


Sri Sai Ram Engineering College
Department of Electrical and Electronics Engineering

1. Name : Dr. T. Porselvi	
2. Designation:	Professor
3. Qualification :	M.E., Ph. D
4. Area of Specialization :	ELECTRICAL
5. Experience :	Teaching : UG: 24 years PG: 12 years Industry : nil
6. No. of workshop : FDP attended :	No. of workshops attended : 19 No. of conferences attended : 30 No. of FDP/STTP attended : 38 No. of workshops/ FDP organized : 12
7. Publication :	Journal National : - International : 39 Conference National : 10 International : 50 Total-96
8. Research Guidance :	-
9. General :	EC member for PALS, UBA administer, Year Coordinator, IEEE-PELS Advisor, Captain GATE, Propagator-SDC, Strategist-EEE Dept
10. Staff Achievements:	1. OBTAINED GOLD MEDAL IN M.E

	<p>2. WRITTEN 2 BOOKS NAMED CONTROL SYSTEMS AND ELECTRICAL MACHINES</p> <p>3. ACHIEVED CENT PERCENT RESULT IN 2005- 2013</p> <p>4. ACTED AS CONVENER FOR CONFERENCE RTIEE'07</p> <p>5. ORGANIZED 8 FDPS, 10 workshops</p> <p>6. ACTING AS PROJECT COORDINATOR FOR PG</p> <p>7. NBA COORDINATOR</p> <p>8. ORGANIZED VARIOUS SEMINARS, WORKSHOPS VALUE ADDED PROGRAMS, INTERNATIONAL CONFERENCES, WEBINARS, ALUMNI INTERACTIONS</p> <p>9. Convenor for ICPECTS 2022</p>
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EXPERIENCE:

Name of the Employer	Period	
	From	To
Thangavelu Engineering College, Chennai.	1998	2000
Rajalakshmi Engineering College, Chennai.	June 2000	July 2000
Sri Sai Ram Engineering College, Chennai.	2000	Till date

BOOKS/ CHAPTERS PUBLISHED:

- **“Control Systems”** for 4th semester EEE, as per Anna University syllabus in Charulatha Publications (2003).
- **“Electrical Machines”** for 3rd semester ECE & ICE as per revised Anna University syllabus in Scitech Publications (2005). ISBN : 8188429961

- **Energy Management in Power Systems using GA, Chapter, ISBN: 978-93-86923-47-9**
- **Importance of Face Mask and its Role in the Covid 19 Pandemic, Chapter, E-ISBN:978-93-87865-44-0**
- **Information Modelling for Virtual and Augmented Reality Virtual Touchpad based Industrial Machine Control, Recent Trends in Engineering and Technology, ISBN-9788194714989**
- **MPPT with Single DC-DC Converter and Inverter for Grid Connected Hybrid Wind- Driven PMSG-PV System Using GA, Chapter, Dipti Press, July 2021**
- **Hybrid Boost Converter for AC and DC Loads Using PV System, Recent Advances in Energy Technologies, Springer, Singapore, 978-981-19-3467-4**
- **A novel study on strategies for Food Packing and Management Mechanism, Dipti Press, ISBN: 978-93-94639-07-2, Dec 2022**

AWARDS and ACCOLADES

1. Received gold medal in M.E.
2. Received cash awards for having produced cent percent results in many subjects like Power electronics, solid state drives, analysis of power converters, analysis and design of inverters, solid state AC drives, neural networks and fuzzy logic controllers, etc
3. **Dr. APJ ABDUL KALAM AWARD OF TEACHING EXCELLENCE-2016**
4. **Best FACULTY AWARD** in the Department from for the academic year 2017-18
5. **Dr. APJ ABDUL KALAM AWARD FOR YOUNG SCIENTIST** for year 2019
6. Selected for Regional level convention of **“AICTE-Chhatra Vishwakarma Award-2019”** for Innovative solution under the theme “How to enhance the income of village”
7. **Dr. APJ Abdul Kalam Award Award for Innovative Research** in the year 2020 from **SEEE**

8. Received **“Innovative Research & Dedicated Academician Award”** from The Society of Innovative Educationalist and Scientific Research Professional in the year 2021
9. Designed and delivered a 12 week online course on **Fundamentals of DC-DC Converters** with Skill Lync.
10. Received Best mentor award for best **Skill Rack Performance**
11. Received INSC awards for 2 projects in 2022
12. Underwent **Industrial Internship at Kasa Anlegen** from 5/2/2022 to 11/2/2022.
13. Received **“Innovative Research & Dedicated Academician Award”** from The Society of Innovative Educationalist and Scientific Research Professional in the year 2022
14. Organized **ICPECTS 2022** on 8th and 9th of December 2022
15. Received **Best paper award** for paper titled “Currency Detection App For Blind People Using MIT App Inventor, in ICPECTS 2022
16. Received BEST SBC AWARD from IEEE_PELS with 1000USD
17. Received Best Teacher Innovation Award from Edumatrix Foundation on 05.09.2024

FUNDED RECEIVED:

1. Received fund of Rs. 100,000/- from DST-IEDC & SAIRAM IEDC for project titled “Enhanced Independent Controlled Wheel Chair” for 2015-16 academic year
2. Received fund of Rs. 6000/- for project titled “Dynamic monitoring of Agricultural Field” for 2018-19 academic year
3. Received fund of Rs. 7500/- from TNSCST for project titled “Ethanol extraction from agricultural waste to power flex fuel vehicle” for 2018-19 academic year
4. Received fund of Rs.25000/- for project titled “Sensor based smart segregation dustbin” from Sairam IEDC 2018-19
5. Received fund of Rs. 500000/- for MODROBs from AICTE
6. Shortlisted for a fund of Rs. 500000/- for 5 in 1 Plant monitoring from IITK and NABARD
7. Received 750\$ as start up fund and for conducting activities for SEC IEEE PELS SBC from IEEE-PELS
8. Received seminar grant of Rs. 30000 for organizing National level IEI seminar on Application of AI and ML in Electrical Engineering

