

# Sri Sai Ram Engineering College

## DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

1. Name :	<b>Dr. T. MUTHAMIZHAN</b>
	
2. Designation:	<b>Associate Professor</b>
3. Qualification :	B.E., M.E., Ph.D.,
4. Area of Specialization :	Power Electronics and Drives
5. Experience :	Teaching : <b>UG: 18.4 PG : 02</b> Industry : 09
6. Publication :	<b>Journal</b> National : 2 International : 23
	<b>Conference</b> National : 0 International : 30
7. FDP	Attended: 32 Organized:4
8. Workshops	Attended: 7
9. Webinars	Attended: 10
10. Online courses	Attended: 11
11. Research Guidance :	<b>NIL</b>
12. Staff Achievements:	<ol style="list-style-type: none"> <li>Received funding of \$150, for High Performing Student Branch Chapter Program 2024, Sri Sai Ram Institute of Technology, PE31 (Power and Energy Society).</li> <li>Received funding of \$300, for High Performing Student Branch Chapter Program 2023, Sri Sai Ram Institute of Technology, PE31 (Power and Energy Society).</li> <li>Received a cash award of Rs.2000/- from the management of Sri Sai Ram Institute of Technology, for Producing 100% results in Special Electrical Machines in End Semester Examinations/ Anna University November/December 2018.</li> </ol>

	<p>4. Received a cash award of Rs.2000/- from the management of Sri Sai Ram Institute of Technology, for Producing 100% results in Design of Electrical Machines in End Semester Examinations/ Anna University April / May 2019.</p> <p>5. Received a funding of Rs.3,00,000 from ATAL for conducting FDP on "Power Electronics Applications to Renewable Energy Systems, Electric Vehicles, and Intelligent Control" from 10.10.2022 to 21.10.2022</p>
Funded Projects	<p>1. Received Rs.90,000/- for project titled 'Harnessing Nature's Bounty: Fog Nets as a Sustainable Supplement to Water Scarcity in Arid Regions' under SEG Capacity Building, Strategy for Convergence and Implementation of Various Govt. Schemes, Unnat Bharat Abhiyan</p>

## EDUCATION

<b>DOCTORATE</b> July/2014	<b>Electrical Engineering</b> College of Engineering Guindy/ Anna University
<b>POST GRADUATE</b> July/2005	<b>Power Electronics and Drives</b> College of Engineering Guindy/ Anna University
<b>UNDER GRADUATE</b> April/1998	<b>Electrical and Electronics Engineering</b> St. Peters Engineering College / Madras University

**Ph.D., THESIS TITLE:** DESIGN AND DEVELOPMENT OF WEB BASED EMBEDDED CONTROLLER FOR ELECTRIC DRIVES.

## EXPERIENCE

<b>Name of the Employer</b>	<b>Position Held</b>	<b>Period</b>	
		<b>From</b>	<b>To</b>
College of Engineering Guindy, Anna University, Chennai- 600 025	Teaching Fellow	July' 07	May' 14.
GKM College of Engineering & Technology, Tambaram, Chennai - 600 063	Associate Professor	July' 14	October' 15
Bharath Institute of Higher Education and Research, Chennai 600073.	Associate Professor	October' 15	November' 16

Kodada Institute of Technology and Science for Women, Kodada-508206	Associate Professor	December'16	June'17
Sri Sai Ram Institute of Technology, Chennai.600064	Associate Professor	June' 17	November' 25
Sri Sai Ram Engineering College, Chennai. 600064	Associate Professor	December' 25	Till Date

### PREVIOUS RESPONSIBILITIES

- Headed Curriculum and Syllabus design and development Team, for B.Tech, EEE 2015 Regulation, Bharath University
- Team Member for the conduct of UG/PG Examinations in the CEG/MIT campuses of the Anna University.
- Developed BUDGET ACCOUNTING SYSTEM Software for Centre for Professional Development Education (CPDE), Anna University and software modules.
- Worked in DIGITAL LIBRARY PROJECT, CEG, Anna University.

