

GOVERNMENT COLLEGE OF ENGINEERING

TIRUNELVELI – 627 007

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING



1. Name in full : P. SUBHA KARUVELAM
2. Designation : Professor (CAS)
3. Date of joining in the present post : 09.08.2017
4. Date of joining the institute : 09.08.2001
5. Date of Birth : 20.05.1975
6. PAN Number : AZYPS2489Q
7. Aadhaar Number : 3308 7979 8532
8. Scale of pay : Rs.1,67,200
9. Address:

Permanent Address	Communication Address
19 A/1, RAJENDRA NAGAR FIRST STRET, PALAYAMKOTTAI, TIRUNELVELI – 627007.	Professor (CAS) Department of Electrical and Electronics Engineering Governemnt Collge of enigneering, Tirunelveli-627007. Mobile:9894734482 e-mail id: subha@gcetly.ac.in

10. Educational Qualification (Starting from basic degree):

Degree	Area of Specialization	Institute/ University	Month/ Year	Class	% Marks / Equivalent
B.E	Electrical and Electronics Engineering	PSG Technology, Coimbatore Bharathiyar University	April 1996	I Class	69.5 %
M.E	Power Electronics and Drives	Anna University, Chennai	July 2005	I Class	75 %
Ph. D	Electrical Engineering	Anna University, Chennai	June 2015	NA	NA

11. Experience (Starting from current position):

Academic Experience				
Period		No. of Years	Designation / Nature of job	Institute / Organization
From	To			
09.08.2017	Till date	5Y 1M	Professor	Government College of Engineering, Tirunelveli
09.08.2014	08.08.2017	3	Associate Professor	Government College of Engineering, Tirunelveli
09.08.2011	08.08.2014	3	Assistant Professor (Sl.Gr)	Government College of Engineering, Tirunelveli
09.08.2006	08.08.2011	5	Assistant Professor (Sr.Gr)	Government College of Engineering, Tirunelveli
09.08.2001	08.08.2006	5	Lecturer	Government College of Engineering, Tirunelveli.
01.08.1996	31.07.2001	4Y 11M	Lecturer	The Indian Engineering College, Vadakkankulam

12. Research Details

Period		No of years	Designation/Nature of job	Institute/organization
From	To			
Jan 2009	June 2015	6 Years 5 Months	Research Scholar – Research activities under the guidance of the supervisor	Government College of Engineering, Tirunelveli
July 2015	Till Date	7 Years	Research Supervisor – Guiding my research scholars	Government College of Engineering, Tirunelveli

12. Publications details

Sl.No	Title	Authors	Name of the Journal	National / International	Year/Vol.	ISSN.NO
1	Real time Implementation of SHE PWM in Single Phase Matrix Converter using Linearization Method.	P Subha Karuvelam & M. Rajaram.	Journal of Electrical Engineering and Technology	International	Vol. 10, No.4, 2014, pp. 1682-1691.	1975-0102
2	Control of Speed and Torque in Matrix Converter fed BLDC Motor Using FPGA Controller	P Subha Karuvelam & M. Rajaram.	International Journal of Power and Energy Systems	International	Vol.34, No.3, 2014, pp.99-108.	1710-2243
3	Modified Firefly Algorithm for Selective Harmonic Elimination in Single Phase Matrix Converter	P Subha Karuvelam & M. Rajaram.	International Journal of Applied Engineering Research,	International	Vol.9, No. 23, 2014, pp. 22325-22336.	ISSN 0973-4562