9. Received 1000\$ fund for Best SBC for 2023 from IEEE-PELS, USA
10. Received 600\$ fund for having conducted many activities for SEC IEEE PELS SBC from IEEE-PELS, USA
11. Received 200\$ fund for PELS Day 2023 from IEEE-PELS, USA

PATENT:

- Design and Development of Acoustic Power Transfer Using Infrasonic Sound, Application No. 201841045516.
- Sensor Based Smart Segregation Dustbin, Application No. 201941038253
- Design of IOT Based Coal Mine Safety System Using LORAWAN, Application No. 202041044658
- A smart bill generator in digitalized super market, Application No. 202041045439
- Reducement of Glass Bottle Defect using IOT, Appln. No. 202141016344
- **AN AUTOMATIC WET GRINDING APPARATUS, Appln no. 202241075488, dated: 26/12/2022**
- **Receive a grant for patent titled “An Urinal Microbial Fuel Cell System to generate electrical energy”**
- **Grant received for design patent titled “AI BASED TOKEN DISPENSER FOR QUEUE MANAGEMENT”**
- **Published a patent titled " Robot based healthcare monitoring platform", application no. 202441067087**

RESEARCH PUBLICATIONS:

International Journal

1. **“Design of Buck-Boost Converter for Wind Energy Conversion System”** in the European Journal of Scientific Research, Vol.83 No.3 (2011), pp.397-407. Imp.factor : 0.713, Scopus, citations-4
2. **“Comparison of Voltage THDS of Nine Level and Thirteen Level Three Phase Cascaded Multilevel Inverter with One DC Source Using PD and HD Technique”** in CiiT international Journal of Programmable Device Circuits and Systems, vol. 4,no.9,June 2012. Imp.factor : 0.713, Scopus, citations-4

3. **"A High Performance Controlled AC-DC Converter using Single Phase Matrix Converter"** in CiiT international Journal of Programmable Device Circuits and Systems, vol. 4,no.9, June 2012.
4. **"Seven-level Three Phase Cascaded H-Bridge Inverter with a Single DC Source"** in the ARPN Journal of Engineering and Applied Sciences, Vol.7 No.12 (2012), pp.1546-1554. SJR-0.2, citations-5
5. **"Modeling and Control of the PMSG for the Wind Energy Conversion System with the CHB Inverter with the NEW Selective Harmonic Elimination Technique"** in International Review on Modelling and Simulation, vol. 6, No. 3, (2013), pp. 767-773, SJR 2016: **0.407**, SNIP 2016: **0.399** , Scopus indexed, citations-5
6. **"Comparison of TSR and PSO based MPPT algorithm for Wind Energy conversion System"**, International Journal of Advanced Research in Electrical, Electronics and Instrumentation Engineering, vol. 3, special issue. 1, pp. 160-163, 2014, ISSN ONLINE(2278-8875) PRINT (2320-3765)
7. **"Design of a 5KW power converter for powering thruster of a Remotely Operated Submersible"**, International Journal of Advanced Research in Electrical, Electronics and Instrumentation Engineering, vol. 3, special issue. 1, pp. 229-231, 2014, ISSN ONLINE(2278-8875) PRINT (2320-3765)
8. Published a paper titled **'Wind Energy Conversion System with Boost Converter and CHB MLI with Single DC Input'**, International Journal of Engineering and Technology, vol. 6, no. 1, pp.138-145, 2014, e-ISSN: **0975-4024 (online Version)**, p-ISSN: **2319-8613 (Print Version)**, citations-1
9. **"The PMSG based wind Energy Conversion System with cuk converter and CHB MLI with a single DC input"**, International Energy Journal, Volume 14, Issue 1,2014, pp. 43-56, Scopus, SJR, EBSCO, ISSN: 1513-718X.
10. **"Sensor-less Field Oriented Control of Wind Turbine Driven Permanent Magnet Synchronous Generator Using flux Linkage And Back Emf Estimation Methods"**, Research Journal of Applied Sciences, Engineering and Technology ISSN:2040-7459, vol. 7, no.4, May 2014, pp. 4303-4312, SJR = 0.15, Journal Impact = 0.47, citations-3
11. **"Fuzzy based grid connected PV system with isolated coupled-inductor-integrated dc-dc converter and multilevel inverter"**, 12

12. **"High voltage gain switched-capacitor-based converter and multilevel inverter for solar energy applications"**, International Journal of Science and Research ISSN:2319-7064, 2015. Vol 4, no. 4, pp 1251-1255.
13. **"Design and implementation of the PFC Canonical switching cell converter based BLDCM drive"**, International Journal of Applied Engineering Research ISSN 0973-4562 Volume 10, Number 9 (2015).pp. 7357-7360, **SCOPUS, EBSCO, SNIP 0.260**
14. Published a paper titled **"Novel Seven- Level Flying Capacitor based Active Neutral Point Clamped Converter using Photovoltaic Energy Generation"** in International Journal of Engineering Research, Volume No.5, Issue No.3, pp : 207-210, March 2016.
15. Published a paper titled **"Bi directional Transformer less Inverter using Interleaved Modulation"** in International Journal of Engineering Research, Volume No.5, Issue No.3, pp: 220-225, March 2016.
16. **"Selection of Power Rating of an Electric Motor for Electric Vehicles"** International Journal of Engineering Science and Computing, April 2017 ISSN 2321 3361 © 2017 IJESC Volume 7 Issue No.4, pp-6469-6472
17. **"FPGA Based Selective Harmonic Elimination Technique for Multilevel Inverter"**, International Journal of Power Electronics and Drive Systems, vol.9, no.1, 2018, pp-166-173
18. **"Hardware Implementation of Three Phase Five-level Inverter with Reduced Number of Switches for PV Based Supply"**, Journal of Green Engineering, Vol. 7, no. 4, 2018, pp. 527–546.
19. **"Designing of Permanent Magnet Synchronous Generator for Wind Turbine"**, International Journals of Power Electronics Controllers and Converters, Vol.4, no.1. 2018.pp:1-8
20. **"Comparison of THD values of Seven level CHB Inverter with single DC Source for Various Multi Carrier PWM Techniques"**, Journal of Emerging Technologies and Innovative Research, Vol.6, no.5,pp-509-515.
21. **"Artificial Intelligence - Smart Energy Distribution and Management System for small autonomous Photo-voltaic Systems"**, International Journal of Engineering Research in Computer Science and Engineering (IJERCSE), Vol.6, no. 7, Doi 01.1617/vol6/iss7/pid89025

