



Dr. R. Senthil Kumar , M.E., Ph.D
HoD – EEE and Vice Principal

HIGHLIGHTS:

- Number of Journal Publications: 34
- H-Index: 03
- Project Funding Received: 03
- Patents Published: 06
- Patents Granted: Nil

PROFESSIONAL LINKS:

- Scopus ID: 57306678000
- Scopus Link: <https://www.scopus.com/authid/detail.uri?authorId=57306678000>
- Google Scholar ID: [Dr R Senthil Kumar - Google Scholar](#)
- Anna University Faculty ID: 2122105
- AICTE Faculty ID: 1-472607788
- Anna University Supervisor ID: 2930021
- LinkedIn: [Dr R Senthil Kumar - linkedin](#)

PROFESSIONAL BACKGROUND:

- Teaching Experience till date: 27.5 Years
- Industrial Experience: 01

INTERNATIONAL EXPOSURE:

- **Singapore and Malaysia**
 - Visited MDIS University, Singapore – Management Development Institute of Singapore and present my research paper.
 - Visited TAYLOR's University, Malaysia – Given a conference talk in the latest development in the field of Electronics and Agriculture.

AREA OF SPECIALIZATION:

- DC-DC Power Converters
- Renewable and Non-Renewable Energy Sources
- Electrical Machines
- Special Electrical Machines
- Power Electronics and Drives
- Measurements and Instrumentation
- Conservations of Electrical Energy
- E Vehicles

Ph.Ds AWARDED WITH DETAILS:

S:No	Name of Scholar	Title of Thesis	Year of Completion	Full Time/Part Time
1	Kavin F	MODELLING AND DESIGN OF CONTROLLER FOR REVERSE OSMOSIS DESALINATION PROCESS	2023	Part Time
2	Prasanna R	OPTIMIZED MODEL BASED CONTROLLERS FOR MITIGATION OF NMP BEHAVIOUR AND OPERATING PERFORMANCE ANALYSIS IN REAL TIME POWER CONVERTER	2024	Full Time
3	Kavitha S	OPTIMIZATION OF GMR SENSOR LOCATION ON INDUCTION MOTOR FOR ONLINE ROTOR FAULT PREDICTION USING WAVELET TRANSFORM AND MACHINE LEARNING	2023	Part Time
4	Chinthamani B	ONLINE TORQUE MEASUREMENT IN INDUCTION MOTOR USING DUAL-FUNCTION RADAR WITH WAVELET TRANSFORM AND MACHINE LEARNING ALGORITHM	2023	Part Time
5	John De Brttio C	AN OPTIMIZATION ALGORITHM FOR ENERGY MANAGEMENT SYSTEM WITH HYBRID RENEWABLE RESOURCES AND MICRO GRID USING CONVEX PROGRAMMING	2026	Part Time

Ph.Ds GUIDING:

- **Full Time Scholars: 4**
- **Part Time Scholars : 4**

SPONSORED RESEARCH / FUNDING APPLIED / CONSULTANCY:

1. Applied a project under AICTE – RPS under the title “Design and Operation Optimization of a Hybrid Power Plant Integrating Wind Turbines, Solar Photovoltaics, and Battery Energy Storage Systems to Minimize Levelized Cost and Maximize Profitability” at a cost of Rs 50L – July 2025..
2. Applied a project under DST - State University Research Excellence (SERB SURE) at cost of 10.3 L – September 2022.
3. Applied a project under TNSCST – Science and Technology scheme on Automated Oxygen Delivery System for Acute Pulmonary Diseases at cost of Rs. 4.89L
4. Applied a project under TNSCST - INNOVATION AND PRODUCT DEVELOPMENT scheme on Design of Smart Self-Charging Solar Electrical Vehicle at cost of Rs. 95,000/-
5. Applied DST – FIST 2021 project on “Renewable Energy Sources – Solar and Wind for Institutional Development” at a cost of 1.08 crores.
6. Applied a Research Project to DST – CRG on “Smart Irrigation System” at a cost of Rs. 17.1 Lakh. – Reviewed by the Committee member in Four Stages – Informed that the project needs more technology oriented explanations.
7. Applied a Research Project to CVRDE – CARS Project – 9.65 lakhs – Crossed two stages of discussion.
8. Received an amount of Rs. 1.7 Lakhs – Conducting FDP on “Control Systems” from IIT-Kharagpur – Sponsored by NMEICT.
9. “Microprocessor based control of fuel valve with helmet usage as compulsory” – funded by ICTACT for an sanctioned amount of Rs. 7,000/-
10. “E Bike” – funded by TNSCST for an sanctioned amount Rs. 10,000/-
11. Fast Propulsion System using Maglev locomotive and track design – RPS Scheme – AICTE – Applied
12. “Establishment of 440KW solar photovoltaic power plant” – MNRE – AICTE – Applied.
13. In-charge for Business Incubation Center – MSME.
14. Installed 1.25 KW Solar Panel to electrify central library – M/s. Developer Marks Pvt . Ltd at a cost of Rs. 1.45 lakhs.
15. Applied research project on “Super Capacitor for modern vehicles” to CSIR at a cost of Rs. 6 Lakhs. Got the acknowledgement and the meeting was scheduled in the month of July 2017.

