

Dr.G.VIJAYAKUMAR M.E., Ph.D.,

Professor,
 Electrical Engineering,
 Sanjivani College of Engineering (Autonomous)
 Kopergaon – 423 603, Maharashtra, India.
 vijayakumargovind@yahoo.com
 +91 9894386889

**A) ACADEMIC BACKGROUND:**

Degree	Specialization	Name of the School / College	% Marks or CGPA	Year of Passing	Part Time / Full Time / Distance Mode
Ph D	Power Quality	Anna University, Chennai	NA	2014	Part Time
Title of Thesis: Photovoltaic system based shunt active filter for power quality improvement and Energy Conservation					
Post - graduate	Power Electronics and Drives	Bannari Amman Institute of Technology, Sathyamangalam	77	2007	Full Time
Title of Thesis: Analysis of shunt active filter for harmonic mitigation					
Under Graduate	Electrical and Electronics Engineering	Periyar University, Mahendra Engineering College, Tiruchengode	74	2003	Full Time
HSC	State board	Gugai Higher Secondary School, Salem	74	1999	Full Time
SSLC	State board	Gugai Higher Secondary School, Salem	74	1997	Full Time

AREA OF INTEREST:

- Custom Power Devices
- DC-DC Converters

B) PROFESSIONAL EXPERIENCE & WORK SUMMARY: (19 YEARS)**Teaching:** UG – 19 Years & PG – 6 Years**Research:** 13 Years

Sl. No.	Institution / Industry Name	Position / Title	From	To	No. of Years & Month
1	Sanjivani College of Engineering Kopargaon	Professor	15.12.2021	Till Date	3 Year 5 Months
2	Muthayammal Engineering College (Autonomous), Rasipuram	Professor	02.01.2020	14.12.2021	1 Year 11 Months
3	Muthayammal Engineering College (Autonomous), Rasipuram	Associate Professor	01.06.2016	31.12.2019	3 Year 7 Months
4	K.S.R. College of Engineering (Autonomous), Tiruchengode	Assistant Professor	01.07.2010	31.05.2016	5 Years 11 Months
5	K.S.R. College of Engineering (Autonomous), Tiruchengode	Lecturer	09.06.2007	30.06.2010	3 Years 21 Days
ENGINEERING COLLEGE TOTAL EXPERIENCE					17 Y 10 M
6	Muthayammal Polytechnic College, Rasipuram	Lecturer	19.06.2003	26.05.2005	1 Years 11 Months 7 Days
POLYTECHNIC COLLEGE TOTAL EXPERIENCE					2 Years

C) ADMINISTRATIVE RESPONSIBILITIES

Sl. No.	Name of the Assignment	From	To	Nature of responsibility
1	IQAC Dean	March 2023	Till date	To coordinate the quality-related activities of the institution. To coordinate in preparation of the AQAR to be submitted to NAAC based on the quality parameters.
2	BOS member/ Institution	June 2016	Till date	Contributing to curriculum design and syllabus revision to ensure academic excellence and industry relevance.
3	NBA Coordinator	June 2016	Till date	Preparing and organizing accreditation-related documentation as per NBA guidelines. Ensuring compliance with accreditation standards.

4	Academic Coordinator	June 2017	May 2021	Advise the students to obtain what they are seeking for their degree and placement requirements
5	Class Advisor	June 2011	May 2015	Monitoring student attendance, enforcing the dress code, and gathering student feedback for continuous improvement.
6	Exam Coordinator	June 2009	May 2011	Planning and scheduling internal assessment tests and practical examinations to ensure smooth academic operations.

D) RESEARCH AND DEVELOPMENT:

Ph.D., Supervisor in Anna University, Chennai

- Guiding Ph.D scholars of Anna University, Chennai.

Currently, **1 research scholars are doing their research** under my supervision (Faculty of Electrical Engineering Ref. No.: 2530024)

[<http://cfr.annauniv.edu/research/supervisorlist.php?type=electr>]

Ph.D., Scholars Completed

- Under my supervision **8 research scholar has completed** his research work
 - Certain investigations on multilevel inverter for grid connected photovoltaic system (Mr.P.Karuppusamy- Reg. No 10930421022) Viva-Voce on 30.05.2017
 - Performance Analysis of Improved DC-DC Converter For Solar Fed Brushless Dc Motor (Mr.A. Senthilkumar - 11210431050) Viva-Voce on 30.07.2020.
 - Some Investigations On Human Knee, Elbow And Shoulder Images Using Finite Element Modelling And Soft Computing Techniques (Mrs Buvanesvari.V.K - Reg. No. 71160112025) Viva-Voce on 09.11.2020
 - Efficient web service selection and Long term composition for improved QoS in Multi user groups (Mr.P.Kirubanantham - 17144697202) Viva-Voce on 04.12.2020
 - Photovoltaic system based shunt active filter for Harmonic Mitigation and Energy conservation (Mr P Suresh – Reg. No. 1514369785) Viva-Voce on 05.03.2021
 - Investigation on anonymous behavior detection and power demand prediction in secure cloud environment using hybrid deep learning technique (Mr T Aravind – Reg. No. 18144697177) Viva-Voce on 25.04.2023
 - A high step-up switched quasi z-source three-port (SQZSTP) dc-dc converter for photovoltaic power generation system (Mr V Dhinesh – Reg. No. 18143691166) Viva-Voce on 25.08.2023
 - Experimental investigation and comparative harmonic optimization of asymmetric multilevel inverters incorporate modified genetic algorithm used for power quality improvement (Mr P Rajarathinam - Reg No. 16133697158) Viva voce on 06.10.2023

