Dr. R. ILANGO

Professor

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Educational Qualification:

2016 - Ph.D., in Power systems, Anna University Chennai – Title of the thesis: "A comprehensive study of the impact analysis of FACTS devices on relay protection and its mitigation".

- **2002 M.Tech.**, in High Voltage Engineering ('I' class with Distinction), at SASTRA University, Thanjour, Tamil Nadu.
- **1996- B.E.,** in Electrical and Electronics Engineering ('I' class), at REC Trichy (Presently NIT Trichy), Bharathidasan University Thiruchirappalli.

Area of interest:

Power Systems, High Voltage Engineering, Power System Protection, FACTS, Renewable Energy, Power Quality & EV Drives.

Experience:

Total Teaching Experience in Engineering College: **19 years.**Total Teaching Experience in Polytechnic College: **1.9 years**

Total Experience in Industry: **8 years.** Apprentice Trainee: **1year (TNEB)**

List of Publications:

Publication in International Journal: (25)

1. R.Saranraj, **Dr.R.Ilango**, P.Parthasarathy, P.Vigneshwaran (2021) 'Battery Powered by the System using Multilevel Inverter at 5 level to Maximize the Efficiency', **Turkish Journal of Computer and Mathematical Education**, e-ISSN no. 1309-4653, vol. :12,Issue, 7, pp.1880-1885. (**Scopus**)

- 2. Dr.R.Ilango, V. Ashokkumar, C.B. Venkatramanan (2020) 'Power Quality Impacts and its Mitigation in Grid-tied Photo Voltaic Power Generation' Bioscience Biotechnology Research Communications (BBRC), ISSN no. 0974-6455,Vol:13, Issue 2,pp. 85-89,(Web of Science)
- 3. Dr. R.Ilango, T.Santhoshkumar, S.Sathieshkumar (2020) 'Load Flow & Transient Stability Analysis for IEEE 5 Bus System Using UPFC' International Journal of Scientific & Technology Research (IJSTR), ISSN no. 2277-8616, Vol:9, Issue 4, pp.1349-1352 (Scopus)
- **4. Dr. R.Ilango,** Dr.S.Titus, G.Gabriel Santhosh Kumar. (2020) 'High Voltage Dc Generator For Insulation Testing Using Step Up Converter And Voltage Multiplier' **International Journal of Scientific & Technology Research (IJSTR),** ISSN: 2277-8616, Vol :9 Issue 4,pp.1270-1274. (Scopus)
- 5. Dr.S.Titus, G.Gabriel Santhosh Kumar, Dr. R.Ilango (2020) 'Modeling and Simulation of Bidirectional Converter for Solar Powered Refrigeration System' International Journal of Scientific & Technology Research (IJSTR), ISSN: 2277-8616, Vol :9 Issue 3,pp. 3653-3658.(Scopus)
- 6. Sangeetha E.P, R.Chandra Prabha, Dr.R.Ilango (2019) Design & Analysis of Efficient Battery Charging / Discharging for Electrical Vehicle', International Journal of Innovative Research in Electrical, Electronics, Instrumentation and Control Engineering (IJIREEICE), ISSN no.2321-0181. Vol:7, Issue 6, pp.5-9. (Google scholar).
- 7. Ilango.R, Ashokkumar.V, Gabriel Santhosh Kumar.G (2019) FPGA and Fuzzy based Speed Control Technique for Three Phase Induction Motor', International Journal of Engineering Research & Technology (IJERT), ISSN no.2278-0181. Vol:8, Issue 6, pp. 299-304. (Google scholar).
- 8. Ilango.R, Ashokkumar.V, Gabriel Santhosh Kumar.G (2019) 'Analysis of PV Powered BLDC Drive using SMC Control Technique', International Journal of Research and Innovation in Applied Science (IJRIAS), ISSN no.2454-6194. Vol:4, Issue 6,. pp. 30-35. (Google scholar).
- **9.** Gabriel Santhosh Kumar.G, Keerthiga. P.C, **Ilango.R**, Pandeeswari. C (**2019**)' Design and Analysis of Series Connected H-Bridge Multilevel DC/AC Converter for Enhancing Attributes of Power', **International Journal of Engineering Research & Technology** (**IJERT**) ISSN no.2278-0181. Vol:8, Issue:6, pp.550-554, (**Google scholar**).

