


**Sri Sai Ram Engineering College**  
**Department of Electrical and Electronics Engineering**

<p>1. Name :</p> <p style="text-align: center;">Dr.SHARMILA P</p>	
<p>2. Designation:</p>	<p>Associate Professor</p>
<p>3. Qualification :</p>	<p>Ph.D</p>
<p>4. Area of Specialization :</p>	<p>Distributed Generation, Demand side management, High Voltage Engineering</p>
<p>5. Experience :</p>	<p>Teaching : <b>UG:</b> 17 yrs  <b>PG:</b> 5 yrs  Industry : 1 year</p>
<p>6. No. of workshop : FDP/Seminar attended :</p>	<p>8 31</p>
<p>7. Publication :</p>	<p><b>Journal</b> International : 9  <b>Conference</b> International : 20 National : 3</p>
<p>8. Research Guidance :</p>	<p>-</p>
<p>9. General :</p>	<ol style="list-style-type: none"> <li>1. Completed NPTEL Online Certification course on “Power System Protection and Switch gear ” under <b>top 5 Category</b> with a score of 87% during July-Sep 2024</li> <li>2. Completed NPTEL Online Certification course on “Smart Grid- Basics to Advanced Technologies ” under <b>top 5 Category</b> with a score of 83% during Jan to April 2024</li> <li>3. Completed NPTEL Online Certification course on “Power System Engineering” under <b>top 5 Category</b> with a score of 84%</li> <li>4. Completed NPTEL Online Certification course on</li> </ol>

	<p>“Introduction to Soft Computing” with <b>Elite + Silver certificate</b></p> <ol style="list-style-type: none"> <li>5. Completed NPTEL Online Certification course on “Accreditation and Outcome Based Learning” with <b>Elite + Silver certificate</b></li> <li>6. <b>Team Captain</b> for Sairam ENSAV Club</li> <li>7. Organizer of 2021 <b>SAIRAM MUN 1.0</b></li> <li>8. Acted as “<b>Publication Chair</b>” for ICPECTS 2020</li> <li>9. Year Coordinator for 2021-2025 Batch</li> <li>10. Received “<b>AICTE Seminar Grant</b>” of <b>Rs.1,50,000</b> and Organized National Seminar in Oct 2013.</li> <li>11. Acted as Coordinator for organizing “Value Added Training Program”</li> <li>12. Acted as department ISO Coordinator.</li> <li>13. Acted as Project Coordinator.</li> </ol>
10. Staff Achievements:	<p>Received Certificate of Appreciation for being a <b>Reviewer for EPICS in IEEE Project Proposal Nov 2023</b></p> <p>Received Certificate of Appreciation for being <b>One of the Top 100 Mentors of ATL Tinkerpreneur 2023.</b></p> <p>Received Certificate of Appreciation from <b>IEEE YESIST12 2023</b> for being a <b>Mentor for the project “Crypto Currency Transactions for Drug Trafficking Over Darknet”</b></p> <p>Certificate of Appreciation from Mahatma Gandhi National Council of Rural Education (MGNCRE) as <b>Faculty Coordinator contributed to the World Environment Day Celebrations, June 2022.</b></p> <p>Participated in Wind Energy Summit 2022, NIWE.</p> <p>Received <b>GREEN9 ENSAV BEST ADVISOR AWARD 2020</b></p> <p>Appreciation as “<b>Most valuable Organizer</b>” in IGEN GREEN9 SDG Conclave 2020</p>

	Best Teacher Award for <b>Securing 100% Results</b> in Anna University Examination consecutively from 2008 to 2017 and 2019.
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## PROFESSIONAL SOCIETY MEMBERSHIP

1. Indian Society for Technical Education (ISTE) - LM131480
2. IEEE Senior Member - 95074108
3. International Association of Engineers (IAENG) - 321190