Patents Published & Granted

1. Patent granted in the title of 'Micro Windmill Unit' during the academic year 2023-24 (Design No: 402482-001, dated 19.12.2023).
2. Patent published in the title of 'Fuzzy neural optimized fuzzy logic controller based dynamic voltage restorer for power quality improvement with non-linear' during the academic year 2022-23 (Reference Registration No: 202241063448, dated 18.11.2022).
3. Patent published in the title of 'Hybrid vehicle technology based efficient idle-stop system in automobiles using smart traffic control algorithm' during the academic year 2022-23 (Reference Registration No: 202221040492 A, dated 29.07.2022).
4. Patent published in the title of 'A solar panel high energy technology' during the academic year 2021-22 (Reference Registration No: 202241014948 A, dated 25.05.2022).
5. Patent published in the title of 'Design and development of an intelligent insect identification device using reverse mapping histogram' during the academic year 2021-22 (Reference Registration No: 202241026616 A, dated 25.03.2022).
6. Patent granted in the title of 'Smart LPG level monitoring and automatic booking system integrated with trolley' during the academic year 2021-22 (Reference Registration No: 360780-001, dated 16.03.2022).
7. Patent published in the title of 'Substation monitoring system: GSM based substation and main station monitoring and control system' during the academic year 2020-21 (Reference Registration No : 202141012061, dated 02.04.2021).
8. Patent published in the title of 'Cloud computing: enhance robustness and reduce energy costs using cloud computing' during the academic year 2019-20 (Reference Registration No : 202041011068, dated 20.03.2020).
9. Patent published in the title of 'Low cost smart spectacle vibration device for visually impaired people' during the academic year 2018-19 (Reference Registration No : 201841025036A dated 13.07.2018).
10. Patent Registered in the title of 'Novel PIN number shuffling algorithm for secured ATM center interfaced with automatic shutter locking system' during the academic year 2015-16 (Reference Registration No : 201641000241 – dated 23.02.2016).

PROJECT FUNDING PROPOSALS APPLIED / RECEIVED

Name of the Agency	Amount (in Rs)	Scheme Name	Title of the Project	Duration and Period	Result
DST (CEST)	3169356	Recovery and Recycling of End-of-Life Solar PV Panels/Modules	Sustainable circular materials SCM as the source of Pharma and medical SPM sectors unlocking the potential Of end of life of photovoltaic panels	2024-25	Not Recommend
DST SERB	2480400	SERB SURE	Design and Development of Autonomous Bi-Facial Solar Photovoltaic System with Micro Wind Based Hybrid Power Systems in Western Ghats Mountains	2023-24	Not Recommend
DST SERB	100000	Seminar/ Symposia	National Level Seminar on "Industrial IoT Trends in Agriculture Digital Transformation" (Theme: Digital Transformation in Agriculture)	2022-23	Not Recommend
CSIR	20000	Seminar Grant	Blockchain enabled smart grid market	2021-22	Recommend
Ref. No. SYM/10844/22-HRD/July 01, 2022 Sanctioned Rs 20,000/-					
AICTE	500000	STTP	Pedagogy Skills for Teacher in Engineering Education Using ICT	2018-19	Recommend
Ref. No. 34-65/94/RIFD/STTP/Policy-1/2018-19 Sanctioned Rs 3,00,000 /-					
AICTE	250000	RPS	IOT based smart street light management system for vehicle and pedestrian pathway	2017 - 18	Not Recommend
TCSCST	10000	Project – Finance assist	Accidental zone indicator for vehicle	2017 - 18	Not Recommend

DST SERB	1713320	SERB Extra Mural Funding (CORE)	Hybrid wind-photo voltaic system for rural electrification and power quality improvement	2016 - 17	Not Recommend
DST SERB	125000	Seminar grant proposal	Role of smart grid in power system planning and operation	2016 - 17	Not Recommend

PUBLICATION DETAILS:

INTERNATIONAL JOURNALS (29 SCOPUS INDEX)

1. Sundar R, Vijayakumar G, September 2024, Jellyfish search optimizer algorithm based multiple distributed generation placements, vol.18, no.3, pp. 1-13. (**SCOPUS - Impact Factor 0.173**) (OICC Press Publisher - Azad University (IR) in Oxford)
<https://doi.org/10.57647/j.mjee.2024.180347>
2. Vijayakumar G, Sujith M, Shanmugasundaram V, Raja R, Ramesh S, February 2024, Design and development of photovoltaic solar system based single phase seven level inverter, Bulletin of Electrical Engineering and Informatics, vol.13, no.1, pp. 58-66. (**SCOPUS - Impact Factor 0.639**) (IAES Publisher - Indonesia)
<https://beei.org/index.php/EEI/article/view/5168>
3. Sundar R, Vijayakumar G, Raja R, Shanmugasundaram V, Kamatchi Kannan V, December 2023, Reduced switch cascaded asymmetrical 27 level inverter STATCOM with fuzzy logic controller, Indonesian Journal of Electrical Engineering and Computer Science, vol.13, no.1, pp. 58-66. (**SCOPUS - Impact Factor 0.346**) (IAES Publisher - Indonesia)
<https://ijeecs.iaescore.com/index.php/IJEECS/article/view/33622>
4. V Kumarakrishnan, G Vijayakumar, R Prakash, S Saravanan, November 2023, Ant colony optimization technique optimized controller for frequency stabilization of an isolated power system with non-linearity, Thermal Science, vol.27, no.6, pp. 4815-4829. (**SCOPUS - Impact Factor 0.56**) (Vinca Inst Nuclear Sci Publisher - Serbia)
<https://doiserbia.nb.rs/Article.aspx?ID=0354-98362300247K>
5. Sujith M, Vijayakumar G, Dipesh B Pardeshi , June 2023, PSO based optimized PI controller design for hybrid active power filter, International Journal of Power Electronics and Drive Systems, vol.32, no.3, pp. 1288-1297. (**SCOPUS - Impact Factor 0.528**) (IAES Publisher - Indonesia)
<https://ijpeds.iaescore.com/index.php/IJPEDS/article/view/22428>
6. Sujith M, Vijayakumar G, Dipesh B Pardeshi , March 2023, ANN-SOGI-based Shunt Active Power Filter for Harmonic Mitigation, International Journal of Electrical and

