


## Sri Sai Ram Engineering College

### Department of Electrical and Electronics Engineering

<b>Name:</b> <b>Dr. G.Venkatesan</b> <b>venkatesan.eee@sairam.edu.in</b>	
<b>Designation:</b>	Professor
<b>Qualification:</b>	Ph.D
<b>Area of Specialization:</b>	Power Electronics and Drives
<b>Experience:</b>	Teaching- 23 Years 5 months
<b>Date of Joining the Institution</b>	15.07.2022
<b>Number of Workshops/ FDP Attended:</b>	17 (5 days and more) 16 (Less than 5 days)
<b>Publication:</b>	<b>Patent:</b> 03 <b>Journal:</b> International: 17 <b>Conference:</b> National: 15
<b>General:</b>	To impart, implement and invest the enriched, experienced knowledge in the areas with latest tools and technologies to the future engineers.
<b>Achievement</b>	1. Doctoral committee member for Anna University Research scholars. 2. Board of Studies member for Autonomous College. 3. Acted as International and National Conference Reviewers
<b>Research Interests</b>	Special Electrical Machines, Power Electronics and Drives

**ACADEMIC QUALIFICATION:**

S. No.	Degree	Year of passing	College	University	Specialization	Class obtained	Full Time/ Part Time
1.	Ph. D	2010	College of Engineering Guindy	Anna University, Chennai	Special Electrical Machines	-	Part time
2.	M.E	2000	P.S.G. College of Technology, Coimbatore	Bharathiyar University	Power Electronics & Drives	First class	Full Time
3.	B. E	1998	National Engineering college, Kovilpatti	Manonmaniam Sundaranar University	Electrical and Electronics Engineering	First class	Full Time

**TEACHING EXPERIENCE:**

S. No	NAME OF THE POST	EMPLOYER	PERIOD OF EMPLOYMENT	Experience (as on 01.05.25)
1.	Professor	Sri Sairam Engineering College, Chennai	01.08.2023 to till date	1 Year 8 months
2.	Asst. Professor	Sri Sairam Engineering College, Chennai	15.07.2022 to 30.07.2023	1 Year
3.	Professor	Christian College of Engineering and Technology, Oddanchatram	25.11.2020 to 13.07.2022	1 year 4 months
4.	Professor	Karpagam College of Engineering, Coimbatore	03.07.2017 to 30.06.2020	3 Years
5.	Principal	Narasu's Sarathy Institute of Tech, Salem	27.11.2012 to 25.05.2017	4 Years 6 months
6.	Professor & HoD	Narasu's Sarathy Institute of Tech, Salem	01.06.2012 to 26.11.2012	5 months
7.	Asst. Professor	College of Engineering, Guindy, Anna University, Chennai	29.10.2008 to 28.05.2012	3 Years 2 months
8.	Lecturer	College of Engineering, Guindy, Anna University, Chennai	24.02.2005 to 28.10.2008	3 Years 8 Months
9.	Teaching Research Associate	College of Engineering, Guindy, Anna University, Chennai	08.08.2001 to 23.02.2005	3 Years 6 months
10.	Lecturer	Sathyabama Engineering college, Chennai	01.06.2000 to 31.07.2001	1 Year 2 Months
Total				<b>23 Years 5 months</b>

**INTERNATIONAL JOURNAL PUBLICATIONS:**

Sl. No.	Title	Name of the Journal	Vol.	Year
1.	Combined Simulated annealing and Improved Binary PSO based Optimal Corona Ring Design for High Voltage Transmission Line	PRZEGLĄD ELEKTROTECHNICZNY	5 (1), 222-229	2024
2.	Novel Control Scheme for Z-Source Inverter based Wind Energy Conversion Systems	WAFFEN-UND KOSTUMKUNDE JOURNAL (WoS)	Volume XI, Issue IV, April/2020, Page No:60 -70	2020
3.	Micro controller based Speed Control of BLDC Motor	Parishodh Journal	Volume IX, Issue III, March/2020, Page 5605-5612 ISSN NO:2347-6648	2020
4.	On shadow length and area for one MW solar PV system	Caribbean Journal of Science	Vol. 53, Issue 2,	2019
5.	Static and Transient Thermal Analysis of Power Factor Converters in Switched Reluctance Motor Drive	International Journal of Advanced Research in Dynamical and Control systems	Vol.10, Issue 13, pp 1656-1662	2018
6.	DC Motor modeling based on MATAB SIMSCAPE language.	International Journal of Pure and Applied Mathematics	vol.118, No.20, pp 35-41	2018
7.	Smart way to control Home appliances using IOT	International Journal of Pure and Applied Mathematics	Vol.118, pp. 1923-1926	2018
8.	Design and Implementation of Adaptive Jamming Gripper	International Journal of Scientific & Engineering Research	Vol.9, Issue 3, March , pp. 33-36, ISSN:2229 -	2018
9.	RSSI based underground coal mine monitoring and tracing system using LABVIEW technique	International Journal of Scientific & Engineering Research	Vol.9, Issue 3, March, pp. 120-126 ISSN:2229 -5518	2018
10.	Aadhar Based Electronic Voting machine	International Journal of Scientific & Engineering Research	Vol.9, Issue 3, March, 127-130- ISSN:2229 -5518	2018
11.	Real Time measurements of Transient Thermal Analysis for Power Factor Converters in Switched Reluctance Motor Drive	International Journal of Pure and Applied Mathematics	<b>Vol.117, No.16,</b> pp 27-33	2017
12.	Steady State Thermal Analysis of Power Factor Converters in	Fronteiras: Journal of social, technological and	Vol. 6, No.2, <b>pp 547 -552.</b>	2017