## PUBLICATION DETAILS

### International Journal

1. **Sharmila, P**, Senthilkumaran, M, Baskaran, J, Nayanatara, C 2022, „Heuristic DRP-DG optimization strategy adopted for maximizing total social welfare in the real time Indian utility network“, IET Renewable Power Generation, vol.16, no.14, pp. 3092-3107, **Impact Factor: 3.034**.
2. P.Shanmugapriya, MSKumaran, J Baskaran, C Nayanatara, P Sharmila, “Flexible Dispatch Strategy Adopted by Optimizing DG Parameters in a Real Time Power System Distributed Network” 2022, Journal of Electrical Engineering & Technology 17 (2), 847-861.
3. Aadit Vikas Malikayil, R Maheswari, H Azath, P Sharmila “Credit Score Improvisation through Automating the Extraction of Sentiment from Reviews” Journal of Computer Vision and Recognition Systems: Research Innovations and Trends, 2022, CRC Press, page:165
4. Maheswari.R, Sheeba Rani.S, Sharmila.P, Rajarao.S “Personalized secured API for Application Developer” Advances in Intelligent Systems and Computing, 2019.
5. R.Maheswari, S.Sheeba Rani, P.Sharmila, V.Gomathy “Solar Powered System on Chip for Meteorological Data Station” International Journal of Pure and Applied Mathematics, Vol 118, No.20, 2018.

6. Maheswari.R, Sheeba Rani.S, Gomathy.V, Sharmila.P, “Cancer Detecting Nanobot” using Positron Emission Tomography, Elsevier Procedia Computer Science, Vol 133, page No.315-322, 2018.
7. Maheswari.R, Pattibiraman.V, Sharmila.P, “Reconfigurable Field Programmable Gate Array – Based Soft Core Processor for Single Instruction and Multiple Data Applications” Asian Journal of Pharmaceutical and Clinical Research, April 2017, Online ISSN 2455-3891.
8. S. Gayathri, P.Sharmila, “A dynamic model of high gain DC-DC converter with multiphase switched capacitor for photovoltaic systems” International Journal of Novel Research in Electrical and Mechanical Engineering, Volume 3, Issue 2, pp: (12-16), Aug 2016, ISSN 2394-9678.
9. Sharmila.P, Shakthi Prasad.S, Adithiya.V, and Aravind.V, “Electroencephalography and MEMS based hybrid motion control system” International Journal of Industrial Electronics & Electrical Engineering Volume 3, Issue 5, 41-46, May 2015.

### **International Conference**

1. Sharmila.P , Nivedhitha.M, Sowndarya.R, Sivaanii.D, Shreya.R, Vishnupriya.K “Power Generation from rotational motion of a motor”, Grenze International Journal of Engineering and Technology, 2024.
2. P Sharmila, P Rohinth, G Sarvesh, P Priyadharshan, M Balasakthishwaran, S Gandhi “Next-Gen Parking Solutions”, 2024 International Conference on Communication, Computing and Internet of Things (IC3IoT)
3. P Sharmila, N Vasudevan, M Nivedhitha, R Yoghamithra, M Aravindh, D Divya, L Sahana, Niranjana Devy SJ, “Ecoflow femmecare - Sanitary Napkin Disposal Via Chemical Breakdown”, 2024 International Conference on Power, Energy, Control and Transmission Systems (ICPECTS)
4. D Saravanan, C Nayanatara, S Aishwarya, P Sharmila, P Muthumari “Optimizing Renewable Energy Integration through Demand Response Management: A Comprehensive Review” 2024 International Conference on Power, Energy, Control and Transmission Systems (ICPECTS)
5. P Sharmila, L Prisha, K Dhaarani, GS Vishal “Fog Penetration Radar” 2024 International Conference on Power, Energy, Control and Transmission Systems (ICPECTS)