### MEMBERSHIP IN PROFESSIONAL BODIES

S.No	Professional Body	Membership No.
1	IEEE (Senior Member)	SM-93629644
2	ISTE (Life Member)	LM73427
3	IEI (Fellow)	F-1271810
4	SESI (Member)	LM/1940/2012
5	IAENG (Member)	163122

### BOOKS PUBLISHED: NIL

### CONSULTANCY: NIL

### PATENTS

1. **T. Muthamizhan**, “VAT- MACHINES : VIRTUAL AUTOMATED TELLER MACHINES”, Application No. 202011007303
2. **T. Muthamizhan**, “INTELLIGENT HYBRID ELECTRIC CONVENTIONAL VEHICLES”, Application No. 202041010651
3. **T. Muthamizhan**, “HANDY DEVICE FOR FACE IDENTIFICATION”, Design Number: 352040-001, The Patent Office Journal No. 50/2021 Dated 10/12/2021

## **INDUSTRIAL TRAINING:**

1. Completed industrial training in Sakthi Transformer, Thirumudivakkam from 03/06/2024 to 11/06/2024.
2. Panchayat Administration & Rural Development department, State Institute of Rural Development & Panchayat Raj (Rural Development & Panchayat Raj Department, Govt. of Tamilnadu), Maraimalainagar – Chengalpattu - 603209

## **RESEARCH PUBLICATIONS:**

### **INTERNATIONAL JOURNAL**

1. **Muthamizhan, T.**, Raji, J., Sakthidhasan, K., Aravinda, K., “Design of a smart solar-powered EV motor drive using TQZSMSL converter and LOA-optimized RBFNN MPPT”, *Applied Nanoscience*, 2190-5509, 2025, 15(6), 48 (SCI)
2. **Muthamizhan, T.**, Karthick, K., Aruna, S.K., Velmurugan, P., AI-Driven Stacking Ensemble for Predicting Total Power Output of Wave Energy Converters: A Data-Driven Approach to Renewable Energy”, *Processes*, 2227-9717, 2025, 13(4), 961 (SCI)
3. Shekar, S.C., **Muthamizhan, T.**, Aijaz, M., Sekhar, D.C., Wavelet-ANN Based Detection of Fault Location of Hybrid Renewable Energy Sources Connected Power Transmission System, *International Journal of Renewable Energy Research*, 2024, 14(3), pp. 551–562 (Scopus)
4. Sivakumar, A., **Muthamizhan, T.**, Kanagarathinam, K., “ Mitigation of supply current harmonics in fuzzy-logic based 3-phase induction motor”, *International Journal of Power Electronics and Drive Systems*, 2023, 14(1), pp. 266–274 (Scopus)
5. **Muthamizhan, T.** A Security Model for Web-Based Fuzzy-Logic Direct Torque Control of Induction Motor Drive, *IETE Journal of Research*, 0377-2063, 2022, 68(2), pp. 1291–1299 (SCI)
6. Logeswari. N and **Muthamizhan T**, “Optimized Wireless Power Transmission System with Magnetic Coupled Resonance Technique”, *International Journal of Advanced Science and Technology*, Vol. 29, No. 6s, (2020), pp. 1712-1720. (Scopus)
7. **T. Muthamizhan**, N. Logeshwari and E. Maheswari, “Investigations on On-Board Charger with Simultaneous Charging of Low Voltage Battery for Electrical Vehicles”, *International Journal of Advanced Science and Technology*, Vol. 29, No. 6s, (2020), pp. 1721-1730. (Scopus)

8. R. Senthilkumar , **T. Muthamizhan**, Ramaprasad Maharana , P. Saravanan,"Designing and Modeling of Three Phase Inverter using Redundant Leg", R. Senthilkumar , T. Muthamizhan , Ramaprasad Maharana , P. Saravanan, Solid State Technology, Vol. 63 No. 3 (2020) pp.1668 – 1676, IF-0.11
9. **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", Solid State Technology, Vol. 63 No. 3 (2020), pp. 1656 - 1667, IF-0.11
10. 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", Solid State Technology, Vol. 63 No. 3 (2020) ,pp.1649 - 1655, IF-0.11
11. 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", Solid State Technology, Vol. 63 No. 3 (2020) ,pp.1847 - 1851, IF-0.11
12. E.Maheswari, V.Balaji and **T. Muthamizhan**, "Solar Energy Based Laptop Charger using Quadratic Boost Converter", International Journal of Advanced Science and Technology, Vol. 29, No. 6s, (2020), pp. 1731-1741. (Scopus)
13. S. Palanikumar, Dr.G.Venkatesan, Dr.S.Solai Manohar, **Dr.T. Muthamizhan**, "Novel Control Scheme for Z-Source Inverter based Wind Energy Conversion Systems", WAFFEN-UND KOSTUMKUNDE JOURNAL, Volume XI, Issue IV, April/2020, pp.60-70, DOI:010.11205.WJ.2020.V11I4.05.100855
14. **T. Muthamizhan** (2019): A Security Model for Web-Based Fuzzy- Logic Direct Torque Control of Induction Motor Drive, IETE Journal of Research, DOI: 10.1080/03772063.2019.1644971 (SCIE/Scopus)
15. MD. Aijaz, **T. Muthamizhan**, "An Advanced Model Implementation of Multi Level Vienna Rectifier With Power Quality Added Function", Global Journal of Engineering Education, Vol. 20, No. 3, pp. 266-274, 2018.
16. **T.Muthamizhan**, A.Sivakumar, "Performance Analysis of Standalone Solar PV Powered Induction Motor Drive using Analog-Circuit based MPPT Algorithm", Journal of Advanced Research in Dynamical and Control Systems, Vol. 10, no.13 Sp. Issue, pp.1637-1648, 2018. (Scopus)
17. Sivakumar. A, **Muthamizhan.T**, "Harmonic Reduction in Single Boost Converter Fed DC Motor with EMI Input Filter", International Journal of Power Electronics and Drive Systems, pp. 914-920, Vol.9, No.2, June 2018. (Scopus)