- **10.** Sathish.R, **Ilango. R** (**2019**) 'Induction Motor Control using SVPWM Quasi Z Source Current fed Inverter', **International Journal of Innovative Research in Electrical, Electronics, Instrumentation and Control Engineering (IJREEICE)**, ISSN no.2321-2004. Vol:7, Issue 5, pp.81-84. (**Google scholar**).
- 11. Ilango. R (2017) 'Fault Location Algorithm using impedance compensation method (ICM) for FACTS Devices compensated transmission lines', Journal of Electrical Engineering, ISSN no. 1582-4594, vol.17, Issue 03, pp. 311-317 (Sl. No. 2159, Annexure-I, version 2016.2) (Google scholar).
- 12. Purushothaman. G, Ilango. R, Karthika. N, Ajith. A (2017) 'Innovative Method to Secure ECG Signal using ECC in Wireless Communication', International Journal for Modern Trends in Science and Technology, ISSN no.2455-3778, vol.03, Issue 05, pp. 99-103. http://www.ijmst.com
- 13. Ilango. R, Sree Renga Raja. T (2016) 'Fault Location Method for STATCOM Connected Transmission Lines using CCM', Circuits and Systems, ISSN no. 2153-1293, vol. 7, no 10, pp. 3131-3141. (Sl. No. 2159, updated list of journals, version 2016.2) (Google scholar). https://doi.org/10.4236/cs.2016.710266
- **14. Ilango. R**, Venkatesa Vimal Chand. M.R.V (**2015**) 'Selective Harmonic Elimination-PWM Technique in a Single Phase Hybrid Cascaded Multilevel Inverter using Bee Algorithm', **International Journal of Innovative Research in Engineering Science and Technology**, ISSN no. 2320 981X, vol. 3, Issue 04, pp. 13-18.
- 15. Ilango. R, Sree Renga Raja. T (2015) 'Impact Analysis of DSSC on the Performance of Distance Relay Protection under Fault Conditions', Indian Journal of Science and Technology, ISSN no. 0974-5645,vol.8, no.33, pp.1-6. (Annexure-II), Sl.No.8167, version 2014.2). (Google scholar, Web of Science & Scopes Indexed) DOI: 10.17485/ijst/2015/v8i33/55401
- **16.** Lilly Renuka. R, **Ilango. R**, Muruganandam. B (**2015**) 'Power Quality Enhancement Using VSI Based STATCOM for SEIG Feeding Non Linear Loads', **International Journal of Engineering and Applied Sciences**, ISSN no. 2394-3661, vol.2, no. 5 pp. 45-50.(**Google scholar**)
- 17. Navaneethan. R, Ilango. R, Prabaharan.V (2015) 'Design and control for Bidirectional AC-DC Converters for Plug-in Hybrid Electric Vehicle', International Journal of Engineering and Applied Sciences, ISSN no. 2394-3661, vol. 2, no. 5, pp. 5-9.
- **18.** Jayashankar.C, **Ilango.R**, Prabaharan.V (**2015**) 'Single Phase Dynamic Voltage Restorer for Abnormal Conditions', **International Journal of Engineering and Applied Sciences**, ISSN no. 2394-3661, vol.2, no.4, pp. 97-101. (**Google scholar**)

- **19.** Silvin Daniel, **Ilango.R**, Prabaharan.V (**2015**) 'Power Quality Improvement for Non Linear Load by Using DSTATCOM', **International Journal of Engineering and Applied Sciences**, ISSN no. 2394-3661, vol.2, no.4, pp.102-106. (**Google scholar**)
- **20. Ilango. R**, Sree Renga Raja. T (**2015**) 'Impact Analysis of D-STATCOM on the Performance of Distribution Relay Protection', **International Journal of Applied Engineering Research**, ISSN no.0973-4562, vol. 10, no. 5, pp. 12939-12950. (**Annexure-II**, **Sl. No.8565**, version **2014.2**).
- 21. Ilango. R, Sree Renga Raja. T (2015) 'Impact Analysis of midpoint Connected STATCOM on Distance Relay Performance', TELKOMNIKA Indonesian Journal of Electrical Engineering, ISSN no. 2302-4046, vol. 13, no 2, pp. 257-263. (Annexure-II, Sl. No.19378, version 2014.2), (Googlescholar). DOI: http://dx.doi.org/10.11591/telkomnika.v13i2.6987
- 22. Venkatesa Vimal Chand. M.R.V, Ilango. R (2014) 'DTC VSI Fed Induction Motor Drive By Using Near State PWM Method With Reduced Common Mode Voltage', International Journal of Innovative Research in Engineering Science and Technology, ISSN no. 2320 981X, vol. 2 no. 01, pp. 73-78.
- **23. Ilango. R,** Sree Renga Raja.T (**2014**) 'Accurate Distance Protection Scheme for Transmission Line Fault Location Considering the Impact of Shunt Connected STATCOM', **Middle-East Journal of Scientific Research**, ISSN no. 1990-9233, vol. 21, no 11, pp. 2123-2129. (**Annexure -II, Sl. No. 14378, version 2014.2**), (**Google scholar**). http://dx.doi.org/10.5829/idosi.mejsr.2014.21.11.21806.
- **24.** Karthik. S, Jegan. C, **Ilango. R** (**2014**) 'Design of Single Input Multiple Output DC-DC Converter' **International Journal of Engineering and Management Research**, ISSN No. 2250-0758, vol. 4, no. 02. pp. 22-28. (**Google scholar**)
- **25.** Angayarkanni. S, Senthilnathan. A, **Ilango. R** (**2013**) 'SVPWM Controlled Permanent Magnet Synchronous Motor', **International Journal of Innovative Technology and Research**, vol.1, no. 1, pp. 042-045. (**Google scholar**)