4	Matrix Converter Fed Brushless DC Motor Using Field Programmable Gate Array	P Subha Karuvelam & M. Rajaram.	International Journal of Electrical, Computer, Energetic, Electronic and Communication Engineering,	International	Vol.8, No:11, 2014, pp. 1761-1768.	2010 – 3948
5	TORQUE RIPPLE MINIMIZATION OF A THREE PHASE MATRIX CONVERTER FED BLDC MOTOR	P Subha Karuvelam & M. Rajaram.	International Journal of Innovative Research,	International	Vol. 3, Issue 2, February 2015, 78-84.	2321-2004
6	A Novel technique for real time implementation of SHE PWM in single phase matrix converter	P Subha Karuvelam & M. Rajaram.	Tehničkivjesnik	International	23.5 (2016): 1481-1488.	1330-3651
7	Field Oriented Control of Permanent Magnet Synchronous Motor	Dr P Subha Karuvelam. Suja, R P. Melba Mary	Asian Journal of Research in Social Sciences and Humanities	International	6.11 (2016): 261-273.	2249-7315
8	SHE PWM in Single Phase Matrix Converter Using Real Coded Genetic Algorithm and Particle Swarm Optimization Techniques	P Subha Karuvelam, M. Rajaram.	WSEAS TRANSACTIONS ON POWER SYSTEMS	International	Volume 11, 2016, Art. #29, pp. 251-260 April 2015	1790-5060
9	Performance Analysis of PSO-MPPT for Single and Three-Phase Grid-Connected PV System	Dr P.Subha Karuvelam F.Alma Margaret, P.Kavitha, C.S. AjinSekhar	JOURNAL OF APPLIED SCIENCE AND COMPUTATIONS,	International	VOLUME 5 ISSUE 5 MAY-2018, pp. 170-180	0076-5131
10	Maximum Power Point tracking in Grid Connected Switched Reluctance Generator based Wind Plant using Artificial Neural Network	Dr P.Subha Karuvelam R.Beulah Praiselin, C.S.Ajin Sekhar, P.Kavitha,	JOURNAL OF APPLIED SCIENCE AND COMPUTATIONS,	International	VOLUME 5 ISSUE 5 MAY-2018, pp. 160-170.	0076-5131
11	Grid tied inverter for direct drive PMSG based wind energy conversion system	Dr P.Subha Karuvelam V. Archana,	ICONSTEM 2017 IEEE Xplore,	International	Mar 2017, pp. 653-658.	978-1-5090-4855-7/17/\$31.00 ©2017 IEEE
12	Torque Ripple Minimization of	Dr P.Subha	Journal of Electrical	International	vol. 18, No. 4, 2018.	1582 – 4594

	PMSM using Adaptive Feedback Linearization based Direct Torque Control	Karuvelam Suja R,	Engineering,			
13	Analysis and Investigation of SEPIC Converter in solar PV system	Dr P.Subha Karuvelam P.Kavitha,	JOURNAL OF APPLIED SCIENCE AND COMPUTATIONS (JASC)	International	Dec 2018	0076-5131
14	Design and Control of Solar and Wind based Hybrid Energy System	P Subha Karuvelam Adlin Reeba G.I	JOURNAL OF APPLIED SCIENCE AND COMPUTATIONS (JASC)	International	Vol. 06, Issue VI, April 2019.	0076-5131
15	PMBLDC Motor speed control with power factor correction using BL – CSC Converter	Dr.P.Subha Karuvelam , K S KAVIN	Journal of Interdisciplinary Cycle Research	International	Vol. XI, Issue XII, Dec 2019.	0022-1945
16	High Performance Z Source Inverter and closed loop control for AC Drives	Dr.P.Subha Karuvelam , K S KAVIN	Journal of Interdisciplinary Cycle Research	International	Vol. XI, Issue XII, Dec 2019.	0022-1945
17	SEPIC Converter based Power Factor Correction for OMBLDC motor with FLC based speed control	Dr.P.Subha Karuvelam , K S KAVIN	Journal of Interdisciplinary Cycle Research	International	Vol. XI, Issue XII, Dec 2019.	0022-1945
18	Enhancement of an Active Power Control with Novel Flower Pollination based Global Maximum Power Point Method for Grid Connected PV System	Dr.P.Subha Karuvelam , J.R.Abinaya Meenakshi	Journal of Interdisciplinary Cycle Research (JICR),	International	Vol. XI, Issue XII, Dec 2019.	0022-1945
19	Optimal Efficiency Control in a Wind System with Doubly Fed Induction Generator	Dr.P.Subha Karuvelam , J.R.Abinaya Meenakshi	Journal of Interdisciplinary Cycle Research (JICR)	International	, Vol. XII, Issue II, Feb 2020.	0022-1945
20	PV-based Grid Interactive PMBLDC Electric Vehicle with High Gain Interleaved DC-DC SEPIC Converter”	K S KAVIN Dr.P.Subha Karuvelam	IETE Journal of Research	International	DOI: 10.1080/03772063.2021.1958070	
21	Performance Analysis of Hybrid Optimized Pi	K S KAVIN Dr.P.Subha Karuvelam	PERIODICO di MINERALOGIA	International	Volume 91, No. 4, 2022	0369-8963