22. **"Sensor based Smart Segregation Dustbin"**, Journal of The Gujarat Research Society, vol.21, no.6, 2019.pp-191-199.
23. **"Solar PV fed Super-Lift LUO Converter and modified SEPIC Converter for LED Drivers"**, Test Engineering and Management, vol. 81, pp.2621-2635
24. **"FOPID Controlled Modified Coupled Inductor based SEPIC Converter with Renewable Energy System"**, Test Engineering and Management, vol. 81, pp.3553 – 3563
25. Sairam S, Porselvi T, Rachana Jadhav, Bala Kannan S, Krishna Mote, **"High Voltage Solar Controller For HVDC PV Transmission System & Applications With Closed Loop MPPT Control"**, International Journal of Control and Automation, vol.13, no.1, pp-458-468
26. Porselvi, T., Deepa, K., Subramaniam, U., Leonowicz, Z., Mitolo, M., **"Combined harmonic reduction and DC voltage regulation of a single DC source five-level multilevel inverter for wind electric system"**, Electronics 2020, doi:10.3390/electronics9060979
27. Saswati, Kumari Behera, Porselvi T, ,Sudharsanam V, Raj Kamal M, Venkatasubramani, KA **"SMART & AUTONOMOUS WIRELESS MONITORING SYSTEM FOR METICULOUSNESS AGRICULTURE USING IOT"** PalArchs Journal of Archaeology of Egypt & Egyptology, PJAE, 17 (6) (2020)
28. **Analysis and Simulation of Four Quadrant Chopper Fed DC Motor Drive, Studies in Indian Place Names, ISSN: 2394-3114 Vol 40 issue 3 (s1) February 2020**
29. **DESIGN OF FULLY AUTONOMOUS ENERGY HARVESTING SYSTEM FOR TREADMILL APPLICATION, ISSN: 2394-3114, Vol 40 issue 40 (s1) March 2020**
30. Porselvi T, Tresa Sangeetha S V , Elavarasu R , Archana V , Gowshni K , Sanmuga Piriya T **"Automatic Control And Monitoring Of Greenhouse System Using Iot"**, Turkish Journal of Computer and Mathematics Education, Vol.12 No. 11 (May 2021).
31. A.Mohamed Abbas, S. Vimal, U. Maheswaran, T. Porselvi, B. Meenakshi, **"Application of IoT for Counterfeit Prevention in Fast Moving Consumer Goods"**, Springer Lecture Notes, DOI 10.4108/eai.7-6-2021.2308794, June 2021
32. V Karthikeyan, T Porselvi, Gangadharayya F Salimath, and G Giftson Samuel, **"Grid Connected Bidirectional Converter Based Ems System with Model Predictive Control"** Journal of Physics: Conference Series, 1964 (2021) 052013, doi:10.1088/1742-6596/1964/5/052013

33. G Giftson Samuel*, Gangadharayya F Salimath, **T Porselvi** and V Karthikeyan, **“Improved Prediction of Wind Speed Using Machine Learning”** Journal of Physics: Conference Series, 1964 (2021) 052005, doi:10.1088/1742-6596/1964/5/052005
34. T. Porselvi, V. Karthikeyan, Gangadharayya F. Salimath, and G. Giftson Samuel **“Design and Simulation of Hybrid Power Systems with Battery Integrated to Main Grid”** <https://doi.org/10.1063/5.0110683>, 2022
35. Vivek Parashar1*, Neelam Labhade-Kumar2 , Badadapure Pravinkumar Rajkumar3 , Bhola Khan4 , Sandeep Rout5 , **T. Porselvi** , Mohammad Idrish I. Sandhi7”**ENHANCING CROP YIELD PREDICTION IN PRECISION AGRICULTURE THROUGH SUSTAINABLE BIG DATA ANALYTICS AND DEEP LEARNING TECHNIQUES”** CARPATHIAN JOURNAL OF FOOD SCIENCE AND TECHNOLOGY <https://doi.org/10.34302/SI/237>, 2023
36. **Porselvi, T.**, Rajesh, P. & Shajin, F.H. An intelligent approach for cascaded multi-level inverter (CMLI) with a grid-connected hybrid system. *Environ Dev Sustain* (2024). <https://doi.org/10.1007/s10668-023-04432-1>
37. Gayathry V, K. Deepa, S.V. Tresa Sangeetha, **Porselvi T**, J. Ramprabhakar, N. Gowtham, “Uncertainty analysis of different forecast models for wind speed forecasting, Renewable Energy”, Volume 241, 2025. <https://doi.org/10.1016/j.renene.2024.122285>.
38. Mohapatra, S., Kaliyaperumal, D., **Porselvi, T. et al.** Optimal sizing of hybrid renewable energy systems relying on the black winged kite algorithm for performance evaluation. *Sci Rep* 15, 20568 (2025). <https://doi.org/10.1038/s41598-025-06442-7>
39. K. Subha Sharmini, R. Vinodha, T. Porselvi, K. Padmanaban, and M. Sanadhya, “SMART CONTROL OF WIND-FED BLDC MOTOR DRIVES THROUGH IOT AND SIX-STEP INVERTER TECHNIQUE”, *IJAS/S*, vol. 11, no. 1, pp. 129-138, Jun. 2025

International Conferences

1. Presented a paper on **“Simulation of Permanent Magnet Surface Mounted Synchronous Generator”** in ICEES-11, at SSN college of Engineering, Pages: 154 - 157, DOI: [10.1109/ICEES.2011.5725320](https://doi.org/10.1109/ICEES.2011.5725320).

