


SRI SAIRAM ENGINEERING COLLEGE

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

1. Name : P.Shanmugapriya	
2. Designation:	Assistant Professor
3. Qualification :	M.E., (Ph. D)
4. Area of Specialization :	ELECTRICAL
5. Experience :	Teaching : UG: 16years PG: 10 years Industry : nil
6. No. of workshop : FDP attended :	No. of workshops attended : 7 No. of FDP/STTPattended :30 No. ofworkshops organized : 3
7. Publication :	Journal National : - International : 8 Conference National : 8 International : 7
8. Research Guidance :	-
9. General :	.

10. Staff Achievements:	<ul style="list-style-type: none"> • Delivered Lecturer during Anna University sponsored 7 days FDP on EE6503 –Power Electronics on June 4th 2015 on the topic “Forced commutated Chopper”
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Professional Experience: 16 Years

Total Teaching Experience: 16 years

- Assistant Professor in Sri Sairam Engineering College since 1.10.2010 till date.
- Lecturer in Sri Sairam Engineering College from 13.6.2008 to 31.9.2010.
- Lecturer in Panimalar Engineering College from 01.6.2006 to 15.5.2008
- Lecturer in S.A Engineering College from 26.6.2003 to 14.4.2004.

Areas of Interest

- ☐ Power Electronics
- ☐ Microprocessor and Microcontroller
- ☐ Embedded systems
- ☐ Power Electronics for Renewable Energy Systems
- ☐ Wind Energy Conversion Systems
- ☐ Power Quality
- ☐ Microcontroller Based System Design
- ☐ Design of Electrical machines

Current Research

Optimization of distributed generation considering its dispatch strategy using IOT technique.

PUBLICATION DETAILS

International Journal

1. **Shanmugapriya, P.,** Kumaran, M.S., Baskaran, J. et al. Flexible Dispatch Strategy Adopted by Optimizing DG Parameters in a Real Time Power System Distributed Network. J.Electr.Eng.Technol. 17, 847–861(2022). <https://doi.org/10.1007/s42835-021-00938-8>
2. **P.Shanmugapriya** published a paper titled “Optimization of DG parameters in the distributed network in the presence of Battery Powered Energy Source using Differential Evolution algorithm” in Solid State technology vol 63,issue 6 **2020**
3. **P.Shanmugapriya** published a paper titled “**Comparative Study on Performance analysis of SEPIC/Modified SEPIC Converter with PI Controller**” Test engineering and Management May - June 2020 ISSN: 0193-4120 Page No. 16863 - 16867
4. **P.Shanmugapriya** published a paper titled “**Analysis of Variable Speed Micro Wind Energy Generator Using SEPIC Converter**” International Journal of Emerging Trends in Engineering Research Volume 8. No. 4, April 2020
5. **P.Shanmugapriya** published a paper titled “**Overcurrent and Earthfault Relay Coordination for Microgrid with Numerical Relay Features**” in IJITEE ISSN: 2278-3075, Volume-9 Issue-3, January 2020
6. **P.Shanmugapriya** published a paper titled “**IoT Based Approach in a Power System Network for Optimizing Distributed Generation Parameters**” [Computer Modeling in Engineering & Sciences, Volume 119, Number 3, June 2019, pp. 541-558\(18\)](#)
7. **P.Shanmugapriya** published a paper titled “**A Novel Control Technique of Bridge less Interleaved Boost Converter with Time Domain Parameters**” in IJARIE ISSN(O):2395-4396 in 2017.
8. **P.Shanmugapriya** published a Paper titled “**Analysis and Design of Soft Switching based Interleaved Fly back Converter for Photovoltaic Applications**” in International Journal of Engineering Science Invention Research & Development, e- ISSN: 2349 – 6185 Volume 2, Issue 8, February 2016.
9. **P.Shanmugapriya** published a Paper titled “**Design and Analysis of Three-Port SEPIC & Zeta Converter for Photovoltaic Applications**” in the International