Journal Publications:

International Journals:

1. M. Shankar and R. Senthilkumar, "Design Implementation of Improved Power Quality for Single Phase to Three Phase Signal Generated Circuit in Grid-Connected PV Systems," **2025 International Conference on Computing Technologies & Data Communication (ICCTDC), HASSAN, India, 2025, pp. 1-5, doi: 10.1109/ICCTDC64446.2025.11159064.**
2. Ezhilarasi, G., & Kumar, R. Senthil . (2025)" **Improved LVRT Control in Grid Tied Hybrid Renewable Energy System with Optimized High Gain Converter**", **Journal of Industrial Information Integration, 100878.**
3. Shanmathi, R. V., & Senthil Kumar, R. (2025), "Design and Simulation of the Re-lift Negative Boost High gain DC-DC Converter Using the Soft Switching Technique" **Journal of Electrical Engineering & Technology, 20(2), 1091-1102.**
4. G. Sathish Goud, R. Senthil Kumar , "Voltage profile enhancement in grid system using expert system" **International Journal of Applied Power Engineering (IJAPE)Vol. 14, No. 2, June2025, pp. 449~458ISSN: 2252-8792, DOI: 10.11591/ijape.v14.i2.pp449-458**
5. N. Ramadevil · R. Senthil kumar · C. R. Balamurugan , " A novel bald eagle search optimised ANFIS controlled high gain sepic converter-based efficient regenerative charging control for electric vehicles , **Electrical Engineering (2025) 107:1949–1974 , https://doi.org/10.1007/s00202-024-02603-5**
6. Moguthala Shankar, R. Senthil Kumar , "Power quality enhancement using fully informed particle swarm optimization based DSTATCOM in distribution systems" **International Journal of Applied Power Engineering (IJAPE) Vol. 13, No. 4, December 2024, pp. 982~988 ISSN: 2252-8792, DOI: 10.11591/ijape.v13.i4.pp982-988**
7. Moguthala Shankar and Senthil Kumar , " An Optimized 3DOF-FOPID2-DF Controller with Improved Power Quality for Multi-Level Inverter in Grid-Connected PV Systems" **Journal of Circuits, Systems, and Computers(2024) 2450310 (32 pages) World Scientific Publishing Company DOI: 10.1142/S0218126624503110**
8. R. Senthil Kumar , J.S Linda Johnsana , "A New Shunt Hybrid Active Power Filter Configuration Research and Implementation for Enhancement of Power Quality" **IEEE Xplore: 23 March 2023, DOI: 10.1109/ICCPC55978.2022.10072093.**
9. R. Senthil Kumar; D S Anusiya Devi; J.S. Linda Johnsana "Battery Management System for Renewable E-Vehicle, **IEEE Xplore, 01 May 2023, DOI: 10.1109/ICEES57979.2023.10110092, 2023, pp. 504-508.**
10. G. Sathish Goud & **Dr. R. Senthil Kumar** , " A Review on implementation of effective control Mechanism for micro-grid fed by renewable energy generating sources" **Gradiva Review Journal, ISSN no: 0363-8057, Vol:9 Issue 1, Jan 2023. UGC Care Group II Journal.**
11. Shankar Mogthala & **R Senthil Kumar**, "Review on Fuzzy logic based power quality improvement by using DSTATCOM based cascade multilevel inverter" **Proceedings on Engineering Sciences , DOI: 10.24874/PES04.03.004 , Vol 04,,No: 3(2022), page 263-270. Scopus Indexed**
12. **R. Senthil Kumar**, R. V. Shanmathi , G. Mageswaran ,, J. Manikandan "Power Flow Analysis of Transient Stability in Microgrids used in Power Stations", **IEEE Explorer,, PP 936-942, Dec 2022. DOI: 10.1109/I-SMAC55078.2022.9987370**
13. John De Britto C, S. Nagarajan & **R. Senthil Kumar** , "Effective design and implementation of hybrid renewable system using convex programming" **International Journal of Green Energy , DOI: 10.1080/15435075.2022.2160634, Published online: 28 Dec 2022. SCI and Scopus Indexed Annexure -1**

14. John De Britto C* , **Dr. R. Senthil Kumar** , Dr. S. Nagarajan ,”An Optimized Tuning of PID Controller Using Bio-Inspired Algorithm for Controlling Voltage and Current in the Photovoltaic System” *Neuro Quantology* , Volume 20 , Issue 7 ,Page 2834-2841 , Jul 2022, **ISSN**: 1303-5150, SCI and Scopus Indexed. Annexure -1
15. B. Chinthamani, N. S. Bhuvaneshwari, **R. Senthil Kumar** and N. R. Shanker, Motor Torque Measurement Using Dual-Function Radar Polarized Signals of Flux, *Intelligent Automation & Soft Computing*, IASC, 2022, vol.34, no.1, Pages : 515 - 530 ISSN: 1079-8587 SCI and Scopus Indexed.
16. S. Kavitha , N. S. Bhuvaneshwari, **R. Senthil Kumar** and N. R. Shanker, “Magnetoresistance sensor-based rotor fault detection in induction motor using non-decimated wavelet and streaming data” in *Automatika - Journal for Control, Measurement, Electronics, Computing and Communications*, Page No: 525-541, 2022, Scopus Indexed, SCI Indexed, ISSN No: 0005-1144, Vol 63 No 3.
17. F. Kavin, **R. Senthilkumar** , “Chaotic Whale Optimized Fractional Order PID Controller Design for Desalination Process”, *Computers, Materials & Continua*, 2022, vol.71, no.2 , Jan 2022. Pages: 2789 – 2806. ISSN: 1546-2218. Scopus Indexed.
18. G. Maheswaran , M. Ettappan, T. Kavitha, **R. Senthil Kumar** ; “ **Effective dc-link voltage variation for renewable power application**”, Scopus Indexed, *Journal of Physics: Conference Series*, IOP Publishing, Volume – 2027, Issue 1, ISBN : 1742-6596 September 2021.
19. **R. Senthilkumar**, S.Sakthi, M.Aharish, K.Mahesh, T.Mari Bhagavathi ., “**Ventilator Using Arduino with Blood Oxygen Sensing**” *Design Engineering* , Scopus Indexed , ISSN: 0011-9342 | Year 2021 Issue: 8 | Pages: 4296- 4303, October 2021.
20. R. Venkatesh, **Dr. R. Senthil Kumar** , Dr. E. Sathish, “ Design of an autonomous aerator system for Aquaculture Applications, *Turkish Online Journal of Qualitative Inquiry(TOJQI)*, volume 12, Issue 3, June 2021 : page 2307 – 2313. e-ISSN 1309-6591
21. **Dr. R. Senthilkumar**, K. AhamedMeeran, P. Nithishkumar, A. Rajamanickam, V. Rositha., “ **Smart Solar Electric Vehicle**” , *International Journal of Scientific Research in Science and Technology*, UGC Approved Journal , Volume 9 , Issue 1 , ISSN: 2395-6011 , Online ISSN: 2395-602X, Page no : 735 – 740, March – April 2021.
22. **R. Senthilkumar**, S.Sakthi, M.Aharish, K.Mahesh, T.Mari Bhagavathi ., “**Smart Ventilator Using Arduino with Blood Oxygen Sensing**” *International Journal of Scientific Research in Science and Technology*, UGC Approved Journal , Volume 9 , Issue 1 , ISSN: 2395-6011 , Online ISSN: 2395-602X, Page no : 448 - 453, March – April 2021
23. **R. Senthilkumar** , T. Muthamizhan , Ramaprasad Maharana , P. Saravanan, “ Designing and Modeling of Three Phase Inverter using Redundant Leg” in “*International Journal of Solid State Technology*” Scopus Indexed - ISSN : 0038-111X, Volume 63 No.3(2020), Page No: 1668 – 1676, Issue Sep – Oct 2020.
24. T. Muthamizhan , **R. Senthil kumar** , P. Saravanan , Ramaprasad Maharana , “Sensorless Control of Z-Source Inverter Fed Brushless DC Motor Drive Using Hybrid Control Strategy For Electric Vehicle Applications” in “*International Journal of Solid State Technology*” Scopus Indexed - ISSN : 0038-111X, Volume 63 No.3(2020), Page No: 1656 – 1667, Issue Sep – Oct 2020.
25. Ramaprasad Maharana , P. Saravanan , **R. Senthil kumar** , T. Muthamizhan, “Multiband 8 Element MIMO Antenna Array with Orthogonal Circular Polarization for Sub 6 GHz Cellular Applications, in “*International Journal of Solid State Technology*” Scopus Indexed - ISSN : 0038-111X, Volume 63 No.3(2020), Page No: 1847 – 1851, Issue Sep – Oct 2020.

