

# K.S.R. COLLEGE OF ENGINEERING, TIRUCHENGODE – 637 215.

## DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

### FACULTY PROFILE

- 01. Name** : Dr.M.Ramasamy
- 02. Designation** : Associate Professor
- 03. Date of Birth** : 11.05.1984
- 04. Date of Joining** : 03.12.2008
- 05. Professional Membership** : ISTE, IEEE
- 06. Supervisor Recognition No.** : 2430182 & 01.08.2014  
& Date



#### 07. Qualification:

S.No.	Qualification	Specialization	Name of the Institution	Affiliated to	Year of Completion	Class & % of Marks
1.	DEEE	Electrical and Electronics Engineering	Aarthi Polytechnic	DOTe	2002	First Class with Honor 84%
2.	B.E.	Electrical and Electronics Engineering	Mahendra Engineering College	Anna University, Chennai	2005	First Class 71%
3.	M.E.	Power Electronics and Drives	K.S.Rangasamy College of Technology	Anna University, Chennai	2007	First Class with Distinction 77%
4.	Ph.D	Electrical Engineering	Anna University, Chennai	Anna University, Chennai	2013	-

- 08. Area of Interest** : Power Electronics and Drives & Power Quality

#### 09. Experience, Promotion & Designation Details (Chronological):

S.No.	Name of the Organization	Designation	Period	
			From	To
1.	K.S.R. College of Engineering	Associate Professor	01.07.2015	Till Date
2.	K.S.R. College of Engineering	Assistant Professor	01.07.2010	31.06.2015
3.	K.S.R. College of Engineering	Lecturer	03.12.2008	30.06.2010
4.	Sengunthar Engineering College	Lecturer	08.01.2007	29.11.2008

## **LIST OF PUBLICATIONS**

### **National Conferences**

1. Nithiya, K. and Ramasamy, M. "Three Port DC-DC Boost Converter for Hybrid PV/Wind/Battery Power System" A National Conference on Technological Innovations in Electrical Engineering, K.S.R. College of Engineering, Thiruchengode, pp. 161-171, March 2014.
2. Vidhukrishnan, U. and Ramasamy, M. "An Enhancement Method for the compensation of voltage sag/swell and Harmonics by Dynamic Voltage Restorer", National Conference on Cutting Edge Technologies in Power Conversion and Industrial Drives", Bannari Amman Institute of Technology, Sathyamangalam, Feb 2012.
3. Sharmila, S. and Ramasamy, M. "A Combined intercept and star line tracking algorithms for trabecular bone fracture analysis", Eighth National Conference on RTICT 2015, Bannari Amman Institute of Technology, Sathyamangalam, 19-20 March 2015.
4. Suresh, S. and Ramasamy, M. "Novel Design of Soft Switching for Multi-Level Inverters", National Conference on Advancement in Electrical Sciences, SNS College of Technology, Coimbatore, pp.43, Feb, 2011.
5. Ramasamy, M. and Thangavel, S. "Performance Evaluation of PI and Intelligent Controllers for Induction Motors" Mahendra Engineering College, 9<sup>th</sup> March 2007.
6. Ramasamy, M. and Thangavel, S. "Analysis of PI and Intelligent Controller", A.C. College of Engineering and Technology, Karaikudi, 14<sup>th</sup> March 2007.
7. Ramasamy, M. and Sethu, V. "Automatic Accident Prevention and Theft Identification using Micro controller", National Conference on Innovations and Advancements in Electrical Sciences (NCIAES 18), at KPR Institute of Engineering & Technology, Coimbatore, 23<sup>rd</sup> March, 2018.

### **International Conferences**

1. Ramasamy, M. and Thangavel, S. "Photovoltaic based Dynamic Voltage Restorer with Energy Conservation Capability Using Fuzzy Logic Controller", International Conference on Smart Grid and Clean Energy Technology, UESTC, China energy Association, Chengdu, China, 27-30 September 2011.
2. Ramasamy, M. and Thangavel, S. "Photovoltaic based Dynamic Voltage Restorer with Outage Handling Capability using PI controller", International Conference on Emerging Trends in Science, Engineering and Technology, J.J. College of Engineering and Technology, Tiruchy, 13<sup>th</sup> & 14<sup>th</sup> Dec 2012.
3. Nithya, K. and Ramasamy, M. "Modeling of Multi-input DC-DC converter for Renewable Energy Sources", International Conference on Trends in Technology for Convergence (TITCON), AVS Engineering College, Salem, 08<sup>th</sup> and 09<sup>th</sup> April 2014.
4. Vidhukrishnan, U. and Ramasamy, M. "An Enhancement Method for the compensation of voltage sag/swell and Harmonics by Dynamic Voltage Restorer", International Conference on Emerging Trends in Computer and Communication Technologies, Maria College of Engineering and Technology, Kanyakumari, pp. 186, Feb 2012.