Journal of Novel Research in Electrical and Mechanical Engineering, ISSN: 2394-9678(online), Vol 03, issue 02, Jun 20 2016, Novelty journals

10. P.Anitha and P.Shanmugapriya (2012) “**Design and Simulation Of Pulse Density Modulation Based Series Resonant Inverter System**”, in International Journal of Communication Engineering Application, ISSN : 2230-8504;e-ISSN-2230-8512,Vol 03,Issue 01,Feb 2012, © 2011-Technical Journals Publishing,

International Conference

1. P. Shanmugapriya, M. S. Kumaran, J. Baskaran, C. Nayanatara and P. Sharmila, "Optimal Placement of Distribution Generator by Incorporating Demand Response Strategy for Residential and Industrial User," *2021 4th International Conference on Computing and Communications Technologies (ICCCT)*, 2021, pp. 403-409, doi: 10.1109/ICCCT53315.2021.9711824.
2. M. SureshKumar, M. P. Shanmugapriya, A. Ramesh and M. Parthasarathy, "A Novel Recommended Approach for Optimized Smart Electricity using Deep Learning," *2021 International Conference on Advancements in Electrical, Electronics, Communication, Computing and Automation (ICAECA)*, 2021, pp. 1-5, doi: 10.1109/ICAECA52838.2021.9675747.
3. M. Suresh Kumar, G. Janaki, S. Hariharan and **P. ShanmugaPriya**, "IoT Based Warning System from the Threat of Wild Animals," *2021 6th International Conference on Communication and Electronics Systems (ICCES)*, 2021, pp. 550-553, doi: 10.1109/ICCES51350.2021.9489181.
4. **P.Shanmugapriya** Presented paper on “IOT enabled temperature sensing system of molten metal in welding” *Materials Today: Proceedings*, 2021, 45, pp. 2514–2517
5. **P.Shanmugapriya** Presented paper on “Scheming Electrical Wheel Chair by Sensing Brain GDTAB Waves of Physically Challenged & Hamstrung People” in ICPECTS 2020 held during 10th and 11th December 2020 .
6. **P.Shanmugapriya** Presented paper on “Optimization of Renewable Energy Parameters for Maximizing Power Output” in ICPECTS 2020 held during 10th and 11th December 2020 .
7. P.Shanmugapriya Presented paper on “GA based Simultaneous Optimization of hybrid Distributed Generation in the Power System Network’ in ICPECTS 2020

held during 10th and 11th December 2020 .

8. P.Shanmugapriya Presented paper on the theme Water Crisis and Conservation (theme for special poster session titled “ADVANCED METHOD OF WATER TREATMENT BY NANO PARTICLES” in YOUNG SCIENTIST CONFERENCE at India International science Festival 2019 ,Kolkata.
9. **P.Shanmugapriya**, J.Baskaran, C.Nayanatara published paper titled “ **A Control Strategy adopted for improving Transient Stability in EESG based Wind Turbines**” in International Conference on Power, Energy, control and Transmission systems-2019 held during 27nd and 28th March 2019
10. **P.Shanmugapriya** Presented paper titled “**Gesture Controlled Bomb Deployer Bot**” in International Conference on Power, Energy, control and Transmission systems-2018 held during 22nd and 23rd February 2018.
11. P.Devipriya, T.Sneha, **P.Shanmugapriya** presented paper titled “**Design of Numerical relay For Over Flux and Over current protection in Transformers**” in International Conference on Power, Energy, control and Transmission systems-2018 held during March 2018
12. **P.Shanmugapriya** Presented paper titled “A Comparative Analysis on Different Control Techniques of Bridgeless Interleaved Boost Converter with Time Domain Parameters” International conference on Computational Power, Energy, Information and Communication-2017 held on March 22nd 2017
13. P.Shanmugapriya Presented paper titled “**Asymmetric Topology For Cascaded Sub- Multilevel Inverter Using Staircase Modulation Technique**” International conference on recent innovation in engineering & technology on 13th and 14th Feb 2015.
14. P.Shanmugapriya Presented Paper titled “ **Hybrid PWM based Z-source inverter applied to high power three level inverter fed induction motor**” in the international conference on Computation of power, energy, information and communication at Adhiparasakthi Engineering College on 17th and 18th April 2013.
15. P.Shanmugapriya Presented Paper titled “**Bridgeless Sepic Power Factor Correction rectifier for unity power factor**” in the International Conference on Computational Intelligence and advanced manufacturing Research” at Vel’s University on 5th and 6 th April 2013.

