

Curriculum Vitae

Name: Assoc. Prof. Dr.-Ing. Boonyang Plangklang

Work Address: Rajamangala University of Technology Thanyaburi
Department of Electrical Engineering
Faculty of Engineering, Klong 6, Thanyaburi
Pathumthani, 12110 Thailand



Home Address: 261/119 Moo. 4, Rangsit, Thanyaburi,
Phatumthani 12110 Thailand

Birthdate : 9 August 1973

Email: pboonyang@gmail.com, boonyang.p@en.rmutt.ac.th

Phone: +66(0) 2549 3420

Fax: +66(0) 2549 3388

Mobile: +66(0) 86 899 2996

Citizenship: Thai

Passport Number: AB3203733, Date of Expire 10 Feb 2024

Academic Degrees:

Bachelor Degree	B.Eng. (Electrical Engineering)	Faculty of Engineering, Rajamangala Institute of Technology, Pathumthani, Thailand, 1996
Certificate	Diploma in Instrumentation	Northern Alberta Institute of Technology, NAIT, Edmonton, Alberta, Canada, 1997
Master Degree	MSc. in Electronics System & Engineering Management	University GH Paderborn, Soest Division, Germany, (DAAD), 2001
Doctoral Degree	Doctor of Engineering (Dr.-Ing.)	University of Kassel, Germany 2005

Working Experiences:

1992	Training (Electrician)	Thai Telecommunication Authority of Thailand, Udonthani, Thailand
1994	Training (Electrical Engineer)	Siam Nissan Automobile, Bang-na, Thailand
1995	Training (Electrical Engineer)	Seagate Technology, Samut-prakran, Thailand

1996	A Lecturer	Department of Electrical Engineering, Faculty of Engineering, RIT Thailand
1997	Diploma in Instrumentation	Northern Alberta Institute of Technology (NAIT), Canada
1998	A Lecturer	Department of Electrical Engineering, Faculty of Engineering, RIT Thailand
2001	Electrical Engineer	Behr-Labor Technik, Düsseldorf, Germany
2005 - Now	A Lecturer	Department of Electrical Engineering, Faculty of Engineering, Rajamangala University of Technology Thanyaburi, Klong 6, Thanyaburi, Pathumthani, 12110 Thailand
2011 - 2014	Vice Dean, Senior Lecturer	Faculty of Engineering, Department of Electrical Engineering, Rajamangala University of Technology Thanyaburi, (RMUTT), Klong 6, Thanyaburi, Pathumthani, 12110 Thailand
Now	Assistant to the President	Rajamangala University of Technology Thanyaburi, (RMUTT), Klong 6, Thanyaburi, Pathumthani, 12110 Thailand
	Director	Renewable Energy System Research Unit Department of Electrical Engineering Faculty of Engineering Rajamangala University of Technology Thanyaburi, Pathumthani, Thailand 12110
	Director	Office of Graduate Studies, Rajamangala University of Technology Thanyaburi, (RMUTT), Klong 6, Thanyaburi, Pathumthani, 12110 Thailand
	Assoc. Prof.	Department of Electrical Engineering, Faculty of Engineering, Rajamangala University of Technology Thanyaburi, (RMUTT), Klong 6, Thanyaburi, Pathumthani, 12110 Thailand

Research Fields:

- Renewable Energy, Solar Energy, PV-Hybrid System
- Electrical Power System
- High Voltage Engineering
- Microcontroller Systems

Teaching Experience:

- Fundamental of Electrical Engineering
- Introduction to Microcontroller
- Electrical Power System
- Energy Technology

Refereed Publications:

1. Referred Journals

- Boonyang Plangklang et al, System Performance of a three-phase PV grid connected system installed in Thailand: Data monitored analysis, *Renewable Energy* 34 (2009) pp. 384-389
- Boonyang Plangklang et al, A new concept of white light generation using a nano-waveguide for the solar radiation collection..., *Opt. Int. J. Light Electron. Opt.* (2009), doi:10.1016/j.ijleo.2009.04.020
- Boonyang Plangklang et al, Analysis and control of UPFC for voltage compensation using ATP/EMTP, *Asian Journal on Energy and Environment*, 2009, 10(04), 241-249
- Boonyang Plangklang et al, Development of a new program for design and analysis of PV Hybrid System for target area in Thailand, *GMSARN International Journal* 4 (2010) 75-82
- Boonyang Plangklang et al, Development of Low-Cost Tesla Transformer for High Performance testing 115 kV Line Post Insulator, *Journal of Engineering, RMUTT*, ISSN 1685-5280, Volume January – June 2010, pp. 69-73
- Boonyang Plangklang et al, Management and Development for Syringe Needle Destroyer, *Quality of Life and Law Journal*, Vol.6 No.2 July – December 2010, ISSN 1686-9443, pp. 177-189
- Boonyang Plangklang et al, Design and Analysis of PV Hybrid System for Isolated Household Electrification, *Journal of Energy and Power Engineering*, ISSN 1934-8975, USA, January 2011, Volume 5, No.1 (Serial No.38)
- Boonyang Plangklang et al, An Optimized PV Monitoring System for the Bus Shelter, Elsevier & Science Direct, *Procedia Engineering* 8 (2011) 62–66
- Boonyang Plangklang et al, Model and Experiment Analysis of 1.2 kW PEMFC Electrification, Elsevier & Science Direct, *Procedia Engineering* 8 (2011) 106–114
- Boonyang Plangklang et al, Analysis of Energy Consumption and Behavior of Television in Resident Houses in Thailand, Elsevier & Science Direct, *Procedia Engineering* 8 (2011) 115-119
- Boonyang Plangklang et al, A Practical Method for Quickly PV Sizing, Elsevier & Science Direct, *Procedia Engineering* 8 (2011) 120-127
- Boonyang Plangklang et al, Design and Construction of a Mobile PV Hybrid System Prototype for Isolated Electrification, Elsevier & Science Direct, *Procedia Engineering* 8 (2011) 138-145
- Boonyang Plangklang et al, Energy Management and Control System for Smart Renewable Energy Remote Power Generation, Elsevier & Science Direct, *Energy Procedia* 9 (2011), 198-206
- Boonyang Plangklang et al, Forecasting Power Output of PV Grid Connected System in Thailand without using Solar Radiation Measurement, Elsevier & Science Direct, *Energy Procedia* 9 (2011) , 230-237
- Boonyang Plangklang, Pronchai Pornharuthai, Mathematical Model and Experiment of Temperature Effect on Discharge of Lead-Acid Battery for PV Systems in Tropical Area , *Energy and Power Engineering*, 2013, 5, 43-49, doi:10.4236/epe.2013.51006 Published Online January 2013 (<http://www.scirp.org/journal/epe>)

- Boonyang Plangklang et al, Implementation and Analysis of Electricity Generation by Thermoelectric, Taylor & Francis Group, Integrated Ferroelectrics: An International Journal, Volume 165, Issue 1, 2015, DOI:10.1080/10584587.2015.1062694
- Boonyang Plangklang et al, A verification analysis of power quality and energy yield of a large scale PV rooftop, Elsevier & Science Direct, Energy Reports 2 (2016) 1–7, doi:10.1016/j.egy.2015.12.002
- N. Thanomsat, B. Plangklang, "Modelling of a Micro Grid PV Rooftop System by PSCAD", Applied Mechanics and Materials, Vol. 839, pp. 34-38, 2016
- Somchai Biansoongnern and Boonyang Plangklang, "OLM Software Data Set for Nonintrusive Load Monitoring (NILM)", Journal of Thai Interdisciplinary Research (JTIR), Volume 12, Number 2 (2017), Pages 14 – 23
- Thanomsat, N.; Plangklang, B.; Ohgaki, H. "Analysis of Ferroresonance Phenomenon in 22 kV Distribution System with a Photovoltaic Source by PSCAD/EMTDC", Energies, 2018, 11 (7), 1742, pp 1-24, IF 2.676. <https://doi.org/10.3390/en11071742>
- Boonyang Plangklang et al, "DC Microgrid Hybrid System Modeling for Small Communities with PV and Diesel Generator", Journal of Innovation and Business Management, Vol. 8, No. 1 (2019), ISSN:2308-7773, pp. 37-45, doi:10.6270/JIBM

2. International Proceedings

- B. Plangklang, An Embedded Interactive Monitoring Website for hybrid system in rural area, Kassel Energy Symposium, 2002 Germany
- B. Plangklang, Decentralized interactive monitoring website for PV-Grid connected system, EU PV Conference, 2004, Paris, France
- B. Plangklang, Promoting PV- grid-connected systems for reducing a peak cooling load demand of air condition systems, The 3rd International Symposium of Eco-Energy and Material Science Engineering, 6-9 April 2005, Lotus Hotel Pang Suan Kaew, Chiangmai, Thailand.
- B. Plangklang, A Low-cost Monitoring System for PV-Diesel Hybrid System, CMD2006, Changwon, April 2-5, 2006, Korea
- B. Plangklang. A Low cost high performance Tesla Transformer for testing 115 kV lone post insulator, POWERCON2006, Chongqing, 22-26 October 2006, China
- Boonyang Plangklang et al, An investigation of PV- grid-connected systems for reducing power demand of an office building in Thailand, Sustainable Energy and Environment SEE2006, 21-23 November 2006, Bangkok, Thailand
- Boonyang Plangklang et al, System Performance of a 3 phase PV Grid Connected System installed in Thailand : Data Monitored Analysis, World Renewable Energy Network International Conference, 4-8 Feb 2007, Australia