18. **Muthamizhan, T**, "Implementation of hang regulator based power division for a microgrid with disseminated power generations", International Journal of Mechanical Engineering and Technology, 2017. (Scopus)
19. S. Ravirajan, **T. Muthamizhan**, "Modelling and Digital Simulation of a Standard IEEE - 30 Bus System to Improve Power Quality of Grid with UPQC using MATLAB", Asian Journal of Research in Social Sciences and Humanities Vol. 6, No. 10, October 2016, pp. 830-845. ISSN 2249-7315. DOI : 10.5958/2249-7315.2016.01056.X
20. **T. Muthamizhan**, "Performance Analysis of Solar Power Optimizer for DC Distribution System ", International Journal of Advanced Research in Electrical, Electronics and Instrumentation Engineering, Vol. 5, No. 8, pp. 6708-6715, 2016, IF-6.392
21. **T.Muthamizhan**, Clinton Williams. A, Malikudeen. I, "Simulation Investigation on Photovoltaic-fed Three-Level Boost Converters", International Journal of Applied Engineering Research (IJAER), Volume 10, Number 23 (2015) Special Issues, pp.20911-20916. IF-0.51
22. **Muthamizhan T** and Ramesh R., 'PV Powered Fuzzy based Direct Torque Controlled Induction Motor without AC Phase Current Sensor', International Review of Electrical Engineering, Vol.9, No.2. pp.307-314, April 2014. IF-0.91 (Scopus)
23. **Muthamizhan T** and Ramesh R., 'PV Powered Direct Torque Controlled Induction Motor without AC Phase Current Sensors', International Journal of Advanced Research in Electrical, Electronics and Instrumentation Engineering, Vol.3, Special Issue 2, April 2014, pp. 255-262, IF-6.392.
24. **Muthamizhan T** and Ramesh R., 'Experimental Investigations on PV Powered SVM-DTC Induction Motor without AC Phase Current Sensor', International Journal of Engineering and Technology, Vol 6, No 2, Apr-May 2014, pp. 842-857. ISSN: 0975-4024.IF-0.172 (Scopus)
25. Sivakumar A, **Muthamizhan T**, Gunasekhar N O and Ramesh R, "A Novel Sensorless Speed Control Strategy of Induction Motor Based on Vector Control", International Review of Electrical Engineering, Vol.8, No 4, pp.1211-1217, August 2013. IF-0.91 (Scopus)
26. **Muthamizhan T** and Ramesh R., 'Design and Simulation of PV driven three-phase Induction motor', International Review on Modeling and Simulations, Vol 6, No 2, pp. 412-418, April 2013.IF-0.940 (Scopus)

## BOOK CHAPTER

1. Silas Stephen, D., Muthamizhan, T., Sophia J, J. (2022). A Study on the Impact of DC Appliances and Direct DC Power System in India. In: Majhi, S., Prado, R.P.d., Dasanapura

Nanjundaiah, C. (eds) Distributed Computing and Optimization Techniques. Lecture Notes in Electrical Engineering, vol 903. Springer, Singapore. [https://doi.org/10.1007/978-981-19-2281-7\\_9](https://doi.org/10.1007/978-981-19-2281-7_9) (Scopus)