	Controller For Sepic Converter Based Grid Tied Electric Vehicle	Dr.M.Gnan a Sundari				
22	Design of Intelligent Controller based High Gain DC-DC Converter for Microgrid applications	Kavitha P Dr.P.Subh a Karuvellam	PERIODICO di MINERALOGIA	Internati onal	Volume 91, No. 3, 2022	0369-8963
23	A Novel Controller for Microgrid Interactive Hybrid Renewable Power Sources	Kavitha P Dr.P.Subh a Karuvellam	Intelligent Automation & Soft Computing	Internati onal	vol.34, no.2	10.32604/i asc. 2022.02303 5 ISSN No: 10798587, 2326005X

13. Books /Course Materials Published:

- i) Course Material published for the subject “ Solid State Drives ” with the link <https://drive.google.com/drive/folders/1rGOhDXX8CIIetpms9O6s1y4x8-Qrusb9?usp=sharing>
- ii) Course material prepared for the subject “Power Electronics” with the link https://drive.google.com/drive/folders/15r58B_h3R0OezXVODVFCFZ7wMxHNNIY8?usp=sharing

14. Academic Research guidance / Supervisor ship:

S.No	Name of Research Scholars	Course / M.Phil / Ph.D	Area of Research / Work	Status
1	Suja R	Ph.D	Torque Ripple Minimization in PMSM	Completed
2	Muthuramkumar A	Ph.D	Non active Power Loss Minimization in DC-DC converter for Distributed Power System	Course Work Completed
3	Kavitha P	Ph.D	Modelling and Technical Benefits of Multilateral AC/DC Interconnections in Power System	Confirmation completed
4	Kavin K S	Ph.D	Design and analysis of dc-dc converter for bldc motor with power factor correction	Confirmation completed
5	Malathi P	Ph.D	Model reference adaptive control of dstatcom for grid integration of wind energy conversion systems	Confirmation completed
6	Selvaprabha S	Ph.D	Renewable Energy system based Grid	Doing their Course work
7	Fabbina C	Ph.D	Optimised Controllers based High Speed Switched Reluctance Generator For Micro Grid Applications	Doing their Course work
8	Priyadharsini S	Ph.D	Renewable energy based self recharging mechanism for electric vehicle	Doing their Course work

15. List of R&D and Consultancy Projects with Approvals and Project Completion Reports:

a) R & D Project: NIL

b) Consultancy Project: NIL

16. **Seminars/Guest Lectures/Conferences/Workshops/FDP/Pedagogical Initiates Organized:**

NIL

17) Seminars/Guest Lectures/Conferences/Workshops/FDP/Pedagogical Initiates Attended:

FDP attended for CAY, CAYm1, CAYm2					
Sl. No.	Title of Training Programme	Institution	Duration		No. of Days
CAYm2 : 2018-19					
NIL					
CAYm1: 2019-20					
1.	Design, Develop and Deliver Online Courses through MOODLE Platform	SPIU Tamil Nadu and CIT Coimbatore	23.04.2020	24.04.2020	02
2	Grid Connected and Standalone Microgrid design using HOMERpro	Erode Sengunthar Engg College (online mode)	14.5.2020		1
3	Challenges in Design of Power Converter for Grid Integration	FXEC (Online mode)	21.5.2020		1
4	Power quality issues and it's improvement techniques in a grid connected system"	REC (online mode)	23.5.2020		1
CAY: 2020-21					
1	Renewable Energy Systems	Panimalar Institute of Technology (Online mode)	8.6.2020	12.6.2020	One Week
2	MATLAB Programming for Meta-Heuristic Multi-Objective Optimization Tools – Hands on Training	GCT, Coimbatore (online mode)	22.6.2020	26.6.2020	One Week
3	Data Handling and data visualization using PYTHON	GCE, Tirunelveli (online)	6.7.2020	10.7.2020	One Week
4	Energy Manager and Auditor (Online)	PSG College of Technology, Coimbatore	04.01.2021	08.02.2021	30
2021-22					
1	Online workshop on NAAC	Jharkhand Government Tool Room, Ranchi	13.12.2021	18.12.2021	One Week