5. Piramanathan, P. and Ramasamy, M. "Implementation and Control of DVR for Power Quality Mitigation using Fuzzy Logic", International Conference on Electrical and Electronics Engineering and Technology, Muthayammal Engineering College, Rasipuram, 25<sup>th</sup> & 26<sup>th</sup> April 2013.
6. Sharmila, S. and Ramasamy, M. "A Combined intercept and star line tracking algorithms for trabecular bone fracture analysis", International Conference on Innovations in information Embedded and Communication Systems, Karpagam College of Engineering, Coimbatore, 19<sup>th</sup> & 20<sup>th</sup> March 2015.
7. Nithya, K. and Ramasamy, M. "Modeling of Multi-input DC-DC converter for Renewable Energy Sources", International Conference on Engineering Technology and science, Muthayammal Engineering College, Rasipuram, 10<sup>th</sup> & 11<sup>th</sup> Feb 2014.
8. Mithhra, E. Ravi, V. and Ramasamy, M. "PV interfaced Three-Phase Multilevel Inverter Fed Dynamic Voltage Restorer", International Conference on Contemporary Topics in Power Engineering and Aiding Technologies, Pondicherry Engineering College, Puducherry, 24<sup>th</sup> – 25<sup>th</sup>, February 2017.
9. Dhanushya, A. Sankarganesh, R. and Ramasamy, M. "PV interfaced Three-Phase Two-Leg Split Source Inverter based Series Active Power Filter for Power Quality Improvement", International Conference on Contemporary Topics in Power Engineering and Aiding Technologies, Pondicherry Engineering College, Puducherry, 24<sup>th</sup> – 25<sup>th</sup>, February 2017.
10. Ramasamy, M. "IoT Based Fully Automated Road Blocker and Speed Bumps for smart Cities", International Conference on Information Sciences and Renewable Energy Sources, Selvam College of Technology, Namakkal, 07<sup>th</sup> & 08<sup>th</sup> March 2019.
11. Ramasamy, M. "Waste Heat Recovery Plant for Heaters in Home and Boilers using Thermoelectric Generator", International Conference on Innovative Research in Power and Energy Engineering, Arasu Engineering College, Kumbakonam, 26<sup>th</sup> March 2021.

#### **International Journals**

1. Ramasamy, M. and Thangavel, S. "Photovoltaic based Dynamic Voltage Restorer with Outage Handling Capability using PI controller", Energy Procedia(Elsevier), No. 12, pp. 560-569, 2011. DOI: 10.1016/j.egypro.2011.10.076, RG Journal Impact: 1.07.
2. Ramasamy, M. and Thangavel, S. "Photovoltaic based Dynamic Voltage Restorer with Energy Conservation Capability using Fuzzy Logic Controller", IEEE Conference Publications, pp. 485-492, 2012. DOI: 10.1109/INCOSET.2012.6513953
3. Ramasamy, M. and Thangavel, S. "Novel High Step-Up DC-DC Converter with Coupled-Inductor Based Dynamic Voltage Restorer", International Journal of Power Systems and Energy Management, Vol.1, No.1, pp.17-22, 2012.
4. Vidhukrishnan, U. and Ramasamy, M. "An Enhancement Method for the compensation of voltage sag/swell and Harmonics by Dynamic Voltage Restorer", International Journal of Modern Engineering Research, Vol.2, Issue 2, pp. 475-478, March 2012.