2. Presented a paper on **“Comparison of Cascaded H-Bridge, Neutral Point Clamped and Flying Capacitor multilevel inverters using multicarrier PWM”** in IEEE International conference INDICON 2011, DOI: [10.1109/INDICON.2011.6139534](https://doi.org/10.1109/INDICON.2011.6139534). Citations-8.
3. Published a paper titled **“Field Oriented Control of Generator Side Converter of PMSG Driven Wind Turbines”** in the International National Conference on Computational Intelligence & Advanced Manufacturing Research ICCIAMR 2013, conducted by Vels Institute of Technology and Advanced Studies on 05-04-13 to 6-04-13.
4. Published a paper titled **“A Novel SPWM Strategy DC-AC Inverter using single phase MATLAB Matrix converter”**, in the International Conference held at PPG Institute of Technology 7th – 9th March 2012.
5. Published a paper titled **“Modelling and Simulation of Single Phase Matrix Converter using PWM”**, IEEE International Conference on Computing Electronics and Electrical Technologies, 22nd & 23rd March 2012, Citations-4.
6. Published a paper titled **“Comparison of Total Harmonic Distortion Values of Cascaded Multilevel Inverter with Equal DC Sources using Genetic Algorithm”** in the International National Conference on Computational Intelligence & Advanced Manufacturing Research ICCIAMR 2013, conducted by Vels Institute of Technology and Advanced Studies on 05-04-13 to 6-04-13.
7. **“Comparison between Five-Level and seven level Active Neutral point clamped converter for photovoltaic energy generation”**, IEEE sponsored fourth International Conference on Computation of Power, Energy, Information and Communication, ICCPEIC-2016, Pages: 600 – 606, DOI: [10.1109/ICCPEIC.2016.7557299](https://doi.org/10.1109/ICCPEIC.2016.7557299).
8. **“Comparison of Conventional H6 inverter and Bi directional Interleaved Modulated Transformerless Inverter”**, IEEE sponsored fourth International Conference on Computation of Power, Energy, Information and Communication, ICCPEIC-2016, Pages: 593 - 599, DOI: [10.1109/ICCPEIC.2016.7557299](https://doi.org/10.1109/ICCPEIC.2016.7557299).
9. **“Comparative study of isolated PV with soft switching capability of dc-dc converter”** 2017 International Conference on Computation on Power, Energy, Information and Communication (ICCPEIC) 978-1-5090-4324-8/17/IEEE.
10. **“Speed Control of Single and Three Phase Induction Motor using full bridge cycloconverters”**, International conference on Power, Energy, Control and Transmission Systems, ICPECTS, 2018.

11. **T. Porselvi, J. Nisha., K. Thendral. and D. P. Vasantha, "Solar Pv Fed Electric Vehicle Charging System With Hybrid Energy Storage System," 2019 International Conference on Computation of Power, Energy, Information and Communication (ICCPEIC), 2019, pp. 202-206, doi: 10.1109/ICCPEIC45300.2019.9082391.**
12. **"Sensor based Smart Segregation Dustbin"** 2nd International Conference on Innovative & Advanced Multidisciplinary Research (ICIAMR 2019), Singapore
13. **T. Porselvi, K. Sujitha, S. K. Kumar, M. Hemalatha and D. Thiagarajan, "Implementation and Performance Analysis of Various Converter fed Inverter with PV Applications," 2020 International Conference on Power, Energy, Control and Transmission Systems (ICPECTS), 2020, pp. 1-5, doi: 10.1109/ICPECTS49113.2020.9336987.**
14. **T. Porselvi, S. G. CS, J. B, P. K and S. B. S, "IoT Based Coal Mine Safety and Health Monitoring System using LoRaWAN," 2021 3rd International Conference on Signal Processing and Communication (ICPSC), 2021, pp. 49-53, doi: 10.1109/ICSPC51351.2021.9451673.**
15. **T. Porselvi, K. Krithika and C. Sai Ganesh, "PV System Based Induction Motor With Landsman Converter Using IFOC Controller," 2021 2nd Global Conference for Advancement in Technology (GCAT), 2021, pp. 1-4, doi: 10.1109/GCAT52182.2021.9587724.**
16. **T. Porselvi , Preethi Kannan ,Aouthithiye Barathwaj SR Y 3 ,Sai Ganesh CS 4 , R. Kothai, "Hybrid Boost Converter for AC and DC Loads Using PV System" ICEMT 2021, Organized by the department of Mechanical Engineering, SSNCE during Aug 20-21, 2021.**
17. **S. V. Tresa Sangitha,C. Kumaresan, T. Porselvi, Radha Ram Mohan, Karthik Ramanathan, "IoT Implementation-A Comparative study" ICCCT held on 16th and 17th December 2021, <https://doi.org/10.1109/ICCCT53315.2021.9711815>**
18. **T. Porselvi, Praveena D, Shalini Priya J, Hemalatha M, Meenakshi B "PV Based Multilevel Inverter With 15 Levels using POD Control Method", IC3IoT22428 held on 10th and 11th of February 2022.**
19. **B.Meenakshi, R. Sivaprasad, T. Porselvi, "Designing and commissioning of Heat Pumps for Hybrid Heating and Cleaning of Coaching Equipment using Solar Panels", IC3IoT22428 held on 10th and 11th of February 2022.**
20. **T. Porselvi, S. Y. Aouthithiye Barathwaj, S. G. CS, S. V. Tresa Sangeetha and J. Shalini Priya, "Deep Learning Based Predictive Analysis of BLDC Motor Control," 2022 IEEE 3rd**

Global Conference for Advancement in Technology (GCAT), Bangalore, India, 2022, pp. 1-6, doi: 10.1109/GCAT55367.2022.9972193.

