



RAVTE

Regional Association of Vocational
and Technical Education in Asia

RAVTE RESOURCES

Curriculum Vitae



Full name: Asst. Prof. Dr. Yutthachai Sillapawicharn

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Technology Thanyaburi**

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Education Background:

- **Ph.D. in Electrical Engineering**, Chiang Mai University, THAILAND, 2013
- **M.Eng in Electrical Engineering**, Chulalongkorn University, THAILAND, 1999
- **B.Eng in Electrical Engineering**, Rajamangala Institute of Technology, Thewes Campus, THAILAND, 1994
- **Certificate in Machine Control in High-Tech Industries**, JICA-Kyushu International Center-Kitakyushu International Techno-cooperative Association, JAPAN, 2000
- **Thai Meister Mechatronics**, BGE of the Aachen Chamber of Skilled Crafts and Trades, GERMANY, 2017

REMARK: Please send it in PDF format to secretariat.

Expertise / Research Areas (identified by keywords):

- **Power Electronics (Power Converters, Induction Heating)**
- **Power Quality Solutions using Power Electronics (Voltage Sag Compensations, Harmonic Mitigations, Power Factor Corrections)**
- **Power Electronics for Renewable Energy Systems (Photovoltaic)**
- **Motor Drives**
- **Microcontroller Applications in Power Electronics**
- **LabVIEW Applications in Automation and Smart Systems**

Engagement (networks):

- **Reviewer - IJEPES (International Journal of Electrical Power and Energy Systems, Elsevier, NETHERLANDS), Scopus Q1**
- **Reviewer - IET (Electric Power Applications, UK), Scopus Q1**
- **Reviewer - IMEKO (Measurement: Journal of the International Measurement Confederation, Elsevier, NETHERLANDS), Scopus Q1**
- **Reviewer - JPE (Journal of Power Electronics, KOREA), Scopus Q2**
- **Reviewer - ECTI-CIT (ECTI Transactions on Computer and Information Technology, THAILAND), Scopus Q4**
- **Reviewer - MIJET (Mahasarakham International Journal of Engineering Technology)**
- **Reviewer - ICPE (International Conference on Power Electronics)-ECCE Asia, Scopus indexed proceeding**
- **Reviewer - ICEMS (International Conference on Electrical Machines and Systems), Scopus indexed proceeding**
- **Reviewer - ECTI-CON (International Conference on Electrical Engineering/Electronics, Computer, Telecommunications and Information Technology), Scopus indexed proceeding**
- **Reviewer - Rajamangala University of Technology Srivijaya Research Journal**
- **Reviewer - Rajamangala University of Technology Krungthep Research Journal**
- **Special instructor for Pathumwan Institute of Technology, THAILAND (Microcomputer Systems Subject)**
- **Special instructor for Valaya Alongkorn Rajabhat University under the Royal Patronage, THAILAND (Power Electronics and Telecommunication Systems Subjects)**

Engagement (networks) (cont.):

- **Special instructor for LAO-GERMAN Technical College, LAO (Power Electronics, Electrical Machines, and Industrial Electronics Subjects)**
- **Special instructor for Dawei Technological University, MYANMAR (Power Electronics, Motor Drives Subjects)**
- **Academic committee of Her Royal Highness Princess Maha Chakri Sirindhorn (at that time) Education Project to Kingdom of Cambodia (Kampong Chheuteal Institute of Technology and Kampong Speu Institute of Technology)**

Publications:

- **Y. Sillapawicharn** and Y. Kumsuwan, "An Improvement in Synchronously Rotating Reference Frame-Based Voltage Sag Detection under Distorted Grid Voltages," *Journal of Electrical Engineering & Technology*, Vol. 8, No. 6, pp.1283-1295, Nov. 2013. (Scopus Q2)
- **Y. Sillapawicharn** and Y. Kumsuwan, "Voltage sag compensation using two three-phase voltage-fed PWM converters," *Electrical Engineering/Electronics, Computer, Telecommunications and Information Technology (ECTI-CON), 2011 8th International Conference on*, pp.776-779, 17-19 May 2011. (Scopus)
- **Y. Sillapawicharn** and Y. Kumsuwan, "An improvement of synchronously rotating reference frame based voltage sag detection for voltage sag compensation applications under distorted grid voltages," *Power Electronics and Drive Systems (PEDS), 2011 IEEE Ninth International Conference on*, pp.100-103, 5-8 Dec. 2011. (Scopus)
- **Y. Sillapawicharn** and Y. Kumsuwan, "Commutation Process of Thyristor-Based Static Transfer Switch for Voltage Sensitive Load Against Voltage Sags," in *Proceedings of EECN-34*, 30 Nov-2 Dec, pp. 257-260, (in Thai), 2011. (Scopus)
- Y. Kumsuwan, **Y. Sillapawicharn**, Y., "A fast synchronously rotating reference frame-based voltage sag detection under practical grid voltages for voltage sag compensation systems," *Power Electronics, Machines and Drives (PEMD 2012), 6th IET International Conference on*, pp.1,5, 27-29 Mar. 2012. (Scopus)
- Y. Kumsuwan, **Y.Sillapawicharn**, Y., "An application of improved synchronous reference frame-based voltage sag detection in voltage sag compensation system," *Power Electronics and Applications (EPE), 2013 15th European Conference on*, pp.1,8, 2-6 Sept. 2013. (Scopus)
- Y. Sillapawicharn and Y. Kumsuwan, "Dual Low Pass Filter-Based Voltage Sag Detection for Voltage Sag Compensator under Distorted Grid Voltages," *Electrical Engineering Congress (iEECON), 2014 International*, pp. 1-4, 19-21 Mar. 2014. (Scopus)
- **Y. Sillapawicharn**, "A Hybrid Synchronously Rotating Reference Frame-Based Voltage Sag Detection under Distorted Grid Voltages," *Electrical Engineering/Electronics, Computer, Telecommunications and Information Technology (ECTI-CON), 2014 International Conference on*, 14-17 May 2014. (Scopus)
- **Y. Sillapawicharn**, "A Fast Single-Phase Voltage Sag Detection for Voltage Sag Compensation System," *TENCON 2014 - 2014 IEEE Region 10 Conference*, pp., 22-25 Oct. 2014. (Scopus)