Electronics Research (IJEER), vol.11, no.1, pp. 97-102. (**SCOPUS - Impact Factor 0.34**) (Forex Publisher - USA)

https://www.researchgate.net/publication/369721150_ANN-SOGI_based_Shunt_Active_Power_Filter_for_Harmonic_Mitigation

7. Vijayakumar G, Thakur AG, Dipesh B Pardeshi, Ingle SS, Sujith M, Kirubanantham P, January 2023, Implementation of Activity Based Continuous (ABC) Evaluation Strategies for PSOs Attainment, Journal of Engineering Education Transformations, vol.36, no.2, pp. 556-559. (**SCOPUS - Impact Factor 0.46**) (India Publisher - Rajarambapu Institute Of Technology)
https://sciresol.s3.us-east-2.amazonaws.com/srs-j/jeet/pdf/Volume-36/Special%20Issue-2/29_PAPER_ID_29%20-%20G%20Vijaykumar.pdf
8. Sujith M, Vijayakumar G, Dipesh B Pardeshi , August 2022, Analysis of battery based hybrid electric vehicle power train, Journal of Engineering and Applied Sciences, vol.17, no.16, pp. 1563-1579. (**SCOPUS - Impact Factor 0.38**) (ARPN Publisher - Pakistan)
http://www.arpnjournals.org/jeas/research_papers/rp_2022/jeas_0822_9005.pdf
9. Palanisamy R, Kalyanasundaram V, Vijayakumar G, December 2022, A novel SVPWM for 3-phase to 5-phase conversion using matrix converter, International Journal of Power Electronics and Drive Systems, vol.13, no.4, pp. 2269-2276. (**SCOPUS - Impact Factor 0.346**) (IAES Publisher - Indonesia)
<https://ijpeds.iaescore.com/index.php/IJPEDS/article/view/22182>
10. Aravind T, Vijayakumar G, October 2022, Forecasting Energy Demand Using Conditional Random Field and Convolution Neural Network, Elektronika IR Elektrotechnika, vol.28, no.5, pp. 12-22. (**SCOPUS - Impact Factor 1.34**) (Kauno Technologijos Universitetas - Lithuania)
<https://eejournal.ktu.lt/index.php/elt/article/view/30740>
11. Vijayakumar G, May 2022, An optimized MPPT method for PV system with fast convergence under rapidly changing of irradiation, IEEE Explorer conference proceedings. (10.1109/PECCON55017.2022.9851107)
<https://ieeexplore.ieee.org/document/9851107>
12. Dhinesh V & Vijayakumar G, March 2022, A switched quasi Z-source three-port (SqZSTP) DC-DC converter for a photovoltaic power generation system, Semiconductor Science and Technology, vol.37, no.4, pp. 045014(1-22). (**SCI index - Impact Factor 2.352**) (IOP Science Publisher – United Kingdom)
<https://iopscience.iop.org/article/10.1088/1361-6641/ac419d/meta>

13. Rajarathinam P & Vijayakumar G, February 2022, Experimental investigation and comparative harmonic optimization of AMLI incorporate modified genetic algorithm using for power quality improvement, Journal of Intelligent & Fuzzy Systems, vol.43, no.2, pp. 1163 - 1176. (**SCI - Impact Factor 1.73**) (IOS Press, Netherland)
<https://dl.acm.org/doi/abs/10.3233/JIFS-212668>
14. Kumarakrishnan V & Vijayakumar G, January 2022, Frequency Regulation of Interconnected Power Generating System Using Ant Colony Optimization Technique Tuned PID Controller, Control and Measurement Applications for Smart Grid (Lecture Notes in Electrical Engineering) vol.822, pp. 129-141. (Springer)
https://link.springer.com/chapter/10.1007/978-981-16-7664-2_11
15. Kumarakrishnan V & Vijayakumar G, December 2021, PSO Optimum Design-PID Controller for Frequency Management of Single Area Multi-Source Power Generating System Contemporary Issues in Communication, Cloud and Big Data Analytics (Lecture Notes in Networks and Systems), vol.281, pp. 373-383. (Springer)
<https://www.springerprofessional.de/en/pso-optimum-design-pid-controller-for-frequency-management-of-si/19917294>
16. Kumarakrishnan V & Vijayakumar G, December 2020, Optimized PSO Technique Based PID Controller for Load Frequency Control of Single Area Power System, Solid State Technology, vol.63, no.5, pp. 7979-7990. (**SCOPUS - Impact Factor 0.30**) (Pennwell Corporation, United States)
17. Kirubanantham P & Vijayakumar G, February 2020, Novel recommendation system based on long-term composition for adaptive web services, Computational Intelligence, vol.36, no.3, pp. 1063 - 1077. (**SCI - IF 1.196**) (Wiley, USA)
<https://onlinelibrary.wiley.com/doi/abs/10.1111/coin.12309>
18. Kirubanantham P & Vijayakumar G, February 2020, Real Time Quality of Service Specific Dynamic Web Service Composition and for Improved Performance of SOA Implicit Explicit Feedback, International Journal of Advanced Science and Technology, vol.29, no.4, pp. 1892 - 1901. (**SCOPUS - Impact Factor 0.11**)
19. Rajarathinam P & Vijayakumar G, October 2019, An Intelligent Control of Three-Phase Distributed Power Flow Controller for Power Quality Improvement, Journal of Tierarztliche Praxis, vol.39, no.10, pp. 108 - 120. (**SCI - Impact Factor 0.14**) (Schattauer GmbH, Germany)
20. Suresh P & Vijayakumar G, July 2019, Shunt Active Power Filter with Solar Photovoltaic System for Long-Term Harmonic Mitigation, Journal of Circuits, Systems,

and Computers, vol.29, no.5, pp. 1 - 23 (**SCI Index – Impact Factor 0.49**) (World Scientific Publishers, Singapore)