26. P. Saravanan , Ramaprasad Maharana , T. Muthamizhan , **R. Senthil kumar**, “Performance Improved Medical Signal Filters with Doctor’s Assistance System through Augmented Reality for Clinical Investigation” in “International Journal of Solid State Technology” Scopus Indexed - ISSN : 0038-111X, Volume 63 No.3(2020), Page No: 1649 – 1655, Issue Sep – Oct 2020.
27. **R. Senthil Kumar**, G. Mageswaran, “Modeling of Closed Loop ZVS Double Boost DC-DC Converter” Test Engineering and Management, ISSN: 0193 - 4120 , Volume 82, page No: 3082 – 3092, Issue : Jan –Feb 2020.
28. **Dr. R. Senthil Kumar** , G. Maheswaran, “ Closed Loop Design and Implementation of ZVS High gain Super Boost DC-DC Converter” International Journal of Printing, Packaging and Allied Sciences, ISSN 2320-4387, Vol. 4, No. 2, pages 735 -749 December 2016.
29. Sasikala, S, **Senthilkumar, R**, Manimegalai, L, and Suresh, T.D. “Smart Solar Influx Controller for Buildings with Optimized Tracking System” International Journal of Applied Engineering Research, ISSN 0973-4562 Vol. 10 No.23 (2015).
30. **Kishore Kumar , Dr. R. Senthil Kumar**. “Smart Dust for Tactical Border Surveillance to Detect, Classify and Track Enemy Intrusion Using Acoustic-Magnetic-Thermal-Vibration Signatures” International Journal of Advance Research in Electrical, Electronics and Instrumentation Engineering, ISSN 2278 – 8875 Vol. 3 Special Issue 2, pg. no 183-193, April 2014.
31. **Senthilkumar, R.** and Uma, G. “Design and Implementation of ZVS Re-Lift DC-DC Converter”, European Journal of Scientific Research, ISSN: 1450-216X, Vol.86, No.1, pp.123-134, September, 2012.
32. **Senthilkumar, R.** and Uma, G. “Design of ZVS Voltage Boost DC-DC Converter”, Wulfenia Journal, Austria, ISSN: 1561-882X, Vol.19, No.11, pp.334 -345, November 2012.
33. **Senthilkumar, R.** and Mageswaran, G. “Single Phase to Three Phase Converter Using Inversion techniques” International Journal of Advanced Engineering Sciences and technologies”, ISSN :2230-7818, Vol. 10(2), pp. 347-352, January 2011.
34. **Senthilkumar, R.** and Singaaravelu, M. “Design of Single Phase Inverter Using dPIC30F4013”, International Journal of Engineering Science and Technology, ISSN: 0975-5462, Vol.2(11), pp. 6500-6506, November 2010.

International Conference

1. Analysis and Design of a Soft Switching Boost DC – DC Converter –International Conference on Electrical Electronics & Communication Technology ICEECT’24 on 27th Aril 2024 held at PERI Institute of technology.
2. ” Sustainable Vertical Gardens in the City: An Android-Powered Irrigation Approach" submitted at Intelligent Computing, Advanced communication and Materials – IC²ACM 2023 held at RMK College of Engineering and Technology from 21 to 23 Dec 2023.
3. ” Efficient Power Conversion for Sustainable Energy: The High-Gain SEPIC Approach" submitted at 5th National Conference on Recent Trends in Power and Energy Engineering RTPEE -2024 held at SSN College of Engineering from 21 to 22 March 24.
4. ” Intelligent BMS Hardware Integration for Sustainable E-Vehicles " submitted at Recent

Advancements in Science, Management, Engineering and Technology" (RASMET24) held on 25th & 26th April, 2024 at DMI College of Engineering, Chennai, India.