Publication in International Conferences: (14)

- **1. Ilango.R,** "AI based ATM security System using IOT", 'Proceedings of the **Third International Conference on Power Initiatives (ICPI-2021)** ', during 29th & 30th March 2021 at K. Ramakrishnan College of Engineering, Trichy.
- **2. Ilango.R**, "Predefined Masala Unit", 'Proceedings of the **Third International Conference on Power Initiatives (ICPI-2021)'**, during 29th & 30th March 2021 at K. Ramakrishnan College of Engineering, Trichy.

- **3.** Ilango.R, "Power Quality Analysis in Grid Connected PV System", 'Proceedings of the Third International Conference on Innovations in Engineering, Technology and Science (ICIETS2019)', during 21st & 22nd March 2019 at K. Ramakrishnan College of Engineering, Trichy.
- **4. Ilango.R,** "Induction Motor Control using SVPWM Quasi Z Source Current Fed Inverter", 'Proceedings of **Third International Conference on Innovations in Engineering, Technology and Science (ICIETS2019)',** during 21st & 22nd March 2019 at K. Ramakrishnan College of Engineering, Trichy.
- **5.** Ilango.R, "Generating Electricity from Humans in Fitness Centre", 'Proceedings of the Third International Conference on Innovations in Engineering, Technology and Science (ICIETS2019)', during 21st & 22nd March 2019 at K. Ramakrishnan College of Engineering, Trichy.
- **6.** Ilango.R, 'Design and Analysis of PV Powered PMSM Drive using SMC Control Technique', **Presented in the International Conference on Innovative Engineering Initiatives'(ICIEI-2019)**, held during 13th &14th March 2019, at SRM TRP Engineering College, Tiruchirappalli, TamiNadu.
- 7. Ilango.R, 'A Novel Grid Support Topology Using Nine Switch Converter for Off Shore Connected Wind Forms', 'Presented in the International Conference on Newer Engineering Concepts & Technology-2K18', (ICONNECT2K18), organized by K. Ramakrishnan College of Technology, Trichy, during March 23th and 24th, 2018.
- **8.** Ilango.R, 'A Novel Topology Using CUK Converter in PV Micro Converter with Transformer Less Injection', 'Presented in the International Conference on Newer Engineering Concepts & Technology-2K18', (ICONNECT2K18), organized by K. Ramakrishnan College of Technology, Trichy, during March 23th and 24th, 2018.
- **9.** Ilango.R, 'Power Quality Improvement in Low Voltage Distribution System using STATCOM based voltage regulator', 'Presented in the International Conference on Modern trends in Engineering &Research' (ICMTER-2018), organized by Vins Christian Women's College of Engineering, Nagercoil during March 15th and 16th, 2018.
- **10. Ilango.R,** 'Wind Energy Conversion System using Solid State Transformer,' 'Presented in the International Conference on Modern trends in Engineering &Research' (ICMTER-2018), organized by Vins Christian Women's College of Engineering, Nagercoil during March 15th and 16th, 2018.