<https://www.worldscientific.com/doi/abs/10.1142/S0218126620500814>

- 21.Senthilkumar A, Vijayakumar G & Sathish Kumar S, August 2018, Solar photovoltaic array fed brushless DC motor drive using sensorless technique for reducing vibration with Enhanced DC-DC converter, Journal of Vibro Engineering, vol.20, no.6, pp. 2515 - 2538. (**SCI Index – Impact Factor -0.24**) (Vibromechanika, Lithuania) <https://www.extrica.com/article/19732>
- 22.Karuppusamy, P & Vijayakumar, G April 2016, Certain Investigation on Multilevel Inverters for Photovoltaic Grid Connected System, Journal of Circuits, Systems, and Computers, vol.25, no.9, pp. 1506 - 12. (**SCI Index – Impact Factor -0.49**) (World Scientific Publishers, Singapore)
<https://www.worldscientific.com/doi/abs/10.1142/S0218126616501085>
- 23.Ravi, V, Vijayakumar, G & Karthikeyan, C 2016, Operation of PV System With dc–dc Boost-Fed Shunt Active Filter to Mitigate Current Harmonics and Energy Conservation, Journal of Testing and Evaluation, vol. 44, no. 1, pp. 342 -356. (**SCI - Impact factor 0.63**) (AMER SOC Testing Materials, USA)
<https://dergipark.org.tr/tr/pub/iujs/issue/9360/117090>
- 24.Vijayakumar, G & Anita, R 2015, 'Investigate the performance of photovoltaic based shunt active filter for energy conservation using Icosp algorithm', Australian Journal of Electrical and Electronics Engineering, vol.12, no.1, pp. 29-44. (**ESCI Index – Impact factor 0.15**) (Taylor and Francis Ltd., United Kingdom)
<https://www.tandfonline.com/doi/abs/10.7158/1448837X.2015.11464449>
- 25.Vijayakumar, G & Anita, R 2015, 'Photovoltaic based shunt active filter for power quality improvement using icosp theory', Journal of Engineering Science and Technology, vol. 10, no.11, pp. 1422 – 1440. (**ESCI – Impact factor 0.53**) (Taylor's University, Malaysia) <http://jestec.taylors.edu.my/V10Issue11.htm>
- 26.Vijayakumar, G & Anita, R 2014, 'Optimal Operation of Photovoltaic System with a DC-DC Boost Converter FED SAF Using ICosp Algorithm', Journal of Engineering Science and Technology Review, vol.7, no.3, pp.7-16. (**SCOPUS – IF 0.3**)(Kavala Institute of Technology, Greece)
<http://www.jestr.org/downloads/Volume7Issue3/fulltext27314.pdf>
- 27.Vijayakumar, G & Anita, R 2014, 'Renewable energy interfaced shunt active filter for power quality enhancement using T-Connected transformer ', UPB Scientific Bulletin, Series C: Electrical Engineering, vol. 76, no. 4, pp. 1-16. (**ESCI - IF 0.15**) (Politechnica University of Bucharest, Romania)

https://www.scientificbulletin.upb.ro/rev_docs_arhiva/fullb97_351266.pdf

28. Vijayakumar, G & Anita, R 2014, 'Photovoltaic system with a dc-dc converter fed shunt active filter for power quality improvement using icos-phi algorithm', Journal of Circuits, Systems, and Computers, vol.23, no.9, pp. 132-145. (**SCI- IF 0.49**) (World Scientific Publishers, Singapore)
<https://www.worldscientific.com/doi/abs/10.1142/S0218126614501321>
29. Aravindan P, Sanavullah M Y, Vijayakumar G 2014, 'Renewable Energy Based Shunt Compensator For Power Quality Improvement, International Review on Modelling and Simulations, Vol.7, no.1, pp. 152-159 (**Scopus -0.283**)
<https://www.praiseworthyprize.org/jsm/index.php?journal=iremos&page=article&op=view&path%5B%5D=14816>

NATIONAL JOURNALS (19) (Google Scholar)

1. Vijayakumar G, Sujith M, Dipesh B Paradeshi, OCT 2022, Design and development of photovoltaic based grid interactive inverter, International Journal of Applied Power Engineering, vol.11, no.4, pp. 294 - 303.
<http://doi.org/10.11591/ijape.v11.i4.pp294-303>
2. Jayaprakasam S, & Vijayakumar G, September 2020, An Efficient Analysis of Energy Conservation Audit and Symmetric Measurement for Wide -Area Power System, Seybold Report, vol.15, no.9, pp. 1876 - 1883.
3. Punitha R, Dhinesh V, Saravanan S & Vijayakumar G, August 2020, PV Integrated Highly Efficient Quasi Z - Source Inverter Using Adaptive Neuro Fuzzy Inference System, Seybold Report, vol.15, no.8, pp. 1082 - 1089.
4. Periyasamy V, Surya s, Vasanth K & Vijayakumar G, April 2020, Design and implementation of IoT based modern weaving loom monitoring system, International Journal of Engineering Technology Research & Management, vol.4, no.4, pp. 11 - 18.
5. Harish N, Jayakumar, R, Kaliyarasan, K, Vijayakumar G & Saravanan S, March 2020, IoT based smart home energy meter, International Journal of Engineering Technology Research & Management, vol.4, no.3, pp. 177 - 183.
6. Prakashraj K & Vijayakumar G, February 2020, IoT based energy monitoring and management system for smart home using renewable energy resources, International Research Journal of Engineering and Technology, vol.7, no.2, pp. 1790 - 1797.
7. Dhinesh V & Vijayakumar G, January 2020, A Photovoltaic Modeling module with different Converters for Grid Operations, international journal of innovative research in technology, vol.6, no.8, pp. 89 - 95.
8. Dhinesh, V & Vijayakumar, G 2018, Online Grid Integrated Photovoltaic System With New Level Inverter System, International Journal of Innovative Research in Engineering Science and Technology, vol.6, no.2, pp. 94 - 106.