2. **T. Muthamizhan**, D. Silas Stephen and A. Sivakumar, "ANFIS Controller based speed control of High-Speed BLDC Motor Drive", Advances in Parallel Computing, 2020, pp.597-602. (Scopus)
3. M. Jagadeesh Kumar, **T. Muthamizhan**, P. Rathnavel, G. Ezhilarasan, T. Eswaran, "Performance and Analysis of Voltage Compensation in Transmission Line Using SMES-Based IDVR", Proceedings of International Conference on Power Electronics and Renewable Energy Systems, pp. 613-623, Nov 2021. (Scopus)
4. Md. Aijaz, **T. Muthamizhan**, T. Venkateswarlu, "An Intelligent Fuzzy Controlled Microgrid Fed by Distribution Generation Sources", Proceedings of International Conference on Power Electronics and Renewable Energy Systems, pp. 467-477, Nov 2021. (Scopus)
5. Sasikala and **T. Muthamizhan**, "Smart Home LPG Application Using GSM Network and Controlling Black-Marketing by RFID Technology", Advances in Parallel Computing, 2020, pp.161-167. (Scopus)

## INTERNATIONAL CONFERENCE

1. **T. Muthamizhan**, P. P. Narendhira Sai Raam, B. Naveen, P. Rathnavel, "Experimental Investigation and Performance Analysis of Cascaded Active Quasi Z-Source Inverter Fed Three Phase Induction Motor", 2025 6th International Conference for Emerging Technology (INCET)
2. **Muthamizhan T**, Rithika C, Avanthika S, Sriranganichellam M, A High Gain SEPIC DC/DC Converter for Renewable Energy Applications, 2025 6th International Conference for Emerging Technology (INCET)
3. **T. Muthamizhan**, B. Naveen, P.P.Narendhira Sai Raam, "Performance Analysis of Active-Quasi Z-Source Inverter fed Induction Motor Using SVM", 2024 International Conference on Smart Technologies for Sustainable Development Goals (ICSTSDG)
4. **Muthamizhan T**, Rithika C, Sriranganichellam M, Avanthika S, "A Solar PV fed High Gain Quasi-Resonant SEPIC Converter using LQR Controller", 2024 5th IEEE Global Conference for Advancement in Technology (GCAT)
5. **T. Muthamizhan**, Mohammad Aijaz, Guna. G, Anusharani V, M Mudhu Krishnan, " Optimization Techniques and Algorithmic Control in Power Electronics for Renewable Energy Systems", 2024 Second International Conference Computational and Characterization Techniques in Engineering & Sciences (IC3TES)

6. M Mudhu Krishnan, **T. Muthamizhan**, Mohammad Aijaz, Guna. G, Anusharani V, “Algorithmic Optimization and Synthesis Strategies for High-Performance Computing Integrated Circuit Design”, 2024 Second International Conference Computational and Characterization Techniques in Engineering & Sciences (IC3TES)
7. Anusharani V, M Mudhu Krishnan, **T. Muthamizhan**, Mohammad Aijaz, Guna. G, “Cutting-Edge Innovations in Biomedical Sensing Technologies for Enhanced Remote Healthcare Monitoring”, 2024 International Conference on Cybernation and Computation (CYBERCOM)
8. Mohammad Aijaz, Guna. G, Anusharani V, M Mudhu Krishnan, **T. Muthamizhan**, “Innovative Circuit Designs for Achieving Ultra-Low Power Consumption in Wearable Electronics”, 2024 International Conference on Cybernation and Computation (CYBERCOM)
9. M Mudhu Krishnan, **T. Muthamizhan**, Mohammad Aijaz, G Guna., V Anusharani, Algorithmic Techniques for Power Management and Optimization in Low-Power VLSI Design for Energy-Efficient Systems, 2024 International Conference on Cybernation and Computation (CYBERCOM)
10. **T. Muthamizhan**, P. P. Narendhira Sai Raam, B. Naveen, “Cascaded Quasi Z-Source Inverter fed Three Phase Induction Motor Control Using Space Vector Modulation”, 2024 10th International Conference on Electrical Energy Systems (ICEES)
11. **Muthamizhan T**, Avanthika S, Rithika C, Sriranganichellam M, Performance of High-Gain Quasi-Resonant SEPIC Converter fed by PV with Fuzzy Logic Controller, 2024 5th International Conference for Emerging Technology (INCET)
12. **T. Muthamizhan**, B. Barath, K M S Surya, “ANN Control for Switched Quasi Sepic Converter Integrated VSI for a Grid Connected System”, 2024 10th International Conference on Communication and Signal Processing (ICCSP)
13. **T Muthamizhan**, S Dhivya, S Fowziya, R Rajavarththini, “Analysis of a Solar PV Source fed Two-Stage Converter with Intelligent Control for Single-Phase Grid-Connected Systems”, 2024 10th International Conference on Communication and Signal Processing (ICCSP)
14. C. Fabbina, **T. Muthamizhan**, Md Mujahid Irfan, G. W. Martin, M. Shadhik, V. Balaji, “Design Of Optimized PID Controller For Switched Reluctance Generator In WECS Applications”, 2023 International Conference on Energy, Materials and Communication Engineering (ICEMCE)
15. **T Muthamizhan**, A Sivakumar, “A Solar PV Array Fed High-Gain Reboost Luo Converter by Grey Wolf Optimizer Algorithm based MPPT in BLDC Motor Drive for Electric Vehicles”, 2023 4th International Conference for Emerging Technology (INCET)
16. **T Muthamizhan**, M Janarthanan, P Nalin, M Nirmal, “ANN-Based Energy Storage System for an EV Charging Station Using Quadratic Boost Converter”, 2023 4th International Conference for Emerging Technology (INCET)