16.P.Shanmugapriya Presented Paper titled “Obtaining Unity power factor using two Quadrant shunt active filter” in the International Conference on Computing Techniques, Embedded System and Drives at PPG Institute of Technology on 7-9th march 2012.

17. P.Shanmugapriya Presented paper titled “**Design and Simulation of Pulse Density Modulation based Series Resonant Inverter System**” in the International Conference on ICICES-2012, at Coimbatore Institute of Technology

National Conference

- a. Presented paper titled “**Comparative study Between 2-D Method & Ferrari method to Control Torque of IPMSM**” in National conference on Innovation & challenges in Electrical and Electronics Engineering at Sri Sairam Engineering College on 18th Feb 2014.
- b. Presented Paper titled “ **Hybrid PWM based Z-source inverter applied to high power three level inverter fed induction motor**” in the national conference on Recent trends in renewable energy technology at RRASE college of engineering on 23 Feb 2013
- c. Presented Paper titled “ **Comparative Analysis of SEPIC Power Factor Correction Rectifier for Unity Power Factor and Conduction loss**” in National Conference on Recent Trends in renewable energy Technology at RRASE college of engineering on 23 Feb 2013
- d. Presented Paper titled “**Improving the efficiency of series resonant inverters by pulse density modulation**” in the National Conference on Technological Advancement in Power system and Power Electronics Engineering at Eswari Engineering College on 2012
- e. Presented Paper titled “**Study of two Quadrant active Power Filters using Voltage Source PWM converters for harmonic compensation**” in the National conference on Innovative Techniques in Power Engineering and Drives at Vellammal engineering college on 22nd March 2012
- f. Presented paper titled “**Power Factor Correction of Single Phase Rectifier Based On Two Quadrant Shunt Active Filter**” in the National Conference On Technological advancements in Power system and Power Electronics Engineering at Sri Venkateshwara College of Engineering on 17th and 18th Feb 2012
- g. Presented Paper title “**A Novel Technique for power factor correction using**

Active Filter” in National conference On Modern Trends in Electrical and Electronics System on 22nd and 23rd march 2006

Seminar & Training attended

1. Participated & completed successfully AICTE Training And Learning (ATAL) Academy **Online Elementary** FDP on "**Nature Inspired Optimization Techniques**" from **2021-7-19** to **2021-7-23** at **National Institute of Technology Delhi**.
2. Participated in the Faculty Development Programme (FDP) on “Interactive Approaches in Handling Renewable Energy Systems Laboratory for the New Normal” organized by Sri Sivasubramaniya Nadar College of Engineering during June 29 – July 02, 2021.
3. Participated in the Online AICTE Recognized Faculty Development Programme on Development of Residential Micro grid (in collaboration with Typhoon) from 07/06/2021 to 11/06/2021 Conducted by NITTTR, Chandigarh
4. Participated & completed successfully AICTE Training And Learning(ATAL) Academy Online FDP on "**Electrical & Computer Engineering**" from **2021-1-4** to **2021-1-8** at **Swami Keshvanand Institute of Technology, Management & Gramothan, Jaipur**.
5. Participated & completed successfully AICTE Training And Learning(ATAL) Academy Online FDP on "**Learning Management Systems**" from **15-3-2021 to 19-3-2021** at **NITTTR, Chennai**.
6. Participated & completed successfully AICTE Training And Learning (ATAL) Academy Online FDP on "Artificial Intelligence" from 04-05-2020 to 08-05-2020 at MOTILAL NEHRU NATIONAL INSTITUTE OF TECHNOLOGY ALLAHABA.
7. Attended Five days FDP on RENEWABLE ENERGY SYSTEMS from 8th June to 12th 2020 at Panimalar Institute of Technology through online mode .
8. Participated & completed successfully AICTE Training And Learning (ATAL) Academy Online FDP on "Artificial Intelligence" from 04-05-2020 to 08-05-2020 at MOTILAL NEHRU NATIONAL INSTITUTE OF TECHNOLOGY ALLAHABA
9. Successfully completed the ARPIT Course for Career Advancement Scheme (CAS) promotion Big Data Analytics For Smart Grid with a "B" Grade in the