5. " Advanced Smart Dual Charging and Monitoring system of Batteries " submitted at International Conference on Innovations, Challenges and Solutions in Engineering Science and Technology 2024 (ICICSET'24) from May 30 to 31st 2024 at Sri Indu College of Engineering and Technology, Hyderabad.
6. " **Smart Spraying system for precision agriculture: A cloud connected approach**" International Conference on Computational Methods in Engineering Health Sciences, ICCMEH - 2023, organized by Manipal Academy of Higher Education on 2-3 October 2023.
7. " **A Ground Breaking Design Approach for a High gain ZVS Self Boosting DC-DC Converter**" International Conference Emerging Technologies in Power Electronics for Green and Renewable Energy Systems(ICETRPS – 2023) , organized by Bharath University during 3rd and 4th May 2023.
8. **Review on Fuzzy logic based power quality improvement by using DSTATCOM based cascade multilevel inverter**" Third International Conference on Emerging Trends in Engineering and Technology, organized by SIEM, Nashik, during 20th and 21st July 2022.
9. **Design and Control of Micro grid fed by PMSG of a microcontroller based wind energy conversion system**", Third International Conference On Emerging Trends In Engineering and Technology, organized by SIEM, Nashik, during 20th and 21st July 2022.
10. " **Agriculture Pesticide Sprayer In Wireless Technology** " Third International Conference On Power Electronics & Renewable Energy Systems(ICPERES 2023) organized by **Rajalakshmi Engineering College, Chennai, Tamil Nadu, India**, during 28-29, April 2023.
11. " **Subterranean Power Cable Fault Detection**" Third International Conference On Power Electronics & Renewable Energy Systems(ICPERES 2023) organized by **Rajalakshmi Engineering College, Chennai, Tamil Nadu, India**, during 28-29, April 2023.
12. " **Analysis of Micro-grid Power Flow Transient with Renewable Energy**" - Third International Conference On Power Electronics & Renewable Energy Systems(ICPERES 2023) organized by **Rajalakshmi Engineering College, Chennai, Tamil Nadu, India**, during 28-29, April 2023.
13. " **Battery Management System for Renewable E-Vehicle**" presented in 9th International Conference on Electrical Energy Systems ICEES – 2023 from 23rd – 25th March 2023 conducted by SSN College of Engineering,, Chennai
14. **Power Flow Analysis of Transient Stability in Microgrids used in Power Stations**
Published in: 2022 Sixth International Conference on I-SMAC (IoT in Social, Mobile, Analytics and Cloud) (I-SMAC), **Date of Conference:** 10-12 November 2022. **Date Added to IEEE Xplore:** 22 December 2022, **ISBN Information: Electronic ISBN:**978-1-6654-6941-8 ,**DVD ISBN:**978-1-6654-6940-1, **Print on Demand(PoD) ISBN:**978-1-6654-6942-5 ,**ISSN Information: Electronic ISSN:** 2768-0673 ,**Print on Demand(PoD) ISSN:** 2768-0665 ,**DOI:** 10.1109/I-SMAC55078.2022.9987370, **Publisher:** IEEE, **Conference Location:** Dharan, Nepal.
15. **A new shunt hybrid active power filter configuration research and implementation for enhancement of power quality in IEEE madras section sponsored -2022** – First International Conference on Computer, Power and Communication ICCPC'22 from 14th to 16th Dec 2022, Sairam Institute of Technology , Chennai.
16. Paper entitled "Improvement of Transient Stability in Micro-grid Using Energy Storage" has been accepted for the Oral Presentation as a full paper for the- "The IEEE International Conference on Intelligent Technologies (CONIT 2021)" Hubballi, Karnataka, India.

17. **R. Senthil Kumar**, J. Monika, S. Naresh Kanna, J. Florence Shalom, “Ingenious Hunger Breaker for Comatose and Neonatal (IHBCN)” 9th International Conference on Contemporary Engineering and Technology 2021 organised by Organisation of Science & Innovative Engineering and Technology(OSIET), Chennai held on 10th and 11th April 2021,
18. **R. Senthil Kumar**, R V Shanmathi, G. Mageswaran, “Improvement of Transient Stability in Micro-grid Using Energy Storage” 9th International Conference on Contemporary Engineering and Technology 2021 organised by Organisation of Science & Innovative Engineering and Technology(OSIET), Chennai held on 10th and 11th April 2021,
19. John De Britto C, S.Nagarajan, **R.Senthil Kumar**. “Battery Storage Based Convict Tracking of Embedded Platform” International Conference on Advances in Computing, Communication, Automation and Biomedical Technology @ IJAICT India Publications 2020, ISBN : 978-81-950008-0-7, Page :193-196. Dec 2020.
20. **Senthilkumar**, R, Monika, J and Nareshkanna, S. “Ingenious Child Abduction Rescue System (ICARS) in International Conference - ICRTCCNT'19, Kings Engineering College, Chennai, Oct 2019.
21. **R. Senthil Kumar** and G. Mageswaran., “Modeling of Closed Loop ZVS Double Boost DC-DC Converter” presented and published in International Conference on Advanced Technology in Engineering and Management ICATEM'19 on 15th Feb 2019 at Management Development Institute of Singapore – MDIS
22. **R. SenthilKumar**, S. Joyal Isac and M. Kuzhali. “Implementation of Biogas Powered Fuel Cell” IEEE Conference publication in Power, Control, Signal and Instrumentation Engineering, ISBN: 978-1-5386-0814-2, pp.3036 – 3041, 2017.
23. **Senthilkumar, R.** and Uma, G. “Design of Resonant Soft Switching Converter” , IEEE Conference publication in Power, Energy & Industry Applications, ISBN: 978-1-4244-4789-3, pp.1-6, June 2009.
24. **Senthilkumar, R.** “ Design of Zero Voltage Transient Soft Switching Chopper” National Conference on Soft Skill Applications for Solid State Drives, pp. 18-23, April 2009.