- Boonyang Plangklang et al, Design and Implementation of the Grid-Connected PV Monitoring System, IASTED AsiaPES 2007, Phuket, Thailand
- Boonyang Plangklang, PV Hybrid System modeling for rural electrification, 6th Asia Pacific Conference on Sustainable Energy and Environmental Technologies, May 7-11, 2007, Bangkok, Thailand
- Boonyang Plangklang et al, Partial Discharge Measurement for High Voltage Cable Terminators Using Air Compression, ECTI-CON 2007, Mae Fah Luang, Chiang Rai, Thailand
- Boonyang Plangklang et al, The Design of High Voltage Cable Terminators for Partial Discharge and Dielectric Loss Measurement of 24 kV XLPE Cable, ISH 2007, 26-31 August, Ljubljana, Slovenia
- Boonyang Plangklang et al, Energy Consumption Analysis of Residence Houses in Thailand for PV Application, EU PVSEC 2007, 3-7 September 2007, Milan, Italy
- Boonyang Plangklang et al, Micro-Grid System in Thailand : Concept , Prospect and Principle Operation, The 5th Eco-Energy and Materials Science and Engineering Symposium (5th EMSES), 21-24 November 2007, Pattaya, Thailand
- Boonyang Plangklang et al, Analysis of Energy Consumption and Behavior of Television in Resident Houses in Thailand, The 5th Eco-Energy and Materials Science and Engineering Symposium (5th EMSES), 21-24 November 2007, Pattaya, Thailand
- Boonyang Plangklang et al, Voltage Flicker Mitigation In Wind Farm By Using DSTATCOM, The 5th Eco-Energy and Materials Science and Engineering Symposium (5th EMSES), 21-24 November 2007, Pattaya, Thailand
- Boonyang Plangklang et al, A Study Model of AC Solid State Circuit Breaker, The 5th Eco-Energy and Materials Science and Engineering Symposium (5th EMSES), 21-24 November 2007, Pattaya, Thailand
- Boonyang Plangklang et al, Optimal Position of Lp in Tesla Transformer, The 5th Eco-Energy and Materials Science and Engineering Symposium (5th EMSES), 21-24 November 2007, Pattaya, Thailand
- Boonyang Plangklang et al, Control and Management of Power Use in RMUTT Campus for Reducing the Energy Costs, The 5th Eco-Energy and Materials Science and Engineering Symposium (5th EMSES), 21-24 November 2007, Pattaya, Thailand
- Boonyang Plangklang et al, Study of Electric Field Effect on Photovoltaic (PV) by Lightning Impulse and Its Protection, The 5th Eco-Energy and Materials Science and Engineering Symposium (5th EMSES), 21-24 November 2007, Pattaya, Thailand
- Boonyang Plangklang et al, A Sustainable PV-Hybrid System for an Isolated House in Thailand: Case Study RMUTT Energy House, Status and Report, The 5th Eco-Energy and Materials Science and Engineering Symposium (5th EMSES), 21-24 November 2007, Pattaya, Thailand
- Boonyang Plangklang et al, Energy Saving Technique for Street Lighting Load, Status and Report, The 5th Eco-Energy and Materials Science and Engineering Symposium (5th EMSES), 21-24 November 2007, Pattaya, Thailand