21. B. Meenakshi, **T. Porselvi**, M. Deepa, R. SivaPrasad, L. Kurinjimalar and V. Selvapriya, "Grid connected single-stage multiport inverter with two independent source," 2022 International Conference on Power, Energy, Control and Transmission Systems (ICPECTS), Chennai, India, 2022, pp. 1-4, doi: 10.1109/ICPECTS56089.2022.10047299.

22. B Pooja, Sivaprasad R, Meenakshi B, SHALINI J PRIYA, **Porselvi T** - "DESIGN AND ANALYSIS OF FIFTEEN LEVEL INVERTER FOR RENEWABLE APPLICATIONS", ICPECTS 2022

23. S. V. T. Sangeetha, S. Kumar, **T. Porselvi**, Z. Abdullah Al-mazroui, I. D. J. AlNofli and A. K. H. Almamari, "Location Sensitive Browser App using MIT App Inventor for Blocking Social Media Websites in Educational Institutions," 2022 International Conference on Power, Energy, Control and Transmission Systems (ICPECTS), Chennai, India, 2022, pp. 1-5, doi: 10.1109/ICPECTS56089.2022.10047061.

24. **T. Porselvi** et al., "Design and Implementation of Electric Cycle," 2022 International Conference on Power, Energy, Control and Transmission Systems (ICPECTS), Chennai, India, 2022, pp. 1-5, doi: 10.1109/ICPECTS56089.2022.10047264.

25. **Porselvi T**, Srividya Subramanian, Kurinjimalar L, Meenakshi B, Sivaprasad R, Sai Ganesh CS, "Intelligent Wireless Charging Station for EVs with Integrated PV Power Grid System," 2022 International Conference on Power, Energy, Control and Transmission Systems (ICPECTS), Chennai, India, 2022, pp. 1-3, doi: 10.1109/ICPECTS56089.2022.10047577.

26. S. V. T. Sangeetha, **T. Porselvi**, A. Venkateshwaran, M. Gokul, I. Sathmikan and P. Tharun Kumar, "Currency Detection App for Blind People Using MIT App Inventor," 2022 International Conference on Power, Energy, Control and Transmission Systems (ICPECTS), Chennai, India, 2022, pp. 1-4, doi: 10.1109/ICPECTS56089.2022.10047784.

27. **T. Porselvi**, J. S. Priya, M. Hemalatha, C. Jeeva, K. Aishwarya and B. Suruthi, "Microcontroller Based Wet Grinder System For Domestic Applications," 2022 International Conference on Power, Energy, Control and Transmission Systems (ICPECTS), Chennai, India, 2022, pp. 1-4, doi: 10.1109/ICPECTS56089.2022.10047107.

28. L. Kurinjimalar, S. Pooja, R. Sivaprasad, B. Meenakshi, J. S. Priya and **T. Porselvi**, "Design and Analysis of Fifteen Level Inverter for Renewable Applications," 2022 International Conference on Power, Energy, Control and Transmission Systems (ICPECTS), Chennai, India, 2022, pp. 1-4, doi: 10.1109/ICPECTS56089.2022.10047591.

29. R. Sivaprasad, T. Mahalakshmi, B. Meenakshi, **T. Porselvi**, L. Kurinjimalar and J. RManasa, "Modified Bridgeless Landsman Converter Fed EV Battery Charger Power Factor Improvement," 2022 International Conference on Power, Energy, Control and Transmission Systems (ICPECTS), Chennai, India, 2022, pp. 1-6, doi: 10.1109/ICPECTS56089.2022.10046874.
30. K. Prathibanandhi, B. Meenakshi, **T. Porselvi**, R. Azhagumurugan, V. Chithra and V. Malini, "Design and Development of PV Powered Integrated DC - DC Converter Fed Multilevel Inverter for Standalone Application," 2022 International Conference on Future Trends in Smart Communities (ICFTSC), Kuching, Sarawak, Malaysia, 2022, pp. 27-32, doi: 10.1109/ICFTSC57269.2022.10040014.
31. N. Saju, **T. Porselvi**, M. G. Raj, C. Pradip and S. Kavitha, "Wind Energy Fed SEPIC Converter with PID Controller for High Performance," 2022 Sixth International Conference on I-SMAC (IoT in Social, Mobile, Analytics and Cloud) (I-SMAC), 2022, pp. 370-373, doi: 10.1109/I-SMAC55078.2022.9987426.
32. M.Hemalatha, **T.Porselvi**, Deepashri.R, Jeyashri.R, L.Kurinjimalar, J.ShaliniPriya. Presented a paper entitled "An Intelligent Reading Aid for Stone blind Individuals" in 3rd International Conference on Power Energy Control and Transmission Systems 2022
33. J. S. Priya, K. B. S. Kumar, **T. Porselvi**, S. Thennarasu, M. Hemalatha and L. Kurinjimalar, "Smart Wearable for Pulmonary Fibrosis Patient Monitoring with Oxygen Saturation Prediction," 2022 International Conference on Power, Energy, Control and Transmission Systems (ICPECTS), Chennai, India, 2022, pp. 1-6, doi: 10.1109/ICPECTS56089.2022.10047080.
34. C. Jeeva, G. Chaurasia, **T. Porselvi**, A. S. Gandhi, G. Subiksa and M. Dhivyashri, "Atmospheric Air Condensation for Irrigation by the application of Peltier effect using Solar energy," 2022 International Conference on Power, Energy, Control and Transmission Systems (ICPECTS), Chennai, India, 2022, pp. 1-5, doi: 10.1109/ICPECTS56089.2022.10046780.
35. C. Jeeva, **T. Porselvi**, B. Krithika, R. Shreya, G. S. Priyaa and K. Sivasankari, "Intelligent Image Text Reader using Easy OCR, NRClex & NLTK," 2022 International Conference on Power, Energy, Control and Transmission Systems (ICPECTS), Chennai, India, 2022, pp. 1-6, doi: 10.1109/ICPECTS56089.2022.10047136.
36. C. Jeeva, **T. Porselvi**, D. Karthikeyan, K. Suresh, K. B and D. S, "A Review on Electric Vehicle Adaptation: Challenges, Standards and Policy Options," 2022 International

Conference on Power, Energy, Control and Transmission Systems (ICPECTS), Chennai, India, 2022, pp. 1-5, doi: 10.1109/ICPECTS56089.2022.10046743.