6. D Arulselvam, C Nayanatara, P Sharmila, M Priyadharshini, “IoT Based Robot for Domestic Surveillance Using ESP-NodeMCU” 2023 Intelligent Computing and Control for Engineering and Business Systems (ICCEBS)
7. **Sharmila, P**, Senthilkumaran, M, Baskaran, J, Nayanatara, C, Shanmugapriya, P, “Energy saving through optimal DG dispatch with DSM for residential consumer” IEEE International Conference on Power, Energy, Control and Transmission Systems (ICPECTS), 2022.
8. P.Sharmila, Rohinth P, Sarvesh G, Priyadarshan Prakash “Advanced car parking system” IEEE International Conference on Power, Energy, Control and Transmission Systems (ICPECTS), 2022.
9. **P Sharmila**, C Nayanatara, P Shanmugapriya “Power Plant Automation Using SCADA in a Gas Insulated Substation”, 2022 International Conference on Communication, Computing and Internet of Things (IC3IoT)
10. Shanmugapriya, P., Kumaran, M.S., Baskaran, J., Nayanatara, C., **Sharmila, P**. “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, 2021, pp. 403–409
11. Ravikumar, N., **Sharmila, P.**, Premnath, S.P., Khan, J.M.F., Subbiah, R. “Performance and optimization of parameters on rubber punching process” Materials Today: Proceedings, 2021, 45, pp. 2581–2583
12. **Sharmila, P**. Baskaran, J. Nayanatara, C. Cs, S.G. Haariharan, C.N. presented the paper titled “Congestion Management in Deregulated Power Systems using Genetic Algorithm”, IEEE International Conference on Power, Energy Control and Transmission Systems (ICPECTS), 2020.
13. Nayanatara, C. **Sharmila, P**. Shanmugapriya, P. Janani, T. Sai Ganesh, C.S. presented the paper titled “Optimization of Renewable Energy Parameters for maximizing Power output”, IEEE International Conference on Power, Energy Control and Transmission Systems (ICPECTS), 2020.
14. Shanmugapriya, P. Baskaran, J. Nayanatara, C. **Sharmila, P**. Haariharan, N.C. presented the paper titled “GA based Simultaneous Optimization of hybrid Distributed Generation in the Power System Network”, IEEE International Conference on Power, Energy Control and Transmission Systems (ICPECTS), 2020.
15. **Sharmila.P**, Baskaran.J, Nayanatara.C, R.Maheswari, “A hybrid technique of machine learning and data analytics for optimized distribution of renewable energy resources targeting smart energy management” International Conference on Recent Trends in Advanced Computing (ICRTAC-DTI 2019) held during 11th and 12th November 2019.

16. Maheswari, R., Azath, H., **Sharmila, P.**, Sheeba Rani Gnanamalar, S. “Smart Village: Solar Based Smart Agriculture with IoT Enabled for Climatic Change and Fertilization of Soil” IEEE 5th International Conference on Mechatronics System and Robots, ICMSR 2019
17. Abinaya .M, Survenya.S, **Sharmila.P**, Dr.J.Baskaran, “Design and implementation of Aquaculture monitoring and controlling system” International Conference on Computation of Power, Energy, Information and Communication”, Adhiparasakthi Engineering College, March 27<sup>th</sup> & 28<sup>th</sup> 2019.
18. Ramya.Y, Maheswari.R, **Sharmila.P**, “Iot Based Water & Flouride Monitoring & Controlling System in Rural Areas” International Symposium on Big Data and Cloud Computing Challenges, VIT University, Chennai Campus, Tamilnadu, March 9<sup>th</sup> – 10<sup>th</sup>, 2017.
19. S.Gayathri, **P.Sharmila**, “An Optimized design of multiphase resonant switched capacitor DC-DC converter for PV applications” International conference on computation of Power, Energy Information and Communication, March 2016, Melmaruvathur.
20. Maheswari.R, **Sharmila.P**, Anti- Pilferage machine: “A Novel Technique for Automating Ration Billing” International Conference on Mathematical Modeling and Computer Simulation with Application, 45-48, 2013, IIT Kanpur.

### National Conference

1. Sharmila.P, Shakthi Prasadh.S, “**Electroencephalography and MEMS based hybrid motion control system**” A three days“ National Exhibition and Symposium on Innovative & Futuristic Approaches in Science and Technology, Maulana Azad National Institute of Technology, Bhopal, 26<sup>th</sup> to 28<sup>th</sup> Feb 2015,
2. Thiruvengadam, Sharmila.P, “**Modified single input multiple output DC-DC Converter**” National Conference on Innovative & Emerging Trends in Engineering and Technology, Panimalar Institute of Technology, 14<sup>th</sup> May 2015.
3. Sharmila.P “**Investigation of Transformer Inrush Current**” National Conference on Emerging Trends in Electrical Engineering and Power Drives, April 2008, Govt. college of Engineering, Tirunelveli.