9. Aravind, T & Vijayakumar, G 2018, Semantic Representation of Data Security for Centralizing Data Storage in Cloud Environment, International Research Journal of Engineering and Technology, vol.5, no.2, pp. 1544 - 1547.
10. Vijayakumar, G & Suresh, P 2017, Control Strategy for A UPQC to Compensate PQ Problems, Journal of Industrial Engineering, vol.1, no.3, pp. 121 - 128.
11. Suresh, P & Vijayakumar, G June 2017, Solar System Based Static Compensator For Power Quality Enhancement Using T-Connected Transformer, Journal of Research in Engineering Technology, vol.2, no.4, pp. 14 - 23.
12. Vijayakumar, G & Kumarakirisnan, V 2017, Design and Implementation of Class EF2 Circuit Based Wireless Power Transfer, journal of CIIT - Wireless Communication, vol.9, no.6, pp. 115 - 118.
13. Suresh, P & Vijayakumar, G & 2017, Novel Control Strategy for a UPQC System to Compensate Power Quality Problems At The Point Of Common Coupling, Journal of Power Electronics and Drives, vol.2, no.2, pp. 549 - 557.
14. Vijayakumar, G & Anita, R 2015, 'Photovoltaic Based Three-Phase Three-Wire SAF for Significant Energy Conservation', International Journal of Electronics and Electrical Engineering, vol. 3, no. 1, pp. 71-79
15. Vijayakumar, G & Soundharya, M 2016, 'Automation in water board using PLC with SCADA', International Journal of Advanced Research in Biology Engineering Science and Technology, vol. 2, no. 10, pp. 1503 -1510.
16. Vijayakumar, G, Karthikeyan, C & Ravi, V 2014, 'Novel optimized operation of wind System based shunt active filter To mitigate the current harmonics for energy conservation', Istanbul University - Journal of Electrical and Electronics Engineering, vol. 14, no. 2, pp. 1825 -1835.
<https://dergipark.org.tr/en/pub/iujeee/issue/9360/117090>
17. Vijayakumar, G & Anita, R 2013, 'Renewable energy based shunt compensator for power quality improvement', International Journal of Emerging Trends in Electrical and Electronics, vol. 9, no. 1, pp. 1-8.
18. Vijayakumar, G & Anita, R 2013, 'Renewable energy interfaced shunt active power filter using a pi controller based ant colony and swarm optimization algorithms', Australian Journal of Basic and Applied Sciences, vol. 7, no. 8, pp. 110-119.
19. Vijayakumar, G & Anita, R 2013, 'Real time digital simulation of shunt active filter for mitigation of current harmonics with P-Q theory', Academic Journal of Scientific Research and Essays, vol. 8, no. 26, pp. 1239-1251.

INTERNATIONAL CONFERENCES (10)

1. Vijayakumar, G. "Implementation of Activity Based Continuous (ABC) Evaluation Strategies for PSOs Attainment", International Conference on Transformations in Engineering Education organized by Vidyavardhaka College of Engineering, Mysuru, Karnataka, 7th January 2023.
2. Vijayakumar, G. "Power system efficiency improved by PV STATCOM", International conference on Artificial intelligence, materials science and renewable energy organized by kalaingar karunanidhi Institute of Technology, Coimbatore, 27th May 2022.
3. Vijayakumar, G. "An optimized MPPT method for PV system with fast convergence under rapidly changing of irradiation", International virtual

conference on Power engineering computing and control organized by Vellore Institute of Technology, Chennai, 3rd May 2022.

4. Vijayakumar, G. "A seed sewing machine for zero till farming", International conference on Advanced science and engineer organized by Al-Ameen Engineering college, 23th March 2019.
5. Vijayakumar, G. "Blockchain enabled smart grid transmission system", International conference on Information Sciences and Renewable Energy Sources organized by Selvam College of Technology, Namakkal, 7th & 8th March 2019.
6. Vijayakumar, G. "IoT based Energy Monitoring and Management system for smart home", International conference on future technologies in engineer, science and humanities organized by Sri Guru Institute of Technology, 22th February 2019.
7. Vijayakumar, G. "control strategy of wind turbine based on permanent magnet synchronous generator and energy storage for standalone systems", International conference on innovation in science engineering and technology for sustainable development sponsored by DST SERB and organized by Muthayammal Engineering college, 30th & 31st March 2018.
8. Vijayakumar, G. "Automation in water board using PLC with SCADA", International conference in global innovations in computing technology organized by Jay shriram group of institutions, 4th & 5th March 2016.
9. Vijayakumar, G. "Tongue segmentation using GVF method", International conference in synergistic evolutions in engineering organized by Surya Engineering College, 4th & 5th March 2015.
10. Vijayakumar, G. "Particle swarm optimization based MPPT for PV system under partial shading conditions", International conference on engineering technology and science organized by Muthayammal college of Engineering, 10th & 11th February 2014.