17. **T Muthamizhan**, M Aijaz, G Prakash, P Rathnavel, A Sivakumar, "A Multi-Port Autonomous Reconfigurable Solar PV System for Renewable Energy Integration in Hybrid AC/DC System", 2023 9th International Conference on Electrical Energy Systems (ICEES)
18. P. Rathnavel, **T. Muthamizhan**, G. Prakash, M. Jagadeesh Kumar, T. Baldwin Immanuel, A. Sivakumar, "Wind Energy Conversion system for Industrial Adaptation Control using IoT", 2022 International Conference on Computer, Power and Communications (ICCP)
19. G. Prakash, K. Dhineshkumar, **T. Muthamizhan**, P. Rathnavel, "A Review of Multilevel Inverter Topologies for Solarphotovoltaic System", 2022 International Conference on Computer, Power and Communications (ICCP)
20. **T. Muthamizhan**, M Janarthanan, P Nalin, M Nirmal, R Rajarajan, D. Gokulakrishnan, "Iot Based Solar Energy Monitoring System", 2022 International Conference on Computer, Power and Communications (ICCP)
21. Mohammad Aijaz, **T. Muthamizhan**, T. Venkateswarlu, D. Siva Prasad, P. Rathnavel, A. Sivakumar, "Performance Improvement in Fuzzy Logic Controller based Grid-connected Solar Photovoltaic System with Fractional Order Notch Filter", 2022 International Conference on Computer, Power and Communications (ICCP)
22. R. Sathya Vignesh, P. Vinayagam, S. Gomathi, S. Jaanaa Rubavathy, Indumathi, **T. Muthamizhan**, "GSM Based Electrical Load Control System for Home Applications", 2022 International Conference on Computer, Power and Communications (ICCP)
23. **T. Muthamizhan**, Mohamed Aijaz, A. Sivakumar, "Artificial Intelligence Integrated Control to PMSG Built Wind Energy Conversion Scheme", 2022 IEEE 3rd Global Conference for Advancement in Technology (GCAT)
24. **T. Muthamizhan**, Bhukya Shivaji, Mohammad Aijaz, " Fuzzy logic controller based Multilevel Inverters integrated Speed Control of Induction Motors", 2022 3rd International Conference for Emerging Technology (INCET)
25. **T. Muthamizhan**, M. J. Kumar, P. Rathnavel, M. Aijaz and A. Sivakumar, "A Photovoltaic fed High Gain Bidirectional DC/DC Converter on EV Charging stations Applications," 2021 2nd Global Conference for Advancement in Technology (GCAT), 2021, pp. 1-6, doi: 10.1109/GCAT52182.2021.9587699. (**Scopus**)
26. N. Mahesh Babu, M. Aijaz and **T. Muthamizhan**, "Fuzzy Logic Controller Based 3-Phase 4-Wire Inverter for Enhancing the Reactive Power Injecting Capability in Asymmetrical Voltage Sag," 2021 2nd Global Conference for Advancement in Technology (GCAT), 2021, pp. 1-6, doi: 10.1109/GCAT52182.2021.9587511. (**Scopus**)
27. **T. Muthamizhan**, M. Aijaz and T. Venkateswarlu, "Active Shunt Power Filter Using ANN Controller for Wind Turbine - PMSG Interfaced to Grid," 2021 2nd International Conference

for Emerging Technology (INCET), 2021, pp. 1-7, doi: 10.1109/INCET51464.2021.9456123  
**(Scopus)**