	Switched Reluctance Motor Drive	environmental science.		
13.	Power factor correction for Switched reluctance motor drive	International journal of Electrical engineering and Embedded systems,	Vol 2, no.1 pp 79-83.	2010
14.	Power Factor Improvement in Switched Reluctance Motor	Advances in Electrical and computer Engineering Journal	Vol 10, No.1, Pp 59 -63	2010
15.	Occurrence of Harmonics with Inductance machine and Switched reluctance machine – A survey and analysis	Journal of Applied sciences, ANSINET	Vol. 6, No. 9, pp.2123-2127	2006
16.	Modeling and simulation of a Novel Switched reluctance motor drive system with Power factor improvement	American Journal of Applied Sciences	Vol. 3, No. 1, pp. 1649-1654.	2006
17.	High Efficiency sequential switching HPWM inverter	WSEAS Transactions on circuits and systems	Vol. 2, No. 2, pp. 321-326	2003

### **INTERNATIONAL CONFERENCE PUBLICATIONS:**

<b>Sl. No.</b>	<b>Title</b>	<b>Conference</b>	<b>Month&amp; Year</b>
1.	Power Generation Using Barium Titanate Piezoelectric Material [Tizo-Gen]	2024 International Conference on Power, Energy, Control and Transmission	2024
2.	Adaptive SMC for modified three phase bridgeless Vienna rectifier for Electric Vehicle Applications	2024 International Conference on Power, Energy, Control and Transmission	2024
3.	Solar Energized Atmospheric Water Generator Using Peltier Device	2024 International Conference on Power, Energy, Control and Transmission	2024
4.	A Holistic Approach to Prevent Drug Misuse: Strategies and Framework for Comprehensive Support	2023 Intelligent Computing and Control for Engineering and Business Systems	2023
5.	Towards Energy-Efficient Data Centres: A Comprehensive Analysis of Cooling Strategies for Maximizing Efficiency and Sustainability	2023 Intelligent Computing and Control for Engineering and Business Systems	2023
6.	Advancing Cybersecurity with Explainable Artificial Intelligence: A Review of the Latest Research	5th International Conference on Inventive Research in Computing Applications, RVS College of Engineering and Technology, Coimbatore.	3rd to 5th August 2023
7.	Smart Garbage Monitoring and Vigilant	International conference on	6th to 8th June

	System	electronics and sustainable communication systems, Hindusthan Institute of Technology, Coimbatore	2023
8.	Implementation of digital power factor controller for switched reluctance motor drives	IEEE International Conference on Nanoelectronics, Nanophotonics, Nanomaterials, Nanobioscience & Nanotechnology (5NANO 2023)	27th & 28th April, 2023
9.	Automatic intelligent model for Lung tumor detection using medical images	IEEE ICPECTS-2022, Sri Sairam Engineering College, Chennai	8 <sup>th</sup> & 9 <sup>th</sup> December, 2022
10.	Modified U Net based learning model for semi supervised medical image segmentation	IEEE ICPECTS-2022, Sri Sairam Engineering College, Chennai	8 <sup>th</sup> & 9 <sup>th</sup> December, 2022
11.	Implementation of Digital Power Factor Controllers for Switched Reluctance Motor Drives	India Council International conference (INDICON-2022), Kochi.	24 <sup>th</sup> -26 <sup>th</sup> November, 2022
12.	Speed control of BLDC motor using microcontroller	ICADEE 2k20, Karpagam College of Engineering, Coimbatore	6-7, February 2020.
13.	Optimized control scheme for Z-source inverter based wind source power conversion systems	ICADEE 2k20, Karpagam College of Engineering, Coimbatore	6-7, February 2020.
14.	Simulation Analysis of an ON board charger with simultaneous charging of low battery for electric vehicle	ICADEE 2k20, Karpagam College of Engineering, Coimbatore	6-7, February 2020.
15.	Implementation of Microcontroller based maximum power point tracking controller of photovoltaic module arrays using particle swarm optimization	5 <sup>th</sup> International conference on Electrical, Electronics, Instrumentation and computer communication	24 <sup>th</sup> and 25 <sup>th</sup> January 2019