## Seminar & Training attended

1. Short Term Training Programme on “**Energy Audit and Demand Side Management**” conducted by the Department of Electrical and Electronics Engineering, **College of Engineering**, Anna University.
2. Short Term Training Programme on “**High Voltage Testing Techniques**” conducted by the Department of Electrical and Electronics Engineering, **College of Engineering** Anna University.
3. Short Term Training Programme on “**Pollution of Power Supply- causes and mitigation**” conducted by the Department of Electrical and Electronics Engineering, **College of Engineering**, Anna University.
4. Short Term Training Programme on “**Modeling of FACTS Devices and its Applications**” conducted by the Department of Electrical and Electronics Engineering, **SRM University**.
5. Seminar on “**Promoting Excellence in Technical Education - The Deemed University Model**” organized by **Velammal Engineering College** and **ISTE Staff Chapter** – VEC.
6. Faculty Development Programme on “**Electro magnetic Theory**” conducted by the Department of Electrical and Electronics Engineering, Valliammai Engineering College.
7. Faculty Development Programme on “**Control Systems**” conducted by the Department of Electrical and Electronics Engineering, Sri Sai Ram Engineering College.
8. Workshop on “**PLC and its Applications**” organized by the Department of Electrical and Electronics Engineering, Sri Sai Ram Engineering College.
9. Workshop on “**An Overview of OrCAD**” organized by the Department of Electrical and Electronics Engineering, Sri Sai Ram Engineering College.
10. Faculty Development Programme on “**VHDL Programming**” conducted by the Department of Electrical and Electronics Engineering, Sri Sai Ram Engineering College.

11. Faculty Development Programme on **“Power Flow Solutions and Demo on CYME Power Engineering Software”** conducted by the Department of Electrical and Electronics Engineering, Sri Sai Ram Engineering College.
12. Faculty Development Programme on **„High Voltage in Power System and Power Quality“** organized by IEEE Madras Section at Jeppiar Engineering College.
13. Workshop on **„Smart Grid Technologies: Opportunities and Challenges“** organized by the Department of Electrical and Electronics Engineering, VIT University – Chennai campus.
14. Faculty Development Programme on **“Application of FACTS in Power System and Power Electronics”** conducted by the Department of Electrical and Electronics Engineering, Sri Sai Ram Engineering College.
15. AICTE Sponsored National Seminar on **“Current Trends and Future Role of Renewable Energy”** conducted by the Department of Electrical and Electronics Engineering, Sri Sai Ram Engineering College.
16. National Seminar on **"Sustainable Energy for All-Ideas and Approaches with A Focus on SMART MICROGRID"** School of Electrical Engineering, VIT University – Chennai on 22<sup>nd</sup> March 2014.
17. **“Three days Entrepreneurship Awareness camp”** sponsored by NSTEDB, Dept of Science and Technology and organized by IEDC, Sri Sai Ram Engineering College during the period 18<sup>th</sup> to 20<sup>th</sup> March, 2015.
18. **“Simulation Workshop on Power Electronics & Electric Drives”**, Department of Electrical and Electronics Engineering, SSN College of Engineering, Aug 5-6, 2016.
19. **Two weeks AICTE Sponsored FDP on “Smart Grid and Internet of Things: The Future Energy Delivery System”**, Department of Electrical and Electronics Engineering, Sri Ramakrishna Engineering College, Coimbatore from 27<sup>th</sup> Nov to 10<sup>th</sup> Dec 2017.
20. **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.



21. **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 14<sup>th</sup> June to 27<sup>th</sup> June 2019.
22. One week Short-Term Course on **“Machine Learning and Applied Optimization Applications in Engineering”** from December 21 to 25, 2021, NIT – Jalandhar.
23. One week “Faculty Industrial Training Program” at I.P.L. PRODUCTS from 13.06.22 to 18.06.22
24. IEI All India Seminar on Application of **“Artificial Intelligence and Machine Learning in Electrical Engineering”** held on 27<sup>th</sup> and 28<sup>th</sup> July 2022, SSEC.
25. Industry Powered FDP on **“Emerging Smart Technologies”** during 28-29 Sept 2022, L&T Campus, Chennai.