28. **T. Muthamizhan**, P. Saravanan and R. Maharana, "Sensorless Control of Z Source Inverter fed BLDC Motor Drive by FOC - DTC Hybrid Control Strategy Using Fuzzy Logic Controller," 2021 7th International Conference on Electrical Energy Systems (ICEES), 2021, pp. 358-363, doi: 10.1109/ICEES51510.2021.9383752. **(Scopus)**
29. **Muthamizhan T**, Venkatesan G, Simulation Analysis of an On-Board Charger with Simultaneous Charging of Low Voltage Battery for Electric Vehicles, International Conference on Advances and Developments in Electrical and Electronics Engineering (ICADEE 2K20), 6th-7th, Feb 2020
30. Palanikumar S, Venkatesan G, **Muthamizhan T**, "Optimized Control Scheme for Z-Source Inverter based Wind Source Power Conversion Systems", International Conference on Advances and Developments in Electrical and Electronics Engineering (ICADEE 2K20), 6th-7th, Feb 2020
31. A.Sivakumar, **T. Muthamizhan**, M.Rajmal Joshi and S.Sendil Kumar, "Regulation of DC Grid Voltage with Single Phase Bidirectional Converter", 2nd International Conference on Emerging Current Trends in COMputing and Expert Technology (COMET 2K19), 22-23 March 2019, pp.718-724.
32. J.Jothikumar, **T.Muthamizhan**, D.Baskar, "Reduction of harmonic voltage using a series active filter under different load conditions by using MATLAB", 3rd International Conference on Green Technologies for Power Generation, Communication and Instrumentation ICGPC'16 on March 23th & 24th, 2016, pp.7.
33. D.Vijayaragavan, **T.Muthamizhan**, S.Sherine, " Implementation of multi-input DC/DC converter based on the multi winding transformer for renewable energy applications", 3rd International Conference on Green Technologies for Power Generation, Communication and Instrumentation ICGPC'16 on March 23th & 24th, 2016, pp.5.
34. Sivakumar. A, **Muthamizhan.T** and Gunasekhar. N.O, "A Novel Scheme for Sensorless Speed Control of Induction Motor using DSP Controller", DST Sponsored International Conference on Power and Energy System ICPES'12, pp 50-56, Dec 2012.

## NATIONAL CONFERENCE

1. **T. Muthamizhan**, S. Juliana, S. V Kavya, S. Jayashree, "OBC-LDC INTEGRATED POWER UNIT FOR ELECTRIC VEHICLES", 2nd National Conference on Innovative Solutions in Electrical Engineering Science (NCISEES'19), PP.30, 22nd March 2019.
2. **Muthamizhan T**, Avinash Janakiraman V, Hariharan M, Lokendran U, "Bidirectional High Gain DC-DC Converter For Grid Tied Solar Electric Vehicle Applications", 3<sup>rd</sup> National

Conference on Innovative Solutions in Electrical Engineering Science (NCISEES'21), 21<sup>st</sup> April 2021.

## **WORKSHOP/FDP ATTENDED**

1. Attended SIX-DAY ONLINE FDP on “AI-Driven Innovations in Power Converters for Optimized Renewable Energy Utilization” from 23.06.2025 to 28.06.2025, in Kongunadu College of Engineering and Technology (Autonomous), Trichy.
2. Attended 5-day International Faculty Development Program (FDP) on Advances in Non-linear Dynamics: Methods and Applications (ANDMA 2024), held from June 11-15, 2024
3. Attended 2 Week online FDP on APPLICATIONS OF MACHINE LEARNING & DEEP LEARNING IN ELECTRICAL ENGINEERING” SERIES-I, 18<sup>th</sup> – 30<sup>th</sup> January 2021
4. Successfully participated & completed AICTE Training and Learning (ATAL) Academy Online FDP on "Internet of Things (IoT)" from 30-04-2020 to 04-05-2020 at Indian Institute of Information Technology (IIIT Nagpur).
5. Received FDP certificate from NPTEL for successfully completing the “Advanced Power Electronics and Control” course. Duration of NPTEL Course is 8 Weeks.
6. Two day FDP on “Decision Making Skills” conducted by ICT academy at Vidyasagar Womens college, on 13-06-2019 to 14-06-2019.
7. Five day FDP on “Engineering Teaching Pedagogy and Teaching Learning Process” conducted in Sri Sai Ram Engineering College, held from 3.12.2018 to 7.12.2018.
8. One day National Level workshop on “Solar Photovoltaic System Design”, Organized by Vels University on 22nd April 2017.
9. Faculty development Training Programme on “IC 6601 – Advanced Control System” Organized by Madras Institute of Technology, Anna University, Chennai 600025, during 25 – 31 May 2015.
10. One Day National Seminar on “Research Challenges in Micro grid”, Organized by the School of Electrical Engineering (SELECT), VIT Chennai on 9th May 2015.
11. Faculty development Training Programme on “EE 6401 - Electrical Machines-I” Organized by Department of Electrical and Electronics Engineering, GKM college of Engineering & Technology, Chennai 600025, during 08 – 15 December 2014.
12. Two-day UGC Sponsored Short-Term Course on “Research Methodology, Techniques of Writing Research Articles for SCI journals and Ph.D. Thesis Preparation”, Conducted by Department of Electrical and Electronics Engineering, college of Engineering Guindy, Anna University, Chennai 600025, during 8-9, March 2013.