### **REVIEWERS IN INTERNATIONAL JOURNALS & CONFERENCES**

Sl.No	Journal Name	Year
1.	IEEE SILCON Conference held at National Institute of Technology Agartala, Tripura, India	2024
2.	ICAECA2023, Kumaraguru college of engineering, coimbatore	2023
3.	International Journal of Applied Power Engineering(IJAPE)	2023
4.	Hindawi Publications	2023
5.	Mathematical Problems in Engineering- Hindawi Publications	2022
6.	Journal of Critical Reviews	2020
7.	Journal of Engineering Science & Technology	2018

**PATENT:**

Sl.No.	Title	Application number	Date
1.	Shrewd Head gear for sensing fermented individual and halting the vehicle	201941047106 A	06/12/2019
2.	Constant Nutrients Monitoring System for Hydroponics	202341036139 A	16/06/2023
3.	Servo Amplifier Control Device	-	22/09/2023

**PROJECT SUBMITTED / SANCTIONED:**

Title of the Project / FDTP	Agency	Role as PI / Co PI	Funding Amount	Date	STATUS
Physical mode FDTP on Energy Storage Systems	Anna University	Coordinator	Rs.35,000	Dec 2023	Sanctioned
Design and Development of Energy Management Approach for Hybrid vehicles with fuel cells and ultra capacitor	SERB-SURE	Coordinator	-	Dec 2023	Applied
Heuristic Approach for Power Quality optimization in Hybrid Wind and Solar Energy System using Artificial Intelligence	MNRE	Co PI	Rs.34,80,000	Aug 2022	Applied
Online FDTP on Special Electrical Machines	Anna University	Coordinator	Rs.30,000	Dec 2021	Sanctioned
Modernization & Removal of Obsolescence (MODROBS) in Power Electronics and Drives lab	AICTE	Dept. Co-PI	Rs. 13,44,000	Jan 2020	Sanctioned
Design and Development of Electric Vehicles – A Perspective View	AICTE Training And Learning (ATAL)Academy	Co-ordinator	-	March 2020	Applied
Performance Improvement of Wind Energy Conversion System by using Switched Reluctance Generator Drive	Science and Engineering Research Board	Principal Investigator	Rs. 19,22,000	June 2018	Applied
Behavioral Study of Electromagnetic and Thermal Analysis of Free Energy Generator	Central Power Research Institute	Principal Investigator	Rs.6,00,000	March 2018	Applied
Design, Modelling, Analysis and Implementation of Free Energy Generator	Department of Science and Technology	Co Principal Investigator	Rs. 27,00,000	Dec 2017	Applied

**NUMBER OF EVENTS CONDUCTED:**

Sl.No.	Title	Duration		Institution
		From	To	
1.	Physical mode FDTP on Energy Storage technologies	05.02.2024	10.02.2024	Sri Sairam Engineering College
2.	Online FDTP on Special Electrical Machines	13.12.2021	18.12.2021	Christian College of Engineering and Technology
3.	5 days Virtual FDP on Challenges and Innovations in Electrical Engineering system	06.06.2020	13.06.2020	Karpagam College of Engineering, Coimbatore
4.	Recent topics in Electrical and Electronics Engineering – 12 Webinars	25.04.2020	10.06.2020	
5.	Modern Industrial Drives – Advancements and Applications	20.09.2019		
6.	Recent trend in Smart Electrical Drives	20.01.2018		
7.	Electrical Machines I	30.11.2009	6.12.2009	College of Engineering, Guindy.
8.	Solid State Drives	24.11.2008	30.12.2008	
9.	Modelling and Analysis of Electrical Machines	09.08.2007	11.08.2007	

**CERTIFICATION COURSES COMPLETED:**

S.No	TITLE	CERTIFIED BY	PERIOD
1.	Sustainable Power Generation Systems	NPTEL	July -Oct 2024
2.	Learning Analytics tools	NPTEL	July -Oct 2024
3.	Python for Data science	NPTEL	Jan -Feb 2024
4.	Design Thinking-A Primer	NPTEL	Aug –Sep 2023
5.	NITTT -7 Modules	NITTT	March 2023
6.	Electrical Machines	NPTEL	April -May 2021
7.	Digital manufacturing &Design	Coursera	May 2020
8.	Introduction to Personal Branding	Coursera	May 2020
9.	Electric Power systems	Coursera	May 2020
10.	Natural Gas	Coursera	May 2020
11.	Safety in the Utility Industry	Coursera	May 2020
12.	Power Electronics	NPTEL- AICTE FDP	Jul- Oct 2019
13.	Design of Photovoltaic Systems	NPTEL- AICTE FDP	Jul -Oct 2018