18. Faculty Interaction with Outside World:

Reviewer Details in Journal of Electrical & Electronics Engineering & Technology (Springer)					
1	EETE-D-19-00847	Title of Manuscript A Study on the Multiple Control Techniques for LED Dimming of Single Stage LLC Resonant Converter	Accept	08 Aug 2019	28 Aug 2019
2	EETE-D-19-00579	Common Bus Stability Enhancement Scheme of Multiple Converters with Input Filters in DC Microgrid System	Reject	03 Jun 2019	05 Jul 2019
3	EETE-D-19-00388	Robust Adaptive Sliding-mode Control for Permanent Magnet Spherical Actuator with Uncertainties Using Dynamic Surface Approach	Accept	17 Apr 2019	18 May 2019
4	EETE-D-19-00184	Zeta-Firefly MPP Optimizer for Variable Irradiance Condition	Reject	26 Mar 2019	19 Apr 2019
5	EETE-D-18-00025	A Simplified Common-mode Voltage Suppression and Neutral-point Potential Control for the NPC Three-level Inverter	Accept	10 Feb 2019	16 Mar 2019

19. Membership in professional societies:

S.No	Name of the Tech Body	Membership No	Details of membership
1	Indian Society for Technical Education	32730	MISTE
2	Institution of Engineers (India)	1562481	MIE
3	International Association of Engineers	190396	IAENG
4	Institute for Exploring Advances in Engineering	IEAE2017E473	IEAE

20. Awards/Letters/Certificates/Prizes/Medals/Honors received, if any: NIL

21. Contribution to the College

Responsibilities held	Nature of activities for the betterment of College
Co-ordinator – Secretarial Committee of XIII BOG	Prepared the minutes of the meetings, maintaining records, administration, flow of information/communication and settling of amount.
Member of Building & Works committee in XIII BOG	Assisting the coordinator to conduct and prepare the meeting and its minutes
Co-ordinator for Student Affairs Committee of XIII BOG	Convened the meeting with the members and submitted the report to the Principal
Assisting the written examination for Government Departments conducted on 30.12.2018	Served as hall invigilator
Zonal Officer, Zone XVI, Anna University, Chennai	Co-ordinating conduct of Theory and Practical Examinations and valuation of answer scripts. Solving the web portal related issues of the students & faculty members
Member of Academic Council of Sethu Institute of Technology	Suggestions were given for overall academic development of Institution
Inspection of College of Commerce on 12.7.2019	Inspected and submitted the report to The Principal, GCE, TLY

22. Contribution to the Department

Responsibilities held	Nature of activities for the betterment of the Department
Faculty advisor	Anna University Web Portal Entries from admission to the completion of the program, Bio Data, Master Attendance Register, Result analysis, Exam fee payment etc. and Students counseling.
Purchase Officer	Co-ordinating all the purchases of department

23. Faculty travel for official purpose:

To attend the Zonal Officers meeting in Anna University, Chennai

24. Industrial Visits: Accompanied the students **for 4 Industrial Visits.**

Sl.No	Date	Name of the Industry	Remarks
1	31.08.2018	Papanasam Power Station, Tirunelveli Dist	
2	22.2.2019 & 23.2.2019	PSG Industrial Institute, Coimbatore Ooty Tea Factory, Ooty	
3	28.09.2019 to 01.10.2019	Visweavaraya Industrial Technological Mus HALL Mus & Banglore Keynes Technology India Pvt Ltd., Mysore	
4	6.5.2022	Kothayar Power Station, Tirunelveli Dist	

25. Any other activities

Signature

HOD/EEE