- 11. Ilango.R, 'Adaptive Distance Protection for STATCOM Compensated line using Impedance Compensation', 'Presented in the AICTE Sponsored 3rd International Conference on Innovations in Power Electronics Control and Systems' (IPECS-2017), held at M.A.M. College of Engineering, Tiruchirappalli, during 18th to 19th Dec 2017.
- **12. Ilango.R,** 'Innovative Method to Secure ECG Signal using ECC in Wireless Communication', **Presented in the International Conference on Engineering, Energy Environment (ICEEE-2017**) held during 31st March to 02nd April 2017, at TRP Engineering College (SRM Group) Trichy, Tamil Nadu.
- **13. Ilango. R,** Sree Renga Raja. T 'Fault Location Method for STATCOM Connected Transmission Lines using CCM', **Proceedings of International Conference on Emerging Trends in Engineering and Management Research "ICETEMR-1016",** April 23rd 2016, pp.23. M.E.T.College of Engineering, Kanyakumari, Tamil Nadu.
- **14. Ilango. R** 'Modeling and Simulation of DVR Based on Dual Voltage Source Converter by a Super Capacitor Bank' **Proceedings of International Conference on science, Engineering and Management "ICSEM'13"**, 17th and 18th May 2013. pp. 582-586. Srinivasan Engineering College, Perambalur, Tamil Nadu.

Publication in National Conferences: (09)

- 1. Ilango.R 'Multi Input SEPIC Converter based Grid connected Hybrid Energy System', Presented in the National Conference on 'Advanced Communication, Computing and Power Systems', (NCACCPS2K18), held on 23rd March 2018, at St.Joseph's College of Engineering and Technology, Thanjavur., Tamil Nadu.
- 2. Ilango.R 'Design and Implementation of Hybrid Energy Using Converter Topology', 'Proceedings of Third National Conference on Advancement in Electrical Power, Signal Processing and Communication Network Systems' "ESCON-2014", 7th and 8th March 2014, Selvam College of Technology, Namakkal, Tamil Nadu.
- 3. Ilango.R 'Simulation of FPGA Based Speed Control of 3 phase Induction Motor using Fuzzy Control', 'Proceedings of Third National Conference on Advancement in Electrical Power, Signal Processing and Communication Network Systems' "ESCON-2014", 7th and 8th March 2014, Selvam College of Technology, Namakkal, Tamil Nadu.
- **4. Ilango.R** 'Design and Implementation of DVR Based On Dual Voltage Source Converter by a Super Capacitor Bank' '**Proceedings of National Conference on Intellectual Perspective on Intelligent Control' "IPIC'13"**, 27th March 2013. Annai Mathammal Sheela Engineering College, Erumapatty, Tamil Nadu.

- 5. Ilango.R 'Power Quality Improvement in Distribution System using FLC Based D-STATCOM' 'Proceedings of Second National Conference on Advancement in Electrical Power, Signal Processing and Communication Network Systems' "ESCON-2013", 15th and 16th March 2013, Selvam College of Technology, Namakkal, Tamil Nadu.
- 6. Ilango.R 'A new Voltage gain Improved method in a Forward- Fly back Converter using a soft-Switching Technique' 'Proceedings of Second National Conference on Advancement in Electrical Power, Signal Processing and Communication Network Systems' "ESCON-2013", 15th and 16th March 2013, Selvam College of Technology, Namakkal, Tamil Nadu.
- 7. Ilango.R 'Impact of FACTS Devices on Distance Relay', 'Proceedings of the National Conference on Electrical Emerging Technology "NCEET09", 28th March 2009, M.A.M. College of Engineering, Siruganur, Trichy, Tamil Nadu.
- **8.** Ilango.R 'Nonlinear compensation for voltage source Inverter', 'Proceedings of the Second National Conference on Cutting Edge Technologies in Power Conversion and Industrial Drives, "PCID2006", 24-25th March 2006, Bannari Amman Institute of Technology, Sathyamangalam, Tamil Nadu.
- **9. Ilango.R** 'Current Controlled techniques for PWM Converters', 'Proceedings of the **Second National Conference Emerging Technologies in Electrical Systems' "ETES"** organized by, Noorul Islam College of Engineering, Kumaracovil, Thuckalay, Tamil Nadu, on 10th & 11th March 2006.

Membership in Professional Bodies:

- 1. Life member in Indian Society for Technical Education (ISTE), India -(LM 49777)
- 2. Senior Member in Institute of Research Engineers and Doctors (IRED), (SNM 10100058482)
- 3. Member in International Association of Engineers (IAENG) (204688)
- 4. Member in Institution of Engineers, India (IEI), Kolkata (M-1628121)