37. R. Kothai, **T. Porselvi**, A. Sri Ari Priya, V. Sandhiya and R. Ajithasri, "Power Scavenging Using a Darrieus Type Vertical Axis Wind Turbine on Highways," 2022 International Conference on Power, Energy, Control and Transmission Systems (ICPECTS), Chennai, India, 2022, pp. 1-3, doi: 10.1109/ICPECTS56089.2022.10047206.

38. **T. Porselvi**, M. Nandhagopal, P. J. Shalini, M. Hemalatha, S. Jaikash and G. C. Sai, "FPGA Based Power Quality Improvement of Grid Connected EV Battery System," 2023 4th International Conference on Signal Processing and Communication (ICSPC), Coimbatore, India, 2023, pp. 400-405, doi: 10.1109/ICSPC57692.2023.10125991.

39. J. S. Priya, M. Hemalatha, **T. Porselvi**, S. Thennarasu, T. Rethick and C. B. R. Naathan, "Cold Supply Chain Logistics with IoT to Ensure Quality and Security of the Transported Goods," 2023 Intelligent Computing and Control for Engineering and Business Systems (ICCEBS), Chennai, India, 2023, pp. 1-4, doi: 10.1109/ICCEBS58601.2023.10448521.

40. **T. Porselvi**, J. S. Priya, L. Kurinjimalar, M. Hemalatha, K. P. Nandhi and M. Barath Kumar, "Convolutional Neural Network for Battery System Monitoring and SOC Estimation for EV Applications," 2023 IEEE 20th India Council International Conference (INDICON), Hyderabad, India, 2023, pp. 561-566, doi: 10.1109/INDICON59947.2023.10440869.

41. **T. Porselvi**, A. K. Saranraj, B. P. Rikthish, M. Prabakaran, S. Priya and Hemalatha, "Industrial Automation Using IoT," 2023 Intelligent Computing and Control for Engineering and Business Systems (ICCEBS), Chennai, India, 2023, pp. 1-5, doi: 10.1109/ICCEBS58601.2023.10448809.

42. **Porselvi T**; Archana R; Janani S; Nishanthini R; Roshini S; Kurinjimalar L, "Comparison of P&O and Incremental conductance for MPPT algorithm in bifacial solar PV system," 2023 Intelligent Computing and Control for Engineering and Business Systems (ICCEBS), Chennai, India, 2023, pp. 1-5, doi: 10.1109/ICCEBS58601.2023.10449300.

43. M. Hemalatha, D. S, **T. Porselvi**, R. G, L. Kurinjimalar and R. K, "IoT Based Ignition System By Insertion And Verification of Driving License," 2023 Intelligent Computing and Control for Engineering and Business Systems (ICCEBS), Chennai, India, 2023, pp. 1-5, doi: 10.1109/ICCEBS58601.2023.10448943.

44. **T. Porselvi**, A. G R, V. K, S. G and S. T, "Robot-Based Healthcare Monitoring Platform," 2024 International Conference on Power, Energy, Control and Transmission Systems (ICPECTS), Chennai, India, 2024, pp. 1-3, doi: 10.1109/ICPECTS62210.2024.10780270.

45. Kurinjimalar. L, **Porselvi. T**, P. Gayathri, V. Malini, M. Hemalatha and M. K. C, "Cascaded Neural Network Controller Development for Electric Vehicle Energy Management," 2024 International Conference on Power, Energy, Control and Transmission Systems (ICPECTS), Chennai, India, 2024, pp. 1-7, doi: 10.1109/ICPECTS62210.2024.10780029.
46. **Porselvi. T**, Shivani. G. K, Ambika. A, N. M, T. M and H. R. K, "Design Of Energy Efficient Motor For Electric Vehicle," 2024 International Conference on Power, Energy, Control and Transmission Systems (ICPECTS), Chennai, India, 2024, pp. 1-6, doi: 10.1109/ICPECTS62210.2024.10780184.
47. A. Ambika, M. P. Dharsaun, J. S. Priya, **T. Porselvi**, C. Nayanathara and S. Thennarasu, "Powering the EV Revolution: Charging Infrastructure Challenges and Innovations," 2024 International Conference on Power, Energy, Control and Transmission Systems (ICPECTS), Chennai, India, 2024, pp. 1-6, doi: 10.1109/ICPECTS62210.2024.10780315.
48. S. V. Tresa Sangeetha, **Porselvi T**; [et.al.](#), "AI Model Integrated Omani Currency Detector for the Visually Impaired-A Comparative Analysis," 2024 International Conference on Power, Energy, Control and Transmission Systems (ICPECTS), Chennai, India, 2024, pp. 1-7, doi: 10.1109/ICPECTS62210.2024.10780266

National Conference

1. Presented a paper on "Implementation of PI-Controller for boost converter uses FPGA" in NCSSC-2005, at Anna University.
2. Presented a paper on "Implementation of PI & FUZZY LOGIC -Controller for boost converter using FPGA" in RIPRAP-2005, at Annai Mathammal Sheela Engineering College.
3. Presented a paper on "Fuzzy Logic Converters for Boost-Controllers", in NCDK-05, at Sri Sairam Engineering College.
4. Presented a paper titled "A Review of Wind Energy Conversion System with Power Electronics" in the National Conference on Innovative Technologies in Electrical & Electronics Engineering (NCITEEE) conducted by Sri Sairam Engineering College on 06-03-12.
5. Presented a paper titled "Implementation of Voltage oriented Control in the Grid Connected Inverter" in the National Conference on Innovative Technologies in Electrical

& Electronics Engineering (NCITEEE) conducted by Sri Sairam Engineering College on 06-03-12.