proctored examination held on 16.02.2020 NITTTR Chandigarh

10. Completed a course on an online learning initiative of Indian Institute of Technology Bombay. LaTeX101x: LaTeX for Students, Engineers, and Scientists an online course conducted from 24 September 2019 to 2 December 2019 secured grade A+

11. Participated & completed successfully AICTE Training And Learning (ATAL) Academy FDP on "Artificial Intelligence" from 04-12-2019 to 08-12- 2019 at IIITDM Kancheepuram.

12. Two weeks AICTE Sponsored FDP on “Challenges of Integrating Wind and Solar into the Electricity Grid using information Communication Technology”
Department of Electrical and Electronics Engineering, RMK Engineering College, from 14th June to 27th June 2019.

13. Three days TEQIP-III Sponsored Workshop on “Energy Conclave 2018”
Department of Electrical and Electronics Engineering Thiagarajar College of Engineering, Madurai during 17-19, Dec 2018.

14. “Two days International level Hands on Workshop on Smart Microgrids And Energy Storage using HOMER” organized by School of electrical Engineering (SELECT), Vellore Institute of Technology ,Chennai from 9th to 10th March 2018

15.AICTE Sponsored “Two Week Faculty Development Programme on Smart Grid and Internet of things (IOT): The Future Energy Delivery Systems”
organized by Sri Ramakrishnan engineering college from 27th Nov to 10th Dec 2017.

5.National level Faculty development program on Electrical Simulation Software
organized by Sri Sairam Engineering college on 6th to 10th Nov 2017.

6. Simulation workshop on Power Electronics & Electric drives organized by SSN college of Engineering on 5th and 6th Aug 2016.

7. Workshop on Simulation of Power Electronic Circuits from 21-4-15 to 23-4-15 at Sri SaiRam Engineering College

8. National Level Seminar on Sustainable energy for all ideas and approaches with the focus on smart micro grid Organized by VIT –Chennai on 22nd Mar 2014

9. AICTE sponsored National Seminar on Current Trends and Future role of Renewable energy at SSEC on 8& 9 Oct 2013

10. National Workshop on” Advanced Power Electronics Interface for Distributed Energy” at SSN college of engineering on 20 &21st Sep 2013

