/2020

K. Kanjanasit and C. H. Wang, "A Finite-Size Superstrate Based on Identical Patch Arrays for Broadband Resonant Cavity Antennas," Proceedings of The 2019 International Electrical Engineering Congress (iEECON2019), Hua Hin, Thailand, 6–8 MAR. 2019, pp.cm51-cm54

3/2019

K. Kanjanasit and C. H. Wang, "Study of Multiband Resonant Absorbers Based on Modified Electric LC Resonators," Proceedings of The 15th International Conference on Electrical Engineering/Electronics, Computer, Telecommunications and Information Technology (ECTI-CON 2018), Chiangrai, Thailand, 18–21 JUL. 2018, pp.210-213

7/2018

K. Kanjanasit and C. H. Wang, "A Broadband Resonant Cavity Antenna Using a Metamaterial Based on Double-Side Identical Arrays," 2017 IEEE Conference on Antenna Measurements and Applications (CAMA), Tsukuba, Ibaraki, Japan, 4–6 DEC. 2017, pp.51-54

iii 12/2017

A. Rusakov, I. B. Vendik, **K. Kanjanasit**, "Tri-Mode Electric Ring Resonator and Adjustable UWB Triple Band-Notched Antenna," 2017 IEEE Conference of Russian Yong Researchers in Electrical and Electronic Engineering (ElConRus), St. Petersburg, Russia, 1–3 FEB 2017, pp.317-321

2/2017

K. Kanjanasit and C. H. Wang, "A High Performance Micromachined CPW Fed Aperture Coupled Compact Patch Antenna Using a Double-Tuned Impedance Matching Method," The 2016 International Symposium on Intelligent Signal Processing and Communication Systems (ISPACS 2016), Phuket, Thailand, 24-27 OCT. 2016, pp.134-137

K. Kanjanasit, C. H. Wang, P. Record, "A Wideband Resonant Cavity Antenna Based on Fano Resonance Effect in a Two-layer Patch Array Superstrate," The 7th International Conference on Metamaterials, Photonic Crystals and Plasmonics (META'16), Torremolinos (Málaga), Spain, 25–28 JUL 2016, pp.1219-1225

7/2016

A. Rusakov, I. B. Vendik, **K. Kanjanasit**, J. Hong, D. Filonov, "Ultra-Wideband Antenna with Single- and Dual-Band Notched Characteristics Based on Electric Ring Resonator," Proceedings of Days on Diffraction 2016, St.

Petersburg, Russia, 27 Jun.-1 JUL 2016, pp.350-355

- **#** 6/2016
- P. Record and **K. Kanjanasit**, "A Compact VHF Antenna for Smart Meters," Progress In Electromagnetics Research Symposium Proceedings (PIERS) Proceedings, Prague, 6-9 JUL 2015, pp.1607-1612
- **#** 7/2015
- I. B. Vendik, A. Rusakov, and **K. Kanjanasit**, "Printed UWB Antennas with Notched Bands," Microwave Microelectronics 2015, St. Petersburg, Russia (2015), pp. 304-308
- 1/2015
- K. Kanjanasit and C. H. Wang, "A High Directivity Broadband Aperture Coupled Patch Antenna Using a Metamaterial Based Superstrate," Antennas and Propagation Conference (LAPC), 2012 Loughborough, UK, 12-13 Nov. (2012)
- 11/2012
- S. Theerawisitpong; **K. Karnjanasit**, A Compact Modified-Meander Resonator for Microwave Bandpass Filter with Harmonic-Suppression, 2006 7th International Symposium on Antennas, Propagation & EM Theory, 26-29 Oct., Guilin, China
- III 10/2006 RF
- **K. Kanjanasit,** V. Vivek, and N. Homsub, "Novel Design of a Wideband Improved U-slot on Rectangular Patch Using Additional Loading Slots" the 2nd International ECTI conferences, May, Thailand, (2005)
- **5/2005**
- **K. Kanjanasit**, D. Worasawate, N. Homsub, and V. Vivek, "Bandwidth Improvement Technique for a U-slotted Rectangular Patch Antenna Using Coupled Slots" Proceedings of The 43rd Kasetsart University Annual Conference, Thailand, (2005)
- 1/2005

CHAPTERS

Irina B. Vendik, Alexander S. Rusakov, and **Komsan Kanjanasit**, "Study of Ultra-wideband Antenna with Multi-notch Band Loaded with a Multimode Electric Ring Resonator and a Complementary Resonance Structure," Book Chapter 15: Newest Updates in Physical Science Research (International Book), 2021. https://stm.bookpi.org/NUPSR-V11/article/view/3897

7/2021

OTHERS

Research participants:

- 1) The European Commission under the FP7 8 project "MultiWaveS"
- 2) Patent: VHF band and smart meters GB1412827.6 filed, Jul. 18, 2014

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