6. Presented a paper titled "Modeling and Control of Permanent Magnet Synchronous Generator for WECS" in the National Conference on Innovative Technologies in Electrical & Electronics Engineering (NCITEEE) conducted by Sri Sairam Engineering College on 06-03-12.
7. Published a paper titled "A Novel Method for DC-DC conversion with Renewable Energy Resources" in the National Conference on Recent Trends in Renewable Energy Technology conducted by Rase College of Engineering on 23-02-13.
8. Published a paper titled "A Single Phase Direct AC-AC Converter using SPMC", National Conference on Power Electronics and Renewable Energy System, SSN College of Engineering, February 2012.
9. Published a paper titled "Harmonic reduction of cascaded Multilevel Inverter with Equal DC Sources using Genetic Algorithm" in the National Conference on Recent Trends in Electrical & Electronics Engineering (NCITEEE) conducted by Jerusalem College of Engineering on 03-05-13.
10. Porselvi T, Archana R, Roshini, Janani S, Nishanithini, "Automated Irrigation Sytem using Arduino UNO", National conference on Recent Trends in Power and Energy Engineering, SSN College of Engineering, 23/2/2023& 24/2/2023.

Faculty Development Program attended/Training Program attended / Workshop Attended

1. Attended Preconference Tutorial on '**Neural Networks & Fuzzy systems**' at CEERI Centre, CSIR Campus, Taramani, on 15-12-2003.
2. Attended Preconference Tutorial on '**DSP/FPGA Based Embedded Systems**' at CEERI Centre, CSIR Campus, Taramani, on 16-12-2003
3. Workshop on '**DSP and Embedded Systems**' organized by the Department of Electrical and Electronics Engineering, Sri Sai Ram Engineering College, on 07-02-2004.
4. Workshop on '**Application of Artificial Neural Networks**' in Engineering organized by Rajarajeshwari Engineering College, on 26,27-08-2005.
5. Workshop on '**8051 Microcontroller**' organized by the Department of Electrical and Electronics Engineering, Sri Sai Ram Engineering College, on 10-09-2005.

6. Workshop on '**Data structures and Algorithms**' organized by the Department of Electrical and Electronics Engineering, Sri Sai Ram Engineering College, 27-09-2005.
7. National Level Workshop on **Energy Conservation and Management** organized by Sree Sastha Institute of Engg. And Technology, on 15-02-2006.
8. FDP on '**Control Systems**' at Sri Sai Ram Engineering College. On 13-02-2009.
9. Attended National seminar on '**Creative & Innovation in new Product Development**' at Anna university on 24,25-04-2009
10. Attended '**workshop on Power Electronics & Drives**' organized by Vi Microsystems Pvt. Ltd., on 23-12-2009.
11. Faculty Development Programme on '**VHDL Programming**' conducted by the Department of Electrical and Electronics Engineering, Sri Sai Ram Engineering College on 6-3-2010
12. Attended One Day Workshop on '**Matlab & PSIM**' on 03-04-2010 at REC, Chennai.
13. Anna Univ. Sponsored FDP on '**Special Electrical Machines**' from 26-05-2010 to 01-06-06-2010. at VEC.
14. FDP on recent advances in wireless information networks at SRM on 01-10-2010.
15. Two day workshop on Matlab / Simulink to Electrical Engineering at VIT, Vellore on 20,21-12-2010.
16. One day workshop on '**Embedded Technologies in Special Machines**' at Easwari Engg. Coll. On 21-01-11
17. FDP on Power Flow Solutions at SSEC on 27-1-2011
18. Attended national workshop on "**Hardware Implementation of Power Electronics & Drives**" organized by Department of Electrical and Electronics Engineering, SRM University on 15th and 16th September 2011.
19. Attended National Workshop on "**Modelling and control of Wind Energy Conversion System**" organized by Department of Electrical and Electronics Engineering, RMK Engg. College from 28-30, December 2011.
20. Attended One Day Workshop on '**Art of Journal and Thesis Writing**' organized by Department of Research & Development, Sri Sairam Engineering College on 19-1-2012.
21. Attended National Workshop on "**Smart Ph.D. Planning**" organized by Department of Computer Science and Engineering, RMD Engineering College on 10th & 11th February 2012.

22. Attended One Day Workshop on **'Renewable Energy'** organized by Department of Mechanical engineering, Sri Sairam Engineering College on 24-02-2012.
23. Attended a Faculty Development Programme on **'Matlab Applications in Electrical Engineering'** organized by Department of Electrical and Electronics Engineering, Sri Sairam Engineering College on 7-3-2012.
24. Attended National seminar on **'Exploring Research Areas in Harnessing Wind Energy'** organized by School of Electrical Engineering, VIT, Chennai on 28-04-2012.
25. Faculty Development Programme on **'Matlab Applications in Electrical Engineering'** organized by Department of Electrical and Electronics Engineering, Sri Sairam Engineering College on 7-3-2012.
26. Attended a National level workshop on **"Feedback Controllers for Power Converters"** on 2nd and 3rd November 2012, organized by Department of Electrical and Electronics Engineering, at SSN college of Engineering.
27. Attended a National workshop on **"Advanced Power Electronics Interfaces for Distributed Energy"** at SSN College of Engineering on 20-09-2013 and 21-09-2013.
28. Attended a National workshop on **"R&D issues and Challenges"** at Adhiparasakthi Engineering College on 20-11-2013 and 21-11-2013.
29. Attended **"Entrepreneurship Awareness Champ"** sponsored by Innovative Entrepreneurship development Centre (IEDC), Department of Science and Technology between 18-03-2015-20-03-15 at Sri SaiRam Engineering College.
30. **Matlab Simulation of Power Electronic Circuits** between 21-4-15 to 23-4-15 at Sri SaiRam Engineering College
31. **PSPICE software** from 15-7-15 to 18-7-15 at Sri SaiRam Engineering College.
32. **FDP on Electrical Simulation Software** between 6-11-17 to 10-11-17 at Sri SaiRam Engineering College
33. **AICTE-ISTE Induction/Refresher Programme on Renewable Energy Sources Integrated Smart Power Grid Scenarios and Control aspects using HVDC and FACTS Controllers** between 16-7-18 to 21-7-18 at SSN College of Engineering.
34. **IDA Connect Workshops at DIDAC India at Bangalore International Exhibition Center from 21/9/2022 to 23/9/2022**
35. Attended workshop on Smart Energy Grid under Naan Mudhalvan Scheme on October 1 at CEG, Anna University
36. **MATLAB and SIMULINK basics for Hardware Projects-01/08/2022 - 05/08/2022**