PATENTS PUBLISHED/GRANTED:

1. Applied and published a patent dated: 19/07/2024 in the topic “OPTIMIZING ELECTRIC VEHICLE DESIGN THROUGH DRIVING FORCE MODELLING BY MACHINE LEARNING” Filling Number 202441052611
2. Applied and published a patent in March 2024 for an Indian design titled ‘Automated Hybrid Electric Storage System for Smart Car Manufacturing Unit’. Filling Number : 202441021552 A and Date of publishing: 29/03/2024.
3. Applied and published a patent in Electrical Sciences under the topic “Portable Nano Grid Solar Power Supply System” Date of filling: 26/07/2023. Filling Number 202341050317 A and date of publishing: 01/09/2023.
4. Applied and published a patent in Computer Science under the topic “A Novel IoT Based Multi Head Food Extrusion Utility System” Date of filling: 18.02.2023. Filling Number 202341011107 and date of publishing: 17.03.2023.
5. Applied a patent in Computer Vision and Image Understanding under the topic “Image Based Detection of Plant Leaf Disease using Five Convolution Layer Deep Convolution Neural Network”. Manuscript Number: CVIU-21-23.
6. Applied and published a patent titled “Machine Learning and IOT based pets health monitoring system” dated 07.05.2021 with filing number: 202141018773.

COURSES CERTIFIED:

1. Online certified course on ‘Electrical Vehicle Technology – A Beginner’s Course’, Udemy – 9 Days Course.
2. Attended and Participated in Anna University Sponsored Six day FDTP on “ EE8601 - Solid State Drives” conducted by University College – Thirukuvalai from 31.01.2022 to 05.02.2022.
3. Attended and Participated in FDP on The Leader’s Secrets” organised by Saveetha Teaching Learning Centre, Saveethe Engineering College on 05.01.2022.
4. Attended NPTEL course on “Electric Vehicles and Renewable for 12 weeks July, 26th 2021 to October 20th 2021.
5. Attended - Certified 6 days - Virtual FDP on “Product Design Engineering using Fusion 360” by ICT Academy from 19.04.21 to 24.04.2021.
6. Online certified course on “ Online Teaching “ by IUCEE – Indo Universal Collaboration for Engineering Education from 27.07.2020 to 07.09.2020.
7. Online certified course on ‘A Complete Course – Solar Energy – Advance level, Udemy – 5th May 2020.
8. Online certified course on ‘A Complete Course – Electrical Vehicle, Udemy – 16th April 2020.

ACHIEVEMENTS AND AWARDS:

1. Dr. R Senthil Kumar has been awarded with Best Faculty Award 2024 by IE(I), Kancheepuram Local Chapter,
2. Dr. R Senthil Kumar has been awarded with Teacher Ratna Award 2021 by Aram Anbin Adaiyalam Trust.
3. PALS – IITM – Executive Member of the College since June 2019 onwards.
4. Academic Council Member – DMI College of Engineering from June 2018 to May 2019.
5. Teaching Awards in Engineering – Staffordshire University , UK & Educational Matters – 2014
6. Saveetha Engineering College - Honored - Best Teacher Award for the Academic Year 2009-2010.

SPECIAL SESSIONS DELIVERED:

1. Delivered Special Lecture on “Power of Energy Conservation using AI Technology in Homes” – 14.12.2024 (Energy Conservation Day) at Saveetha Engineering College (Autonomous) – Conducted by The Institution of Engineers (India), Kancheepuram Local Chapter.
2. Delivered Special Lecture on “Challenges Hindering Widespread EV Adoption” at SEC – 3 Day IEI Sponsored FDP from 5th Nov to 07th Nov 2024
3. Delivered Special Lecture on “Recent Trends and current challenges in Electrical Vehicles” at SMIT – 6 Day Anna University Sponsored FDP from 1st August to 06th August 2024.
4. Delivered Special Lecture on “Recent Trends and current challenges in Electrical Vehicles” at Rajalakshmi Institute of Technology – SERB Sponsored National Level Three Days Workshop from 31st Jan to 02nd Feb 2024.

5. Delivered Special Lecture on “Energy Conservation in the Residential Places” – 14.12.2023 (Energy Conservation Day) at Saveetha Engineering College (Autonomous) – Conducted by The Institution of Engineers (India), Kancheepuram Local Chapter
6. One of the Juries in judging the Innovative projects presented by the students from all over TN in Web 3.0 and Block Chain Technology in ALT Hackathon 2023 conducted by IBC Media in Coordination with TN Skill Development Corporation and Naan Mudhavan Scheme at Anna University on 31.03.2023. Talk on “Recent trends in Science and Technology and Skill to be developed by the students”
7. One of the Technical Panel members in ALT Hackathon 2023 conducted by IBC Media in Coordination with TN Skill Development Corporation and Naan Mudhavan Scheme at Anna University on 24.03.2023. Talk on “Industrial Relevance and Students Placement in Engineering College”
8. Delivered a session on “Self-Management” – 09.11.22 - On the occasion of the 22nd Batch B.E. / B.Tech Learners Induction Programme,
9. Delivered Special Lecture on “Energy Conservation and Auditing” – 14.12.2021 (Energy Conservation Day) at Saveetha Engineering College (Autonomous) – Conducted by The Institution of Engineers (India), Kancheepuram Local Chapter.
10. Delivered Special Lecture on “Resonant Switch Converters” in AICTE Sponsored – 2 weeks FDP on “Trends and Challenges in Power Converters and Control” conducted by DEEE, Anna University between 04.05.2021 and 18.05.2021.
11. Delivered Special Lecture on “Stepper Motor and Switched Reluctance Motor” in DEEE, SMIT - Seven Days FDP on EE6703 – Special Electrical Machines from 11th to 19th June 2018 – Approved by Anna University Chennai.
12. Delivered Special Lecture on Stepper Motor and its control in DEEE, Jaya Engineering College – Seven Days FDP on EE6703 – Approved by Anna University.
13. One of the Panelist in PALS Education Summit 2019 at Sona College of Technology on 16.11.19 – Topic – Paradigm shift in Education – Faculty and Students Perspective and Team Leader for Group 5 batch in the Breakout session on the Topic Project Based Learning.