NATIONAL CONFERENCES (15)

1. Vijayakumar, G. "An ANFIS control of three phase DPFC for power quality improvement", in National e-Conference on Emerging trends in renewable energy, organized by Dhirajlal Gandhi College of Technology, Salem, 24th April 2020.
2. Vijayakumar, G. "Fuel tank guard", Emerging trends in renewable energy, power quality & optimization techniques organized by Er.Perumal manimekalai college of engineering, Hosur, 25th February 2019.
3. Vijayakumar, G. "A novel control strategy for hybrid wind system for standalone system", National conference on recent trends in electrical engineering and technology organized by Muthayammal Engineering college, 28th March 2018.
4. Vijayakumar, G. "Renewable energy integrated battery charger for distributed power system", National conference on emerging trendzs in renewable energy power quality & optimization techniques, organized by Er.Perumal manimekalai college of engineering, 5th March 2018.
5. Vijayakumar, G. "Automated water distribution network using PLC with SCADA", National conference on cutting edge technologies in power conversion & industrial drives organized by Bannari Amman Institute of Technology, 18TH-19TH Mar-2016.
6. Vijayakumar, G. "Implementation of particle swarm optimization based MPPT for PV system under partial shading conditions", National conference on trends in

automotive parts systems and supplications, organized by SAEINDIA SKCET, 21st-22nd March 2014.

7. Vijayakumar, G. (2013), "A STATCOM control scheme for grid connected hybrid wind solar energy system to improve power quality", National conference on emerging trends in technology and management organized by Sobhasaria group of institutions, Sikar Rajasthan, 9th March, 2013.
8. Vijayakumar, G. "A STATCOM control scheme for grid connected hybrid renewable energy systems to improve power quality", National conference on emerging trends in electrical science organized by Institute of Road and Transport Technology , 27th & 28th February 12, 2013.
9. Vijayakumar, G. "A comparative study between two control strategies for shunt active filter", National conference recent advancements & challenges in electrical engineering and application organized by Institute of Road and Transport Technology , 29th February to 1st March 2012.
10. Vijayakumar, G. "Fuzzy controller based hybrid filter for energy saving", National conference on communication technology intervention for rural and social development ncctird-2012, organized by Sri Krishna College of Engineering and Technology, Coimbatore, 16th to 17th February 2012.
11. Vijayakumar, G. "A new technology for power factor correction in ac/dc converters", National conference on advance in information and communication technology organized by C.Abdul Hakeem College of Engineering and Technology, Vellore 5th March 2011.
12. Vijayakumar, G, "Shunt active filter to compensate current harmonics", National conference on innovative in electrical, electronics and control systems organized by Kumaraguru College of Technology, 27th & 28th April 2007.
13. Vijayakumar, G. "Control technique for shunt active filter to compensate current harmonics", National conference on innovative strategies on power systems and power electronics drives organized by Sona College of Technology, 16th March 2007.
14. Vijayakumar, G. "Control technique for shunt active filter to compensate current harmonics", National conference on cutting edge technologies in power conversion and industrial drives organized by Bannari Amman Institute of Technology, Sathyamangalam, 16th & 17th February 2007.
15. Vijayakumar, G. "Zero voltage and zero current switched pwm dc-dc converter using active snubber", National conference on cutting edge technologies in power conversion and industrial drives organized by Bannari Amman Institute of Technology, 24th & 25th March 2006.

E) DETAILS OF FDP / WORKSHOPS / SEMINARS /WEBINARS ATTENDED (53)

S.No	Name of the programme	Organized by	Period
1.	FDA Atal Innovative Design Thinking Strategies for Next Generation AI Solutions	Vivekanandha college of engineering for women, Tamilnadu	03.02.2025 to 08.02.2025

2.	STP on Sustainable Smart Energy Technologies	IIITDM, Chennai	06.01.20225 to 11.01.2025
3.	FDP on Design thinking for product development	Vidyavardhaka college of engineering, Mysuru	15.04.2024 to 20.04.2024
4.	FDP on Design & Innovation on Wireless Communication with Advanced Technology	Gate institute of technology, Ananthapuramu, Gooty	17.01.2024 to 22.01.2024
5.	FDP on Recent Trends In Multidisciplinary Research	SRM institutte of science and technology, Chennai	07.07.2023 to 18.07.2023
6.	FDP on Outcome based Curriculum and Accreditation Criteria	NITTTR, Chandigarh	03.07.2023 to 07.07.2023
7.	Seminar on Strategy for quality improvement in higher educational institutions	RMK college of engineering, Tamilnadu	05.04.2023 to 06.04.2023
8.	FDP on Outcome Based Curriculum Design	NITTTR, Chandigarh	13.02.2023 to 17.02.2023
9.	FDP on Power Quality problems and solutions	AICTE & NITTTR, Chandigarh and Hindusthan College of Engineering and Technology, Coimbatore	30.01.2023 to 03.02.2023
10.	FDP on Trends and challenges in electric vehicles	ISTE & Annasaheb dange college of engineering & Technology, Ashta,	02.01.2023 to 06.01.2023
11.	FDP on Smart grid and renewable energy sources	NITTTR, Chandigarh	29.08.2022 to 02.09.2022
12.	Workshop on Outcome based education and examinations reforms	Bapatla Engineering College, Andra Pradesh	03.08.2022 to 05.08.2022
13.	FDP on Emerging Trends in Electrical Engineering	Annasaheb Dange Colege of Engineering and Technology, Maharastra	27.06.2022 – 01.07.2022
14.	FDP on Smart grid and micro grid in Indian context	Mahatma Gandhi Institute of Technology, Hyderabad	20.06.2022 – 24.06.2022
15.	FDP on Integration of renewable energy and smart grids for smart cities	Bansal Institute of Engineering and Technology, Lucknow	07.03.2022 – 12.03.2022
16.	FDP on Trends and challenges in EV Ecosystem	KCG College of Engineering, Chennai	01.01.2022 – 13.01.2022
17.	Webinar on Innovative Control Techniques for Hybrid Electric Vehicles	Vinayaka Mission's Kirupananda Variyar Engineering College, Salem.	26.06.2021
18.	Modern trends in environment	Annai vailankanni college of engineering, Kanyakumari	17.06.2021 - 18.06.2021