- C. Jordaan, Boonyang Plangklang, A Mobile PV-Wind-Hybrid System Electrification in Germany : Status and report, The Greater Mekong Subregion Academic and Research Network (GMSARN2007), December 12-14, 2007, Ambassador City Jomtien Hotel, Pattaya, Thailand
- Boonyang Plangklang et al, A Practical Method for Quickly PV sizing, The 6th Eco-Energy and Materials Science and Engineering Symposium (6th EMSES), 25-26 May 2008, Kyoto University, Japan
- Boonyang Plangklang et al, Performance and Characteristic of suitable PV Battery for sustainable PV system, The 6th Eco-Energy and Materials Science and Engineering Symposium (6th EMSES), 25-26 May 2008, Kyoto University, Japan
- Boonyang Plangklang et al, Analysis of High voltage Electric field Stress in LP and LS coils of Tesla Transformer for studying the efficiency design, The International Conference on Electrical Engineering 2008 (ICEE 2008), 6-10 July, Okinawa, Japan
- Boonyang Plangklang et al, Design and Analysis of PV Hybrid System for Isolated Household Electrification, EU PVSEC 2008, 1-5 September 2008, Valencia, Spain
- Boonyang Plangklang, System Performance of a PV-Hybrid System for an isolated household: RMUTT Energy House Thailand, The Greater Mekong Subregion Academic and Research Network (GMSARN2008), 12-14 November 2008, Kunming, China
- Boonyang Plangklang et al, CONTROL STRATEGIES FOR PV HYBRID POWER SUPPLY, EU PVSEC 2009, 21-25 September 2009, in Hamburg, Germany
- Boonyang Plangklang et al, Principles of designing a Mobile PV-Wind-Battery-Diesel Hybrid System Prototype for isolated electrification, The 7th Eco-Energy and Materials Science and Engineering Symposium (7th EMSES), Chiang Mai, Thailand, 19-22 November 2009
- Boonyang Plangklang et al Development of a new Program for Design and Analysis of PV Hybrid System for Target Area in Thailand, The 7th Eco-Energy and Materials Science and Engineering Symposium (7th EMSES), Chiang Mai, Thailand, 19-22 November 2009
- Boonyang Plangklang et al, ASSESSMENT OF PV SYSTEM FOR DECENTRALIZED RURAL ELECTRIFICATION, 21-25 September 2009, in Hamburg, Germany
- Boonyang Plangklang et al, A New Interactive Software for the Design and Analysis of PV Hybrid System for Target Area in Thailand, The Greater Mekong Subregion Academic and Research Network (GMSARN2009), 25-27 November 2009, Ha Long City, Vietnam
- Boonyang Plangklang et al, Model and Experiment for study and analysis of lightning Impulse on Photovoltaic, The 2010 International Conference on Power System Technology (POWERCON2010) , Hangzhou, China, October 24-28, 2010
- Boonyang Plangklang et al, Forecasting power output of PV grid connected system in Thailand without using solar radiation measurement, The 9th Eco-Energy and Materials Science and Engineering Symposium (9th EMSES), Chiang Rai, Thailand, 25-28 May 2011

- Boonyang Plangklang et al, Study of Generator Reaction on Permanent Magnet Synchronous Motor for Energy Regenerative Applications, The 10th Eco-Energy and Materials Science and Engineering Symposium (10th EMSES), Ubon Ratchathani, Thailand, 5-8 December 2012
- Boonyang Plangklang et al, Study of Energy Saving from Elevator Energy Regenerative Unit (EERU) Case Study: RMUTT, Thailand, The 10th Eco-Energy and Materials Science and Engineering Symposium (10th EMSES), Ubon Ratchathani, Thailand, 5-8 December 2012
- Boonyang Plangklang et al, Design of Real Time Management Unit for Power Battery in PV-Hybrid Power Supplies by Application of Coulomb Counting Method, The 2014 International Electrical Engineering Congress (iEECON2014), Pattaya, Thailand, 19-21 March 2014
- Boonyang Plangklang et al, Solar Radiation Impact on Grid Power Quality for PV Grid-connected using PSCAD, The 2016 International Electrical Engineering Congress (iEECON2016), Duangtawan Hotel, Chiang Mai, March 2-4, 2016
- Boonyang Plangklang et al, Ferroresonance Phenomenon in PV System at LV side of Three phase Power Transformer Using of PSCAD Simulation, 2016 13th International Conference on Electrical Engineering/Electronics, Computer, Telecommunications and Information Technology (ECTI-CON2016), Chiang Mai, Thailand, 28-30 June 2016
- Boonyang Plangklang et al, Analysis of a direct PV application for LED bulbs in daytime
- without DC to AC Converter and Battery, The 2017 International Electrical Engineering Congress (iEECON2017), Pattaya, Thailand, 8-10 March 2017
- Boonyang Plangklang et al, Electricity Bill Forecasting Application by Home Energy Monitoring System, The 2017 International Electrical Engineering Congress (iEECON2017), Pattaya, Thailand, 8-10 March 2017
- Boonyang Plangklang et al, Efficiency Improvement of Energy Management for LED Street Lightings, The 2017 International Electrical Engineering Congress (iEECON2017), Pattaya, Thailand, 8-10 March 2017
- Boonyang Plangklang et al, Analysis of Energy Consumption and Behavior of Elevator in a Residential Building, The 2017 International Electrical Engineering Congress (iEECON2017), Pattaya, Thailand, 8-10 March 2017
- Boonyang Plangklang et al, The Maximum Power Point Tracking of Roof Top Photovoltaic Appropriate with Three Phase Grid Inverter Using Predictive Current Control Model, The 14th Eco-Energy and Materials Science and Engineering Symposium (14th EMSES), Kyoto, Japan, April 03-06, 2018

----- **End** -----