CONFERENCES/SEMINARS/WORKSHOPS ATTENDED:

1. Participated and Attended 5 Days FDP on “**Semiconductor Devices and Fabrication and Layout Design**” conducted by ICT Academy in association with Miety from **15 Dec 2025 to 19 Dec 2025 hosted by T.S. Srinivasan Centre for Polytechnic College and Advanced Training**
2. Active Participation in 5 Days – Faculty Development Program on “A Road Map for paradigm Shift in Higher Education” organized by Saveetha Teaching Learning Centre from 14th to 18th Feb 2023.
3. Organised, Participated and Attended IIT PALS - **TECHNOLOGY SPEAKS event on 22nd September 2022 on “Trends In Digital Manufacturing”**.
4. Participated and Attended IIT PALS – EC Members Orientation Program on 17th August 2022.
5. Participated and Attended IIT PALS STUDY CIRCLE for GATE/JAM at IIT Madras on 12th August 2022.

6. Participated in ICT Academy BRIDGE 2022 focusing on "Revitalizing India through New Age Skills", Largest Industry Institute Interaction Event, scheduled on the 13th July 2022, at Chennai Trade Centre, Chennai
7. Attended PALS 2021-22 VALEDICTION CEREMONY & FIRST DECADE CELEBRATIONS - **22nd June 2022 at Central Lecture Theatres, Humanities and Sciences Block, IITM Campus.**
8. Attended and Participated in IIT PALS – PI Governing Meeting on 25.05.2022 in Virtual Mode.
9. Attended and Participated in IIT PALS - VLAB Faculty meet event on 07.05.2022.
- 10. Attended Anna University Sponsored Six day FDTP on EE8601 - Solid State Drives from Jan 31st to 05th Feb 2022.**
11. Attended and participated in IP Awareness/Training program under National Intellectual Property Awareness Mission on January 29th 2022.
12. Attended and Participated in **“The Leader’s Secretes”** a faculty development programme organized by Saveetha Teaching Learning Centre on 05.01.2022.
13. Attended PALS CARES AND SHARES on UNIVERSITY- INDUSTRY LINKAGE TO PRODUCE INDUSTRY READY STUDENTS - SATURDAY, NOVEMBER 20th, 2021.
14. Attended PALS INDUSTRY SPEAKS -DIGITAL on 16th November 2021. **Topic: BUILDING AND SCALING ENTERPRISE GRADE MACHINE LEARNING SYSTEMS.** Speaker :Dr. Jai Ganesh, Senior Vice President & Head, Mphasis NEXT Labs
15. **Attended PALS INDUSTRY SPEAKS -DIGITAL on 7th October 2021. Topic: Trends in CyberSecurity - an IBM PoV**, Mr Mahesh Paradkar, Program Director, IBM Security, IBM
16. Attended **PALS INDUSTRY SPEAKS -CORE on 16th September 2021, Topic: Introduction to the world of Business - by Mr Sekar CK**, Business Head – Exports, Tube Investments of India Ltd.
17. Attended special lecture on **INDIA'S FIRST 3D PRINTED HOUSE** by **Dr. Manu Santhanam, Professor, Civil Engineering Department, IITM** on Saturday, **26th June 2021.**
18. Attended PALS CARES & SHARES WEBSERIES on **FUTURE OF ON-LINE & BLENDED LEARNING & DEGREES - A GAME-CHANGER** on Saturday, **17th July, 2021.**
19. Attended PALS - **“i2i – INDUSTRY TO INSTITUTE MEET”** session by Eminent Industry leaders from Ashok Leyland, Tube Investments of India, Buddy.AI, Elait, IBM, Lister Technologies on **Saturday, 7th August 2021.**
20. Attended webinar on **“Ignite the Engineer in you: Try and Fly”** by Dr. Chandra Priya ,MIT campus , Anna University- Conducted by IT department, SEC on 07.06.2021.
21. Attended Webinar by IEI on **World Environment Day 2021 - Restoration of Water Bodies** - by Dr. M. Velan, FIE – on 05.06.2021 – organized by SEC.
22. Attend webinar on **“Step towards Smart Society”** by Mr. V Ponraj - Former Scientific Advisor to APJ on 05.06.2021 organized by SEC.
23. Attended webinar by MBA department - MBA Seminar Series -1 -**“Recent Trends and Career Opportunities in Logistics”** 05.06.2021 by Mr. Arun Kumar – Manager South, Multinational E- Commerce Company.
24. Attended webinar by MBA department - MBA Seminar Series -1 - **“How I have Chiseled My Career”** on 02.06.2021 by Dr. J.V. Muruga lal Jeyan , Vice president –

Research Program Aiipitech Pvt Ltd.