19.	Webinar on Artificial Intelligence in Power System Area	Dr.Mahalingam college of engineering and technology, Pollachi	11.06.2021
20.	Workshop on research methodology	Annai vailankanni college of engineering, Kanyakumari	02.06.2021 - 04.06.2021
21.	FDP on Recent trends and research perspective on energy and power system	PSN college of engineering and technology, Tirunelveli	31.05.2021 - 04.06.2021
22.	Webinar on Recent advancements in infrared thermography techniques for electrical panels	KPR institute of engineering and technology, Coimbatore	18.03.2021 – 19.03.2021
23.	FDP on advanced robotics, Ai & Industry 4.0	Coimbatore institute of technology, Coimbatore	16.03.2021 – 20.03.2021
24.	FDP on Introduction to Smart Grid	NPTEL-AICTE, MHRD	Sep Nov 2020
25.	Webinar on compiling faculty information and contribution	NITTTR, Bhopal	13.08.2020
26.	FDP on Machine learning and deep learning	SRM Institute of Science and Technology, Kattankulathur	27.05.2020 – 31.05.2020
27.	FDP on Modern drive in electrical drives	Nagpur Institute of Technology, Nagpur	19.05.2020 – 23.05.2020
28.	Webinar on Grid connected and Standalone Microgrid design using Homepro	Erode Sengunthar Engineering College, Erode	14.05.2020
29.	Webinar on Basics of Solar photovoltaic system	Karpagam Institute Technology, Coimbatore	13.05.2020
30.	FDP on Fuzzy logic	Kristu jayanti college, Bengaluru	09.05.2020
31.	Webinar on Wind Energy System and its Challenges	Sri Krishna College of Technology, Coimbatore	02.05.2020
32.	Workshop on Intellectual property rights in technology transfer and economic growth: prospectus and challenges	Council of scientific and industrial research, New Delhi	14.02.2020 & 15.02.2020
33.	FDP on AI and Machine Learning	Electronics and ICT Academies	23.12.2019 – 27.12.2019
34.	FDP on Accreditation and Outcome Based Learning	NPTEL-AICTE, MHRD	Aug-Oct 2019
35.	Workshop on Training of Teachers Student Induction Programme	University Grants Commission Hyderabad & Bharathiyar University Coimbatore	30.10.2019 & 31.10.2019

36.	Workshop on Academic Leadership	Muthayammal Engineering College, Rasipuram	19.08.2019 to 21.08.2019
37.	Seminar on Research trends on smart waste management system for batteries	DST (SERB) sponsored Kongu engineering college, Perundurai	11.01.2019 to 12.01.2019
38.	FDP on EE8251 Circuit Theory (Anna University)	K.S.R. college of Engineering, Tiruchengode	26thNov-8thDec 2018
39.	FDP on Basic Electrical Electronics & Instrumentation Engineering (Anna University)	Muthayammal College of Engineering, Rasipuram	11th to 17th December 2017
40.	FDP on power management using PMLK series	Muthayammal Engineering College, Rasipuram	4th & 5th September 2017
41.	FDP on Industrial drives automation and intelligent control (TEQIP-II)	Government College of Engineering, Salem	1st to 7th March 2017
42.	FDP on Electric Energy Generation, Utilization & Conservation. (Anna University)	K.S.Rangasamy College of Technology, Tiruchengode	14th to 20th December 2016
43.	Workshop on Assesing the healthiness of the substation equipments	Voltech Engineering Pvt. Ltd., Chennai In association with Muthayammal Engineering College, Rasipuram	7th to 10th September 2016
44.	Workshop on journal paper writing and preparation of winner research proposal	K.S.R. college of Engineering, Tiruchengode	19th & 20th August 2015
45.	Seminar on Blooms taxonomy and its assessments	K.S.R. college of Engineering, Tiruchengode	20th March 2015
46.	2 week ISTE STTP on Technical communication	IIT, Bombay in association with Vidya Vikas college of engineering & Technology, Tiruchengode	8th October to 5th December 2015
47.	Workshop on solid state drives	EQIP Foundation, Coimbatore	10 th to 13 th December 2014
48.	FDP on Advanced controller for Electric Drives	Sona college of technology, & IEEE Madras section	18 th and 19 th January 2011
49.	Workshop on Teachers Quality improvement programme on Instructional Design and Delivery	National Institute of Technical Teachers Training & Research, Chennai at K.S.R. College of Engineering, Tiruchengode.	8 th to 13 th September 2009

50.	Seminar on Improved Dynamic Performance of Environmental Friendly Green Power Generation	Ministry of environment & forests and Institute of Road and Transport Technology, Erode	16 th & 17 th September 2008
51.	Seminar on Intelligent Digital Controller for Special Electrical Machines	DST and Institute of Road and Transport Technology, Erode.	30 th & 31 st July 2009
52.	Seminar on VLSI Design and Technology	Bannari Amman Institute of Technology, Sathyamanagalam	7 th & 8 th October 2005
53.	Workshop on Power Quality; Problems & Solutions	Numeric Power Systems, Chennai and Bannari Amman Institute of Technology, Sathyamanagalam	10 th & 11 th September 2005

F) COURSES ORGANISED (10)