5. Vidhukrishnan, U. and Ramasamy, M. "An mitigation method for Total Harmonic Distortion and Power Quality Improvement with DVR using Neural Networks Techniques", International Journal of Advanced Research in Technology, Vol. 2, Issue 1, pp. 95-99, 2012.
6. Ramasamy, M. and Thangavel, S. "Photovoltaic based dynamic voltage restorer with power saver capability using PI controller", International Journal of Electrical Power and Energy Systems (Elsevier), Vol.36, No.1, pp.51-59, 2012. Impact Factor: 3.610DOI: 10.1016/j.ijepes.2011.10.023
7. Ramasamy, M. and Thangavel, S. "Experimental verification of PV based Dynamic Voltage Restorer (PV-DVR) with significant energy conservation", International Journal of Electrical Power and Energy Systems (Elsevier), Vol.49, pp.296-307, 2013.Impact Factor: 3.610  
DOI: <http://dx.doi.org/10.1016/j.ijepes.2013.01.018>
8. Ramasamy, M. and Thangavel, S. "Optimal Utilization of PV Solar System as DVR (PV-DVR) for a Residence or Small Industry", Journal of Applied Science and Engineering, Vol.16, No.3, pp. 295-304, September 2013. SNIP: 0.579  
DOI: 10.6180/jase.2013.16.3.09
9. Ramasamy, M. and Thangavel, S. "Optimal Utilization of PV Solar System as DVR (PV-DVR) for voltage regulation and Energy Conservation", Australian Journal of Electrical and Electronics Engineering (Taylor & Francis), Vol.10, No.3, pp. 371-382, 2013. SJR: 0.13  
DOI: <http://dx.doi.org/10.7158/E12-086.2013.10.3>
10. Ramasamy, M. and Thangavel, S. "Optimal Utilization of P&O MPPT Based PV System Operated Three-Phase Three-Leg DVR", International Journal of Power and Energy Systems (Acta Press), Vol.33, No. 3, pp. 112-118, 2013. SJR: 0.14  
DOI: <http://dx.doi.org/10.7158/E12-086.2013.10.3>
11. Ramasamy, M. and Thangavel, S. "Integration of Hybrid Wind-Solar Power Conversion System and DVR for Voltage Regulation and Energy Conservation", Australian Journal of Electrical and Electronics Engineering (Taylor & Francis), Vol.10, No.4, 2013. SJR: 0.13  
DOI: <http://dx.doi.org/10.7158/E12-125.2013.10.4>
12. Piramanathan, P. and Ramasamy, M. "PV based Dynamic Voltage Restorer with Minimal Energy Control using Fuzzy", International Journal of Engineering Sciences and Research Technology, 2(26), pp. 1636-1641, June 2013.
13. Piramanathan, P. and Ramasamy, M. "A New Minimal Energy Injection Control Strategy for Dynamic Voltage Restorer using Fuzzy Logic Controller", International Journal of Advanced Research in Electrical, Electronics and Instrumentation Engineering, Vol. 2, Issue 6, pp. 2669-2676, June 2013.
14. Ramasamy, M. and Thangavel, S. "Optimal Utilization of Hybrid Wind-Solar System as DVR for voltage regulation and Energy Conservation", Journal of Circuits Systems and Computers, Vol. 23, No. 5, pp. 1-20, 2014.Impact Factor: 0.595  
DOI: 10.1142/S0218126614500625