13. One-week CSIR Sponsored Seminar on “Electrical Drives and Embedded Control”, Conducted by Department of Electrical and Electronics Engineering, college of Engineering Guindy, Anna University, Chennai 600025, during 17 – 21, December 2012.
14. Undergone Orientation Course, conducted by Empanelled Training Institution, Madras School of Social Work, from 5 to 10, September, 2011.
15. Faculty development Training Programme on “ EE 2251 - Electrical Machines-I” Organized by Department of Electrical and Electronics Engineering, college of Engineering Guindy, Anna University, Chennai 600025, during November 30 – December 06, 2009.
16. Three-day workshop on “Control Theory & its applications to Practical Problems”, under the aegis of Dr. Kannoth Sukumaran Endowment, Department of Electrical and Electronics Engineering, College of Engineering Guindy, Anna University, Chennai 600025, during 16 - 18, October 2008.
17. Faculty development Training Programme on “Design of Electrical Apparatus” Organized by Department of Electrical and Electronics Engineering, college of Engineering Guindy, Anna University, Chennai 600025, during 19 -25, May 2008.
18. Short Term course on “Modelling and Analysis of Electrical Machines” Organized by Department of Electrical and Electronics Engineering, college of Engineering Guindy, Anna University, Chennai 600025, during 09 -11, August 2007.
19. Two day Workshop on, “Virtual Instrumentation”, Organized by Department of Electrical and Electronics Engineering, college of Engineering Guindy, Anna University, Chennai 600025, during 24 -25, January 2007.
20. Two day Faculty development Programme on “Networks and Systems”, Organized by IEEE Madras Section at IIT Madras, during 28-29, April 2007.
21. Two day Workshop on, “Microcontroller Based System Design”, Organized by Department of Electrical and Electronics Engineering, college of Engineering Guindy, Anna University, Chennai 600025, during 1-2, December 2006

#### **SKILL DEVELOPMENT COURSES DONE:**

1. Completed the Module 1\_ Orientation Towards Technical Education and Curriculum Aspects during Aug'2022 conducted by National Initiative for technical Teachers Training.
2. Completed the Module 2\_ Professional Ethics & Sustainability during Mar'2023 conducted by National Initiative for technical Teachers Training.
3. Completed the Module 3\_ Communication Skills, Modes & Knowledge Dissemination during Aug'2022 conducted by National Initiative for technical Teachers Training.
4. Completed the Module 4\_ Instructional Planning and Delivery during Mar'2023 conducted by National Initiative for technical Teachers Training.

5. Completed the Module 5\_ Technology Enabled Learning & Life Long Self Learning during Aug'2022 conducted by National Initiative for technical Teachers Training.
6. Completed the Module 6\_ Student Assessment and Evaluation during Mar'2023 conducted by National Initiative for technical Teachers Training.
7. Completed the Module 7\_ Creative Problem Solving , Innovation and Meaningful R & D during Oct'2021 conducted by National Initiative for technical Teachers Training.
8. Completed the Module 8\_ Institutional Management & Administrative Procedures during Mar'2023 conducted by National Initiative for technical Teachers Training.