- ❖ Organized one day Faculty Orientation Programme on Strategic Vision to Strengthen Technical Education in association with IQAC at Sanjivani College of Engineering, Kopargaon on 07.11.2023
- ❖ Organized Two days Seminar on "Blockchain enabled smart grid market" in association with CSIR at Sanjivani College of Engineering, Kopargaon on 26.08.2022 and 27.08.2022
- ❖ Organized one day Guest lecture on "Design of Photovoltaic Systems for stand-alone application" in association with Institution of Engineers (India), student chapter at Muthayammal Engineering College on 02.12.2020.
- ❖ Organized one days seminar on "Product Design and Development", in association with Institution of Engineers (India), student chapter at Muthayammal Engineering College on 20.09.2019.
- ❖ Organized two days International conference on "Innovative Science, Engineering and Technology for Sustainable development" in association with DST SERB at Muthayammal Engineering College on 30th & 31st March 2018.
- ❖ Organized two days value added workshop on "Arduino and processing" in association with IE(I) student chapter at Muthayammal Engineering College on 15.02.2018 to 16.02.2018.
- ❖ Organized one day seminar on "Sustainable development and renewable energy" in association with The Institution of Engineers (India), student chapter at Muthayammal Engineering College on 12.02.2018.
- ❖ Organized one day workshop on "Photovoltaic solar power plant design and optimization" in association with The Institution of Engineers (India) student chapter at Muthayammal Engineering College on 09.09.2017.
- ❖ Organized one day seminar on "Electromagnetic theory & its application" at Muthayammal Engineering College on 30.07.2016.

- ❖ Organized value added Workshop on “Testing of Transformer & Electrical Equipments” in association with VOLTECH Engineers Private limited, Chennai on 07.09.2016 to 10.09.2016

G) INVITED TALK DELIVERED (10)

- ❖ Expert lecture on the topic “Challenges and Opportunities in Electric Vehicle”, on 13th October 2023 in faculty development programme organized by Dept of EEE, KSR College of Engineering, Tiruchengode, Tamil Nadu
- ❖ Lecture on the topic, “Institutes - Industries research conclave 2023”, on 25th April 2023 on industry 5.0 organized by Dept of ECE, Muthayammal Engineering College, Rasipuram, Tamilnadu
- ❖ Lecture on the topic, “Grid and Solar PV system”, during five days (06 – 11 July 2020) online FDP on recent challenges in industrial automation and embedded system organized by Dept of EEE, Sri Ramakrishna Institute of Technology, Coimbatore
- ❖ Lecture on the topic, “Computation of power flow problems using different methods and solution” on 4th June 2018 in the Anna University sponsored FDP at K.S.R College of Engineering, Tiruchengode.
- ❖ Lecture on the topic, “Smart Grid” on 10th May 2017 in the self mode workshop at KSR Institute of Engineering and Technology, Tiruchengode
- ❖ Key note speaker on the topic, “Power Seminar” on 31st January 2015 in the ICT Academy of Tamil Nadu sponsored seminar, held at KSR Institute of Engineering and Technology, Tiruchengode
- ❖ Key note speaker on the topic, “Renewable Energy and Conservation” on 12th Sep-2013 in the National Level Technical Symposium Conducted by Department of Electrical & Electronics Engineering, Kongu Engineering College, Perundurai.
- ❖ Lecture on the topic, “Capacitor and Dielectrics” on 8th June 2012 in the Anna University, Chennai sponsored FDP, “Electro Magnetic Theory” held at K.S.R college of engineering, Tiruchengode.
- ❖ Lecture on the topic, “Electrical drives and Control” on 14th May, 2013, in the AICTE sponsored SDP, held at Gnanamani College of Engineering, Namakkal.
- ❖ Lecture on the topic “Green and clean energy” on 16th march 2009 in the DST sponsored seminar on “Improved dynamic performance of environmental friendly power generation” held at Institute of Road and Transport Technology, Erode.

H) MOOC COURSES COMPLETED (NPTEL COURSE)

1. Advance Power Electronics and Control (8 Week) Course during July-Sep 2023 conducted by NPTEL, MHRD, India (Successfully completed certification)
2. Introduction to Smart Grid (8 Week) Course during SEP-NOV 2020 conducted by NPTEL, MHRD, India (Successfully completed certification)
3. NBA Accreditation and Teaching learning in Engineering (NATE 12 Week) Course during Jan-April 2020 conducted by NPTEL, MHRD, India
4. Accreditation and Outcome Based Learning (8 Week) Course during AUG-OCT 2019 conducted by NPTEL, MHRD, India (Elite certification)

I) MEMBERSHIPS IN PROFESSIONAL BODIES

- ❖ Editorial Board member (SSRG-IJEEE-201802) - International Journal of Electrical and Electronics Engineering - Lafayette State, Louisiana, USA
- ❖ Reviewer for the International Journal - Journal of The Institution of Engineers (India): Series B- Springer, Journal of Testing & Evaluation Journal of Circuits, Systems & Computers
- ❖ Life member of ISTE, IE(I), IAENG & IAET
- ❖ Examiner and question paper setter for autonomous colleges and Anna University, Chennai.
- ❖ Member in board of studies of autonomous board
Annasaheb Dange college of engineering, Ashta, K.S.R College of Engineering , Tiruchengode, Namakkal, Pawai college of engineering, Namakkal & Muthayammal Engineering College, Rasipuram

J) DETAILS OF THE SUBJECTS HANDLED:

UG: Circuit theory, Power electronics, Electromagnetic Theory and Basics of Electrical and Electronics Engineering.

LABORATORY HANDLED/ASSISTED:

- ✓ Power electronics laboratory, Circuit theory laboratory, Electron Devices and circuits laboratory, Engineering practices laboratory, Electrical machines laboratory

PERSONAL DETAILS

Date of Birth	18-09-1981
Citizenship, Languages	Indian, English, Tamil & kannada
Address	24 SRM Thottam, Maniyanur, Salem, Tamilnadu, India. Pin – 636 010
Marital Status	Married
E – Mail	vijayakumargovind@yahoo.com
Aadhar Number	347387919508
PAN Number	AGGPV6922Q
Passport Number	S9613282
Mobile	+91 9894386889

DECLARATION

This is to certify that the details furnished above are true to the extent of my knowledge and belief.