25. Attended webinar by Erode Mahesh on "**Perithinum Perthithu kail**" on 22.05.2021 organized by Saveetha Engineering College.
26. Participated in the World Researchers' Symposium 2021, held on April 18, 2021 and presented the paper "Analysis of Multilevel Inverter Topologies for Standalone Inverter Using Different PWM Methods".
27. Attended online webinar on "Electrical Vehicles –Components and technologies" - PALS aspire campus event by Mr. Thiru Srinivasan , Advisor, Enabler: Electric Vehicle Industry Ecosystem, PALS team with KCG technology.
28. Attended online webinar PALS Shares & Cares webinar on "Civil Services Exam – Wonderful career opportunity for Engineers" by expert members on 26.09.2020.
29. Attended online webinar on 21st Century Skills for teachers by Dr. N. Ramesh Babu – IITM on 12.09.2020.
30. Attended online webinar on Tamail Nadu Education Policy by Dr. Badri Seshathri on 05.09.2020.
31. Attended PALS CARES & SHARES WEBSERIES on INNOVATION LED ENTREPRENEURSHIP- THE WAY FORWARD on 29.08.2020.
32. Attended the PALS - InnoWah project competition program organised by PALS -IITM team in Zoom on 27.08.2020.
33. Attended two days online FDP on E-content preparation and delivery NITTTR, Chennai on 17.08.2020 and 18.08.2020.
34. Attended Elsevier two days workshop on Publishing the research papers in quality journals on 27.07.2020.
35. Given welcome address and attended - EWB students chapter - webinar on Role of engineers in the current world post covid'19 on 04.07.2020 by Mr. Gokul – EWB, Chennai in-charge.
36. Attended 5 days online FDP on Renewable Energy Sources by IGEN and PIT from 08.06.2020 to 12.06.2020.
37. Attended - ICTACT – online webinar on Change in the essence of Life by Ms. Bharathi Baskar on 25.05.2020.
38. Attended "ONLINE ASSESSMENTS AND REMOTE PROCTORING - GET THE LOWDOWN" by PALS CARES & SHARES VIRTUAL SERIES III – On 18.05.2020.
39. Attended online webinar on Ennam Pol Vaazhkai by Mr. Kaliamurthy IPS on 12.05.2020.
40. Attended five days Online Workshop on "Incorporating Universal Human Values in Technical Education" – AICTE from 11.05.2020 to 15.05.2020.
41. Attended online webinar on Industry 4.0 - Gen Z - Embrace with Technology by Ms. Vaijyanthi on 08.05.2020.
42. Attended online webinar on Road to success in Engineerign Education by Mr. jayaprash Gandhi On 06.05.2020.
43. Attended online webinar on Un Vaazkai Un Kaiyil by Mr. Neeya Nanna Gopinath, Vijay TV on 05.05.2020.
44. Attended online webinar on "Choosing your career path after high school" by Mr. Badri Sheshadri on 03.05.2020.
45. Attended "VIRTUAL LABS – VIABLE ALTERNATIVE FOR PHYSICAL LABS?" by

PALS CARES & SHARES VIRTUAL SERIES II on 03.05.2020.

46. Attended online webinar on Combatting COVID'19 by Dr. Dr. J. Daniel Chellappa on 02.05.2020.
47. Attended and successfully completed the Online FDP on Improving Competency and Values towards Intellectual Developments – From 6th April to 10th May 2020 – Conducted by saveetha teaching learning center.
48. Seminar - Infosys – Meeting at Mahendra City, Chengalpattu on 03.07.2019
49. CII Conference on Quality and sustainable education at Taj Coramandel Hotel, Chennai Nugambakama on 18.07.19.
50. Attended Awareness program at DOTE office and visit to IITM- Research park on 30.08.2019. – Principals and placement officers meet.
51. Meeting and MoU signing with UTP, Malaysia on 27.08.2019 at Meenambakkam
52. Attended Awareness program on support for Entrepreneurial and Managerial Development of MSMEs through Incubators under CLCS-TUS scheme on 22.08.2019 at MSME Chennai office.
53. IITM – Research Park – Meeting and visit – 06.07.2019
54. Organized Students Workshop on Latest Technologies in Industry by PALS team from IITM on 08.08.2019 at Krunji Hall.
55. Organized Students Seminar on Awareness on “Entrepreneurial opportunities, services and schemes” on 16.08.2019 through EWB Students Chapter – Mr. R. Elango (Ex. President, Kuthambakkam) & Mr. Gokul (ISRO, In-charge – Chennai EWB Chapter).
56. Indian Technology Congress 2019– Topic – Human Digitalization and Future Technologies on 4th and 5th September 2019 at NIMHAS Convention Center, Bengaluru.
57. Organized International workshop on Students Satellite Project on 18th September 2019 at Krunji Hall.
58. CII Regional Conference on Affirmative Action - “Understanding the fortune at the bottom of the pyramid“ at Taj Coramandel Hotel, Nugambakama on 20.09.19.
59. Presented a paper in the International Conference on Recent Trends in Computing, Communication and Networking Technologies – ICRTCCNT’19 at Kings Engineering College on 18th and 19th October 2019. Title : Ingenious Child Abduction Rescue System (ICARS)
60. Participated in the three days FDP on Teaching Learning Process at TLC, IIT Madras from 16th to 18th October 2019.
61. Participated in ICT Academy – Bridge 2020 – “Augmenting Skills and Accelerating Growth” - 26th Feb 2020 – At IITM Research Park – Received Intuitional Decade Partners Award.
62. Visited PALS 2019-20 InnoWAH Finals & Exhibition - 26th February, 2020 at IIT Madras Research Park.
63. Attended “Two Day Faculty Development Programme” - Organized by PALS in M/S "Easun MR, Thiruninravur, Chennai", - from 28th February – 29th February.
64. Visited L & T - ECC on 06.03.2020 at Manapakkam, Chennai – discussed about the following Curriculum support – Credit courses, Assessment of Students (Continuous assessment – 2nd to 4th year), Faculty development programmes, Internship to meritorious students based on Assessment scores & joint R&D projects, Certification courses for reskilling in Technology and new trends and also visited the L & T Museum.