### **FACULTY DEVELOPMENT PROGRAM ORGANIZED**

1. Coordinator, Six Days Online Faculty Development Programme on “Renewable Energy, Electric Vehicle Charging And Grid Integration: An Introduction”, from 12.08.2024 to 17.08.2024, in Sri Sai Ram Institute of Technology, Chennai 600 044.
2. Coordinator, ATAL Sponsored Two Week Faculty Development Programme On “Power Electronics Applications To Renewable Energy Systems, Electric Vehicles And Intelligent Control” 10.10.2022 to 21.10.2022, in Sri Sai Ram Institute of Technology, Chennai 600 044.
3. Coordinator, 5 days online Faculty Development Programme on “Innovation in Electric Vehicles, Energy Storage and Smart Grid Interaction ” from 13<sup>th</sup> December' 21 to 17<sup>th</sup> December 21, in Sri Sai Ram Institute of Technology, Chennai 600 044.
4. Coordinator, 5 days online Faculty Development Programme on “Renewable Energy Technologies, Integration to the Power Grid and e-Vehicle ” from 28th March' 20 to 1st April' 20, in Sri Sai Ram Institute of Technology, Chennai 600 044.

### **CONFERENCE (NATIONAL) ORGANIZED**

1. Organizing Secretory, 4th National Conference on "Innovative Solutions in Electrical Engineering Science (NCISEES'22)", in Sri Sai Ram Institute of Technology, Chennai 600 044, on 30th March 2022.
2. Organizing Secretory, 3rd National Conference on "Innovative Solutions in Electrical Engineering Science (NCISEES'21)", in Sri Sai Ram Institute of Technology, Chennai 600 044, on 21st April 2021.
3. Organizing Secretory, 2nd National Conference on "Innovative Solutions in Electrical Engineering Science (NCISEES'19)", in Sri Sai Ram Institute of Technology, Chennai 600 044, on 22nd March'19.
4. Coordinator, National level Conference on "Smart Engineering Technologies ", in G K M College of Engineering & Technology, Chennai 600 063, on 17-04-15 & 18-04-15

## **Seminar/Guest Lecture Organized**

1. Organized Guest Lecture on "Smart Grid Control and Operation with Electric Vehicle", in Sri Sai Ram Institute of Technology, Chennai 600 044, on 29th October 21.
2. Organized one day Guest Lecture on "Recent Advancements in Smart Grid Technologies" on 07.03.2019 in Sri Sairam Institute of Technology, Tambaram.
3. Organized one day National workshop on SCADA in association with Cartel Automation Systems, Tambaram in Bharath University, Tambaram.
4. Organized Seminar on SOLAR ENERGY IN INDIA in Association with TEDA in Bharath University, Tambaram

## **SPECIAL LECTURES DELIVERED**

- A lecture on the topic, "Permanent Magnet DC Motor" in the Anna University, Chennai sponsored FDP, "Electrical Machines-I" held at GKM College of Engineering & Technology, Chennai – 600 063.

## **REVIEWER**

- Journal of Engineering Research and Sciences
- IEEE Conferences

## **SESSION CHAIR/TPC/CONVENER/COORDINATOR**

- Served as Session Chair in 5th International Conference of Emerging Technologies (INCET) 2024
- Served as Session Chair in 5th Global Conference for Advancement in Technology (GCAT) 2024
- Technical Programme Committee Member, IEEE International Conference on Emerging Trends and Technologies for Sustainable Development (ICET2SD'24) under the aegis of IEEE from 29th – 31st, August 2024
- Served as Session Chair in International Conference - ICEES 2023, Dept. of EEE, SSN College of Engineering, Kalavakkam.
- Served as Session Chair in 4th International Conference of Emerging Technologies (INCET) 2023
- Served as Session Chair in 4th Global Conference for Advancement in Technology (GCAT) 2023
- Served as Session Chair in 3rd International Conference of Emerging Technologies (INCET) 2022

- Served as Convener, International Conference On Computer Power And Communication ICCPC'22.
- Coordinator, National Conference on "SMART Engineering and Technology - NCSET '2015"

#### **SWAYAM-NPTEL ONLINE COURSES**

1. 2025 Power Electronics with Wide Band Gap Device - Elite
2. 2025 Smart Grid: Basics to Advanced Technologies - Elite
3. 2024 Basic Environmental Engineering and Pollution Abatement - Elite
4. 2024 Physics of Renewable Energy Systems - Elite + Silver
5. 2024 Waste to Energy Conversion - Elite
6. 2024 Python for Data Science - Elite
7. 2024 Recent Advances in Transmission Insulators – Successfully Completed
8. 2024 Non-conventional energy Resources – Successfully Completed
9. 2021 Recent Advances in Transmission Insulators – Successfully Completed
10. 2019 DC Microgrid - Elite
11. 2019 Advance power electronics and Control – Successfully Completed