11. **FDP on Applications of FACTS in Power Electronics & Power Systems** on 27th Feb 2013 at SSEC.
12. **National Level Workshop on Smart Grid Technologies : Opportunity and Challenges Organized** by VIT –Chennai on 5th Nov 2012
13. Faculty Development Programme on **Power Flow Solution and Demo on CYME Power Engineering Software** at SSEC on 27th Jan 2010.
14. **National Workshop on Advance in Design and control for Performance Enhancement In Permanent Magnet Motors** Conducted by Pondicherry Engineering College and DRDO on April 20th and 21st 2011
15. Internal Quality Auditor Training Programme on Quality Management System and Audit Training ISO 9001-2008 Creative Management Consultants, Chennai, 11th and 12th October 2011
16. National Seminar On **Research Methodologies In Next Generation Using OPNET** at SSEC from 19-8-10 to 21-8-10
17. Workshop on Recent Trends In **Evolutionary Computation In Electrical Engineering** Organized by B.S Abdur Rahman University On 2nd Nov 2010
18. AICTE Sponsored Staff Development Programme (SDP), **Mobile Networks**, Sri SaiRam Engineering College, Chennai – 19th to 30th Jan 2009.
19. Attended Faculty Development Program on **Control System** at SSEC on 13th Feb 2009
20. Participated in **Mission 10X Workshop** at Sri SaiRam Engineering College, Nov 2- Nov 6 2009 conducted by WIPRO.
21. Workshop on **Power Electronics and Drives** organized by Vi Microsystems Pvt Ltd, Chennai on 23rd Dec 2009
22. Faculty Development Program on **BioMedical Instrumentation** at Sri Sairam Engineering College from 3rd to 15th Dec 2007.
23. Faculty Development Program on **Non-Linear Control System** at College Of Engineering, Guindy From 4th to 16th Dec 2006
24. Faculty Development Program on **VLSI Design and Application** at Panimalar Engineering College in Sep 2006

Other Activities

- Dept NBA Coordinator and Test Co-ordinator
- Microprocessor and Microcontroller Lab Incharge, Sri Sairam Engg College,

- Department Placement Co-ordinator for 2 years in Sri Sairam Engg College,
- Organizing – National Conference on , Sri Sairam Engg College
- Examiner in Anna University, other Universities.
- Guiding Students Projects (internal and external).
- Presented AICTE MODROB project at AICTE, New Delhi.
- Actively involved in all Departmental Activities like Technical Symposium, Industrial Visit, Educational Tours, Workshops and Seminars

No. of Projects Completed / On-going as Chief Coordinator / co-investigator in the Following format:

S.No.	Name of the Funding Agency(AICTE/ Others)	Name of the Scheme	Programme Title	Year of Funding	Duration	Amount Sanctioned	Status Completed /Ongoing
1	AICTE	MODROB	MODERNISATION OF CONTROL SYSTEMS LABORATORY	2012	1YEAR	10,00,000	completed

Patents:

Faculty Name	Title Of Invention	Inventors	Application Name	Date of Filing	Publication Date(U/S 11A)	Status
P.Shanmugapriya	ENHANCED DESIGN OF AUTOMATED STILL BASED ON STEAM GENERATION	P.SHANMUGAPRIYA J.AISHWARYA S.SHIVA RANCHANI	201741027973	7/08/2017	11/8/2017	Request for Examination
	HEURISTIC WINDMILL STRUCTURE CONSIDERING BLADE DESIGN TO OBTAIN THE MAXIMUM POWER OUTPUT	P.SHANMUGAPRIYA C.NAYANATARA P.SHARMILA	202041045363 A	19/10/2020	30/10/2020	PUBLISHED
	IOT BASED AUTOMATED TOILBOTS	P.SHANMUGAPRIYA C.NAYANATARA P.SHARMILA D.ARULSELVAM PUTHLIBAI.G	202041045363 A	19/10/2020	30/10/2020	PUBLISHED
	POWER PRODUCTION FROM WASTE WATER USING MICROBIAL	1.DR.G.PUTHLIBAI 2.MS.P.SHANMUGAPRIYA 3.MS.R.JEYASHRI 4.DR.S.VASUDHEVA	202041054209	14/12/2020	18/12/2020	Published

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Programmes Organized

- ✓ 1. 15 days AICTE Sponsored Faculty Development Program on Transmission and Distribution at Sri SaiRam
- ✓ Engineering College, Chennai
- 2. Conference Co-Chair for IEEE Sponsored International Conference on Power, Control and Transmission Systems (ICPECTS) in the year 2020.
- 3. Organize 3 days ALUMINI TALK ON 1ST JUNE TO 3RD JUNE 2020 for II, III,IV year EEE students