### **ATAL FDP Attended**

1. AI Applications
2. Internet of Things
3. Sustainability Engineering
4. Green Technology and Sustainability Engineering

### **NPTEL Online Certification**

1. Completed NPTEL Online Certification course on “Power System Protection and Switchgear ” under **top 5% Category** with a score of 87% during July-Sep 2024
2. Completed NPTEL Online Certification course on “Smart Grid- Basics to Advanced Technologies ” under **top 5% Category** with a score of 83% during Jan to April 2024
3. Power System Engineering under **Top 5 % Category** with a score of 84%
4. Introduction to Soft Computing with **Elite + Silver certificate**
5. Accreditation and Outcome Based Learning with **Elite + Silver certificate**

## **AICTE Recognized FDP**

1. Completed “Soft Computing Techniques Applied to Power Systems” at VASAVI College of Engineering from 16/12/2024 to 21/12/2024.
2. One week AICTE recognized Faculty Development Programme on “**Smart Grid and Renewable Energy Sources**” from 29.08.22 to 02.09.22, NITTTR, Chandigarh.
3. “Components of Research Process in Engineering” from 20.02.2022 to 25.02.2022 organized by Indian Institute of Information Technology, Nagpur.
4. “Development of Residential Micro grid” (in collaboration with Typhoon) 07/06/2021 to 11/06/2021 conducted by NITTTR.
5. “Neural Networks and CNN” from 11.5.2020 to 15.5.2020 organized by NITTTR.

## **SKILL DEVELOPMENT COURSE**

1. Completed 100 hours online course on “Industrial Power System Analysis” using power system simulation software, ETAP at M/s. Power Projects from 17/06/2024 to 04/09/2024.
2. Attended a Technical session on “Indian Standards to become a Master Trainer on Indian Standards” organized by the Bureau of Indian Standards, held on 10.12.2024

## **Patent Filed:**

<b>Title of Invention</b>	<b>Application No</b>	<b>Date of Filing</b>	<b>Publication Date</b>	<b>Status</b>
HEURISTIC WINDMILL STRUCTURE CONSIDERING BLADE DESIGN TO OBTAIN THE MAXIMUM POWER OUTPUT	202041045363 A	19/10/2020	30/10/2020	<b>PUBLISHED</b>
IOT BASED AUTOMATED TOILBOTS	202041045363 A	19/10/2020	30/10/2020	<b>PUBLISHED</b>
INTERNET OF THINGS BASED TOGGLER DEVICE FOR HYBRID VEHICLE POWER PACK	201841006122 A	17/02/2018	06/04/2018	<b>PUBLISHED</b>

### Book Chapter Published:

Chapter Title	Book Title	Copyright Holder Name	Year
Personalized Secured API for Application Developer	Smart Innovations in Communication and Computational Sciences	Springer Nature Singapore Pte Ltd	2019
Heuristic Windmill Structure Considering Blade Design to Obtain the Maximum Power Output	Contemporary Research in Electronics, Computing and Mechanical Sciences	Manglam Publications	2020

### Professional Experience: 18 Years

- Worked as Technical Abstractor in DOMEX Technical Information Private Limited from 4.6.2001 to 31.5.2002.

### Total Teaching Experience: 19 years

- Associate Professor in Sri Sairam Engineering College since 1.8.2022 till date.
- Assistant Professor in Sri Sairam Engineering College since 1.8.2010 to 31.7.2022.
- Lecturer in Sri Sairam Engineering College from 20.6.2007 to 31.7.2010.
- Lecturer in Hindustan College of Engineering from 24.1.2003 to 30.4.2004
- Lecturer in Arignar Anna Institute of Science and Technology from 3.6.2002 to 23.1.2003.

### Areas of Interest

- High Voltage Engineering
- Distributed generation
- Protection and Switchgear
- Power System Transients
- Power Electronics for Renewable Energy Systems

- Wind Energy Conversion Systems
- Power Quality
- Transmission and Distribution
- Power System Analysis
- Smart Grid Technologies
- Power System operation and Control

### Personal Details

Category	Name of the Degree	Specialization	Year of Passing	Name of the College	Name of the University	% of Marks / Grades obtained	Class obtained
UG	B.E	EEE	2001	Govt. College of Engg, Tirunelveli	Manonmanium Sundaranar University	74.5%	I
PG	M.E	High Voltage Engg	2007	College of Engg, Guindy	Anna University	7.9	I
Doctorate	Ph.D	Distributed Generation and Demand Side Management	2023	Sri SivaSubramania Nadar College of Engineering	Anna University	-	-