37. **Attended Two-Day National Workshop on 'Application of Machine Learning in Electric Drives' organized by the Department of Electrical and Electronics Engineering during 07th – 08th October, 2022.**
38. **National seminar on opportunities and challenges in EV- 08/05/2023 - 12/05/2023**
39. **Six days ATAL FDP on "DESIGN AND DEVELOPMENT OF MICRO/SMART GRID INTENDED FOR SMART CITY DEVELOPMENT AND ENHANCING E-MOBILITY" held at VIT, Vellore from 18/11/2024 to 23/11/2024.**
40. **Five-Day Faculty Development Program on "Recent Advancements, Challenges, and Simulation Methodologies in Power Electronic Applications" held at REC from 05/08/2024 to 09/08/2024.**

GUEST LECTURE GIVEN:

1. Delivered guest lecture on "Simulation of Electronic circuits using MATLAB" at Valliammai Engineering College on 21-08-13.
2. Delivered guest lecture on "Introduction to Space Vector Modulation" on 5-6-2015 at Sri SaiRam Engineering College.
3. Delivered guest lecture on "Advancements in Electrical Machines" at Valliammai Engineering College on 31-08-17.
4. Delivered guest lecture on "Variable Frequency Drives" on 7-1-2018 at Rajalakshmi Engineering College.
5. Delivered lecture on Design of BLDC and PMSM in **FDP on Electrical Simulation Software** from 6-11-17 to 10-11-17 at Sri SaiRam Engineering College
6. Delivered a lecture on **Power World Simulator** in Anna University sponsored FDP on Transmission and Distribution on 15-12-2018 at Sri SaiRam Engineering College
7. Delivered training on **Design of BLDC motors using MAGNET software** to Retech Solutions Pvt. Ltd.
8. Delivered lecture on **Wind Energy Conversion Systems** in ISTE sponsored FDP on Renewable Energy Systems held between 22-7-19 to 26-7-19.
9. Delivered a session on 'Introduction to Smart Grid' on 29.5.2020 in refresher course on Recent Innovations in Electrical, Electronics, Instrumentation , Automation and Teaching Pedagogy at Sri Sairam Engineering College

10. Delivered a session on 'Smart Grid-The Future Grid' in FDP on "Recent Trends in Electrical Engineering: A Research Perspective (RTEeRP- 2020)" at Amrita School of Engineering, Bangalore-560035, Karnataka, India
11. Delivered a session on "Genetic Algorithm" in AICTE sponsored STTP on "Modern Optimization Tools in Engineering Field" on 20.10.2020 at SRM Valliammai.
12. Webinar on "Power Converters-Evolution of DC-DC Converter" in Skill Lync
13. Delivered a talk on Solar PV System-MPPT in Five Day Software Training on electrical Design and Applications held between 26/4/2021-30/4/2021 at Sri SaiRam Engineering College
14. Delivered a session on "DC-DC Converter in an FDP on Power Electronics" on 19/5/2021 at SRM Valliammai
15. Delivered a talk on "Enhancing Technical Education Through PALS" in the Orientation programme of Sri Sairam Polytechnic Students
16. Delivered a session on 'Smart Electric vehicles: Research Challenges and Opportunities' in FDP on "E-Mobility: A Research Perspective" at Amrita School of Engineering, Bangalore-560035, Karnataka, India, on 13/11/2021
17. Delivered a session on "DC Drives in an FDP on Solid State Drives" on 23/11/2021 at SRM Valliammai
18. Delivered a talk on Overview of PALS on 04/06/2022 for SEC- AIDS students
19. Delivered a session on "Articulation of Course Outcomes for curriculum building" in **IN4OBE** Global Virtual Summit 2022 on 13/8/2022
20. Delivered a talk on SDG to Sairam Matriculation students on 20/10/2022
21. Delivered a Expert lecture on "Soft computing technique on Electromagnetic Field and Power Converters" on 21/12/22 at SRM Valliammai
22. Delivered a lecture on BEST PRACTICES FOR SBCs at at Amrita School of Engineering, Bangalore-560035, Karnataka, India, on 29/07/2023
23. Delivered a lecture on "MATLAB" for automobile club students on 26/9/2023
24. Delivered a lecture on "Unlock GATE 2024" for CCE students at SIT, on 16/10/2023
25. Skill Enhancement training on "MATLAB SOFTWARE" on 17/10/2023
26. Membership drive on IEEE PELS on 31/7/2024 at Rajalakshmi Engineering College.
27. Hands on training on MATLAB for students on 27.08.2024 & 28.08.2024

REVIEWER:

- International Journal of Engineering & Technology
- Journal of Green Engineering
- ICCCT, POWERCON, ICPECTS

EDITOR:

- Journal of Control & Instrumentation
- Journal of Power Electronics & Power Systems
- Trends in Electrical Engineering

MEMBERSHIPS

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YOUTUBE CHANNEL

Owning a YouTube channel

- <https://www.youtube.com/@porselvithayumanavan769>