15. Nithya, K. and Ramasamy, M. "Modeling of Multi-input DC-DC converter for Renewable Energy Sources", International Journal of Innovative Research in Science, Engineering and Technology, Volume 3, Special Issue 1, pp. 970-975, Feb 2014.
16. Nithya, K. and Ramasamy, M. "Multi-input DC-DC converter for Renewable Energy Sources", International Journal of Research in Engineering and Technology, Volume 3, Issue 7, pp. 714-719, 2014.
17. Vijayakumar, M. and Ramasamy, M "A Novel Reference Current Generation Method of PV based Three Level NPC Shunt Active Power Filter", U.P.C. Scientific Bulletin, Vol. 77, No. 3, pp. 235-250, 2015. Impact Factor: 0.41
18. Sharmila, S. and Ramasamy, M. "A Combined intercept and star line tracking algorithms for trabecular bone fracture analysis", International Journal of Novel Research in Engineering & Pharmaceutical Science, pp. 32-39, 2015.
19. Vijayakumar, M. and Ramasamy, M. "Performance evaluation of UPQC for interconnecting Photovoltaic systems to the electric grid", Journal of Testing and Evaluation, Vol. 44, No. 4, pp. 1-17, 2016. Impact Factor: 0.721  
DOI: 10.1520/JTE20140474
20. *Bharatiraja Chokkalingam, J.L.Munda, T.K.S Sathayanarayanan, Ramasamy M*, "Modeling, Impedance Design, and Efficiency Analysis of Battery Assists PV tied Quasi-Z source inverter", International Journal of Power Electronics and Drive Systems, Vol. 7, No. 3, 2016. (Annexure II), SJR: 0.22
21. Velumani, R., Vijayakumar, M., and Ramasamy, M., "Tele Alert System for Epileptic Seizure on a Study of EEG Signal Classification by GBE-NLSVM Through ICA Preprocessed and AR Extracted Signal in a BCI System," Vol. 46, No. 2, pp. 469-484, March 2018. Impact Factor : 0.75
22. Ramachandran, S., Ramasamy, M., Sathishkumar, S., Kamalakannan, T., "Efficient Controlled based wind Energy Conversion System using PMSG and ANFIS Adaptive Maximum Power Tracking Control Algorithm", International Journal of advanced research in electrical, electronics and Instrumentation Engineering, Vol. 7, Issue 2, Feb 2018.
23. Ramachandran, S., Ramasamy, M., RadhaKrishnan, K., "Maximum Power DFIC Control Algorithm using Interleaved and ANFIS Converter", International Journal of Advanced Research in Electrical, Electronics and Instrumentation Engineering, Vol. 7, Issue 2, Feb 2018.
24. Ramachandran, S., Ramasamy, M., Dinesh, G., "Wind Turbine System with an Auxiliary Parallel Grid-Side Converter using PMSG Wind Energy", International Journal of Advanced Research in Electrical, Electronics and Instrumentation Engineering, International Journal of Advanced Research in Electrical, Electronics and Instrumentation Engineering, Vol. 7, Issue 2, Feb 2018.
25. Kanagaraj, N., Ramasamy, M., Hegazy Rezk and Manesh, T., "Modified Bi-directional DC-DC Boost Converter Fed Three-Phase Four-Wire PV-DVR", Journal of Testing and Evaluation, Vol. 48, Issue 4, pp. 1-29, 2018. Impact Factor : 0.75
26. SathyaNarayanan, T.K.S. Ramasamy, M., Chokkalingam, S., "Design Analysis and Experimentation of High Step-up, high efficiency isolated SPEIC converter," Journal of Electrical Engineering, Vol. 5, no. 6, pp. 1-6, 2020.

27. Gowrishankar, A and Ramasamy, M. "Experimental Validation of Solar Photovoltaic Based Unified Power Quality Conditioner with Modified Power Angle Control Scheme," Journal of Testing and Evaluation, Vol. 48, Issue 1, pp. 428-451, Feb 2020. <https://doi.org/10.1520/JTE20180928>
28. Hemalatha. R, and Ramasamy, M. "Microprocessor and PI controller based three phase CHBMLI based DSTATCOM for THD mitigation using hybrid control techniques," Microprocessors and Microsystems (Elsevier), Vol. 76, 103093, 2020. <https://doi.org/10.1016/j.micpro.2020.103093>. Impact Factor: 1.61
29. Gowrishankar, A and Ramasamy, M. "SPV-Based UPQC with Modified Power Angle Control Scheme for the Enhancement of Power Quality," Journal of Circuits, Systems, and Computers, Vol. 29, No. 4, 2050064 (41 pages), 2020. DOI: 10.1142/S0218126620500644
30. N. Kumarasabapathy, P.S. Manoharan, and M.Ramasamy, "Experimental validation of solar panel integrated modified three-port active clamp flyback converter fed micro-inverter," Semiconductor Science Technology, vol. 35, pp.105020 (15pp), 2020. <https://doi.org/10.1088/1361-6641/abaa5a>. Impact Factor: 2.654
31. N. Kumarasabapathy, and M.Ramasamy, "Modified isolated power factor correction Cukconverter fed BLDC motor drive with Fuzzy Logic Controller for pumping applications," Journal of the Chinese Institute of Engineers (Taylor & Francis), Vol. 43, No. 6, pp. 553-565, 2020. <https://doi.org/10.1080/02533839.2020.1777204>. Impact Factor: 0.667
32. S. Ramachandran, and M.Ramasamy, Solar Photovoltaic Interfaced Quasi Impedance Source Network Based Static Compensator for Voltage and Frequency Control in the Wind Energy System," J. Electr. Eng. Technol., Vol. 16, pp.1253–1272,2021. <https://doi.org/10.1007/s42835-021-00669-w>. Springer, Impact Factor: 0.736
33. A. SathikBasha and M. Ramasamy, Design of Z-Source Inverter-Based Dynamic Voltage Restorer Circuitry with R-SOGI Control Scheme for Enrichment of Power Quality", Journal of Circuits, Systems, and Computers, Vol. 29, No. 16 (2021) 2150195 (24 pages). DOI: 10.1142/S0218126621501954. Impact Factor: 0.481