Publications (cont.):

- **Y. Sillapawicharn**, “A Fast Voltage Sag Detector Based on Peak Detection,” *Electrical Engineering/Electronics, Computer, Telecommunications and Information Technology (ECTI-CON), 2015 International Conference on*, 24-27 June 2015. (Scopus)
- **Y. Sillapawicharn**, “Improvement of a Fast Single-Phase Voltage Sag Detection Method under Distorted Grid Voltages,” *Electrical Engineering/Electronics, Computer, Telecommunications and Information Technology (ECTI-CON), 2016 International Conference on*, 28 June - 1 July 2016. (Scopus)
- **Y. Sillapawicharn**, “An Isolated Snubberless Single-Switched Boost Converter for High Step-Up Conversion Applications,” *Electrical Engineering/Electronics, Computer, Telecommunications and Information Technology (ECTI-CON), 2016 International Conference on*, 28 June - 1 July 2016. (Scopus)
- Nikorn Saengngam, Unchalee Tonggunnead, **Yutthachai Sillapawicharn**, “An Analysis of the Post-Flooding Resistance of the Ground Electrodes of the 22 KV and the 115 KV Power Distribution Systems in Pathum Thani Province,” *International Journal of Advanced Science and Technology*, 29, pp. 2782 – 2788, 2020. (Scopus Q4)

Award / Research Grants:

- **A Power Factor Corrector Using Sepic Converter**, RMUTT, 2001.
- **A Novel Single-Switched DC-DC Converter**, RMUTT, 2001.
- **An Induction Heater for Metal Hardening**, RMUTT, 2002.
- **A Data Acquisition and Waveform Analysis for Power Electronics Laboratory Subject**, National Research Council of Thailand (NRCT), 2006.
- **A Machine Controller with Power Electronics via Network**, RMUTT, 2007.
- **An Automatic Process Control with Power Electronics**, RMUTT, 2007.
- **A Measurement and Analyzer for Electrical Energy Management**, National Research Council of Thailand (NRCT), 2007.
- **A Multi-purpose Gate Driver**, National Research Council of Thailand (NRCT), 2008.
- **A Mechanical Load Simulator Controller**, RMUTT, 2008.
- **A FPGA-Controlled Multi-purpose Inverter for Laboratory**, National Research Council of Thailand (NRCT), 2009.
- **A Study of Power Quality Solution by using Switched-mode Rectifier**, RMUTT, 2009.
- **An Early Detection and Diagnosis of Faults in Induction Motors**, National Research Council of Thailand (NRCT), 2009.

Award / Research Grants (cont.):

- **A Performance Improvement of Three-phase Vector Control PWM Rectifier**, RMUTT, 2009.
- **Voltage Sag Compensator Using Back-To-Back Converters for Critical Loads**, Energy Policy and Planning Office, Ministry of Energy (EPPO), 2010.
- **D-Q Transformation Based Three-phase Voltage Sag Detection**, National Research Council of Thailand (NRCT), 2012.
- **A Development of Grid-Connected Inverter for Renewable Energy Source**, National Research Council of Thailand (NRCT), 2013.
- **A Fast Voltage Sag Compensator for Distributed Generation System**, National Research Council of Thailand (NRCT), 2015.
- **A Snubberless High Efficiency Boost Converter for apply in Grid Connected Inverter**, RMUTT, 2015.
- **The Prototype of a Regenerative Vector Control Motor Tester for High-Speed Rail**, National Research Council of Thailand (NRCT), 2016.
- **A Novel Voltage Sag Detection for Distributed Generation System with Distorted Grid Voltages**, RMUTT, 2016.
- **A Microcontroller-based Multi-purpose PID Controller for Power Electronics Subject**, RMUTT, 2016.
- **An Analysis of the Post-Flooding Resistance of the Ground Electrodes of the 22 kV and the 115 kV Power Distribution Systems in Pathum Thani Province**, National Research Council of Thailand (NRCT), 2016.
- **A Networking Early Fault Detector for High Speed Rail Traction Motor Using Current Detection Technique**, National Research Council of Thailand (NRCT), 2017
- **A Development of Embedded Control System for Smart Street Light Control**, National Research Council of Thailand (NRCT), 2017.
- **Expert Database and Electrical Training Course for Railway System Maintenance**, National Research Council of Thailand (NRCT), 2021.