65. Participated and attended – 3 Days Workshop on “Life Design Lab” – 26th to 28th Oct 2018.
66. Indo - Israel Initiative: Second International Programme on Students’ Satellite Mission 2022 Indian Technology Congress Association - 28th - 29th November 2018, Sir MV Auditorium, FICCI Bengaluru
67. Tamil Nadu - Global Investors Meet 2019 at Chennai Trade Center – 22nd and 23rd Jan 2019.
68. Participated in the CONNECT 2018 - 17th edition - Accelerating Progress: Inclusive Digital Growth - 9 - 10 October 2018, Hotel Feathers, Chennai
69. One of the Steering Committee members in the “Saveetha Surgical Innovation Hackathon 2019” on 11th and 12th March 2019 at SIMATS, Chennai.
70. Participate and attended two days’ workshop on “Future of the Internet of Things in Renewable Energy” at KCG College of Technology, Chennai from 03/05/18 to 04/05/18.
71. Attended three day workshop on “Mobile Application Development” at SEC from 23/04/18 to 25/04/18.
72. Attended one week workshop on “Control Strategy Prediction between conventional and Intelligent Controller” conducted by Department of Science and Technology at SEC from 18/04/18 TO 24/04/18.
73. Participated and attended – 5 day Workshop on “Outcome Based Education through ICT” by NITTRC at SEC from 05/03/18 to 09/03/18.
74. Attended two weeks workshop on “IOT using Raspberry PI” by NIELIT at Anna University from 27/11/17 to 08/12/17.
75. Participated and attended – 3 Days Workshop on “Life Design Lab” – 26th to 28th Oct 2018.
76. Indo - Israel Initiative: Second International Programme on Students’ Satellite Mission 2022 Indian Technology Congress Association - 28th - 29th November 2018, Sir MV Auditorium, FICCI Bengaluru
77. Tamil Nadu - Global Investors Meet 2019 at Chennai Trade Center – 22nd and 23rd Jan 2019.
78. Participated in the CONNECT 2018 - 17th edition - Accelerating Progress: Inclusive Digital Growth - 9 - 10 October 2018, Hotel Feathers, Chennai
79. IIT- Kharagpur – ISTE STTP on Electric Power Systems – Workshop – Saveetha Engineering College – 10th to 15th July 2017.
80. Attended one day workshop on opportunities and challenges in energy storage systems for building, solar and wind sectors organized by IES, Department of Mechanical Engineering, Anna University, Chennai on 4th March 2017.
81. Centre for FDP, Anna University conducted one week FDTP on Flexible AC Transmission Systems at Saveetha Engineering College from 16th to 23rd Dec 2015.
82. Attended one week Anna University sponsored FDTP program on Flexible AC transmission systems held from 16th to 23rd Dec 2015 – Organised by Department of EEE, SEC.
83. Workshop Coordinator for Two week ISTE workshop on Electric Power System organized by IIT-K in SEC from 2nd to 12th Dec 2014.
84. One week coordinators workshop on Control Systems conducted by IIT- Kharagpur from 15th to 19th September 2014.

85. Attended Two day Indio-US Workshop on Advances in solar energy and utilization – fast forward with solar mission organized by IES, Department of Mechanical Engineering , Anna University, Chennai on 7th and 8th April 2014.
86. Attended one day national workshop on Modeling and simulation of special electrical machines using MATLAB on 22nd Feb 2014 at Jaya Engineering College.
87. Attended Two day program on smart power grid operation- an industry institute interaction organized by School of Electrical Engineering, VIT University, Vellore on 19th and 20th April 2013.
88. Attended one day national seminar on power quality improvement using power converters, organized by the school of Electrical Engineering, VIT Chennai.
89. One day Technical Seminar on Lighting Design Prospects and Perspectives conducted by Indian Society of Lighting Engineers at AIEMA Technology Centre.
90. Attended two day NMEICT (MHRD) - ISTE workshop on Aakash for Education conducted by IIT- Bombay.
91. One day Technical Seminar on Green Lighting for a Greener World conducted by Indian Society of Lighting Engineers at AIEMA Technology Centre.
92. Attended one day faculty workshop on MATLAB programming conducted by SEC – ECE & EEE.
93. Centre for R & D of SEC conducted, one day workshop on Materials Science and its applications.
94. One Day Faculty workshop on Web Applications and technologies conducted by SEC- CSE Department.
95. Attended one day faculty workshop on VLSI Design conducted by SEC- ECE Department.
96. MNM Jain Engineering College – State level seminar on Recent Trends in industrial control and automation.

BOOK PUBLISHED AND REVIEWER:

2. Senthil Kumar R - Book Chapter – “Examples of IoT Usage in SCADA” published in the book titled “Internet of Things” - ESN PUBLICATIONS with ISBN 978-93-95196-94-9
3. Senthilkumar, R and Prakash, G. “Special Electrical Machines”, Charulatha Publication, 2008.
4. Reviewer of the book - Basic Electrical and Electronics Engineering – Charulatha Publications, 2012.
5. Reviewer of the Journal in International Journal of Electrical Engineering & Technology
6. Reviewer of the Journal in IET in Power Electronics.

ADMINISTRATIVE RESPONSIBILITIES :

- ✓ **Vice Principal** - Since 2016 onwards.
- ✓ **HoD – EEE** from June 2023 onwards.
- ✓ **PALS-IITM** – Executive Member from June 2019 to May 2023.
- ✓ **HoD – EEE from June 2013 to November 2017 – 4.5 years**, NBA and NAAC In-charge of the Department.
- ✓ **Supervisor Recognition** – Anna University, Chennai – Guiding 7 Ph.D Research Scholar.

- ✓ **Syllabus Sub-committee member** - Framing curriculum and syllabi for Regulation 2021 for M.E. Power Electronics and Drives programme for Non Autonomous Affiliated Colleges, Anna University Chennai.
- ✓ **Deputy Management Representative** – ISO 9001:2015 – From 2006 to 2020.
- ✓ Overall In-charge for conducting Graduation Day, College Day and Techfest function “DRESTEIN”.
- ✓ Guided 42 UG final year projects and 9 PG final year projects.
- ✓ Established Electrical Machines, Power Electronics, Control Systems lab and Engineering Practices Lab.
- ✓ Attended - National and International Conferences, FDPs, Workshops, Seminars in various colleges.
- ✓ Organized - 3 International Conference, 2 National Conferences, 3 FDPs, 15 workshops, 18 seminars, etc.,
- ✓ Chief Guest and Judge – Conferences, FDPs, workshops and Symposiums.

PROFESSIONAL MEMBERSHIPS:

- IEEE – Membership No: 97951760
- ISTE – Life Membership
- IAENG – Life Membership - 164794.
- UACEE – Life Membership - SNM10100054089.
- IEI – M154221 – Life Membership
- IAEEE – Membership No: 71050228