**MEMBERSHIP IN PROFESSIONAL SOCIETIES:**

<b>Name of the Society</b>	<b>Details of Membership</b>
IEEE Membership	98792884
Indian Society for Technical Education (ISTE)	LM 92774 (Life Membership)
International Society for Research and Development (ISRDR)	F3140900716 (Lifetime Membership)
Society of Digital Information and Wireless Communications (SDIWC)	25516 (Lifetime Membership)
International Association of Engineers (IAENG)	194633
Institute for Engineering Research and Publication (IFERP)	

**NATIONAL & INTERNATIONAL FDTP & SEMINARS ATTENDED: ( 5 DAYS and MORE)**

Sl. No.	Programme	Duration		Institution
		From	To	
1.	AI in Hydrogen and Electric Powered Vehicles (Online)	9.12.24	14.12.24	B S Abdur Rahman Crescent Institute of Science and Technology
2.	Renewable energy, Electric vehicle charging and Grid Integration: An introduction	12.08.24	17.08.24	Sairam Institute of Technology, Chennai
3.	AI applications in Electrical and Electronics Engineering	10.06.24	14.06.24	NITTTR, Chennai
4.	INTEL Unnati FDP	25.09.2023	30.09.2023	Sri Sairam Engineering college, Chennai
5.	Opportunities and Challenges in Electric Vehicle with Smart Grid	08.05.2023	12.05.2023	Sri Sairam Engineering college, Chennai
6.	Inculcating Universal Human Values in Technical Education	03.04.2023	07.04.2023	All India Council for Technical Education
7.	Product Design engineering using Fusion 360	01.08.2022	05.08.2022	Sri Sairam Engineering college, Chennai
8.	Multi technology	28.06.2021	03.07.2021	Dr.N.G.P. Institute of Technology, Coimbatore
9.	FDP on Renewable energy systems	01-06-2020	5-06-2020	RVS College of Engineering and Technology
10.	Renewable energy technologies, integration to the power grid & e-vehicle	28-05-2020	01-6-2020	Sri Sairam institute of technology
11.	Faculty Development Programme on “Research challenges and innovations in renewable energy systems”	11-05-2020	16-5-2020	Aarupadai veedu institute of technology
12.	FDP on Electric Vehicle Technology	06-05-2020	09-5-2020	IEEE - Madras Section
13.	FDP on Technological Advancement in Power System Control, Power Controllers,	27-04-2020	01-5-2020	N.G.P. Institute of Technology, Coimbatore



	Drives & E-Vehicles			
14.	FDP on Teaching and Learning for Accreditation in Technical Education	27-04-2020	01-5-2020	NITTTR Chandigarh
15.	FDP on Neural Network and Convolutional Neural Network	20-4-2020	24-4-2020	NITTTR Chandigarh
16.	Fundamentals of Nano Science and Technology	7.12.2011	21.12.2011	College of Engineering, Guindy
17.	Applied Soft computing	24.11.2010	30.11.2010	
18.	Power Quality	1.12.2010	7.12.2010	
19.	Design of Electrical Apparatus	19.05.2008	25.05.2008	College of Engineering, Guindy.
20.	Non-Linear Control system	04.12.2006	16.12.2006	

**NATIONAL & INTERNATIONAL FDTP & SEMINARS ATTENDED: (LESS THAN 5 DAYS)**

Sl. No.	Programme	Duration		Institution
		From	To	
1.	Application of Artificial Intelligence and machine learning in Electrical engineering	27.07.2022	28.07.2022	Sri Sairam Engineering college, Chennai
2.	Intelligent controllers for Renewable energy systems	02-06-2020	03-6-2020	P.S.R. Engineering college
	Virtual Training for Renewable energy systems	28-05-2020	30-5-2020	S.A Engineering College
3.	Soft computing techniques using MATLAB	23.01.2020		Karpagam College of Engineering, Coimbatore
4.	Industrial Automation using PLC & SCADA	01.02.2020		Karpagam College of Engineering, Coimbatore
5.	Journal writing, IPR and patent drafting	13.12.2019		Karpagam College of Engineering, Coimbatore
6.	Bloom box- The future Energy in India	27.09.2018	28.09.2018	Karpagam College of Engineering
7.	Modern trends in Industrial Energy Auditing and Management.	16.03.2018		Karpagam College of Engineering
8.	Development of Renewable Energy sources for Rural Electrification	09.03.2018	10.03.2018	Karpagam college of engineering
9.	MATLAB/Simulink Based Hands on Training on Power Engineering and Control Topologies	03.01. 2018	05.01.2018	Karpagam college of engineering
10.	Electric Drives and Challenges of Electric Transportation	12.12. 2017		K.C.G college of technology
11.	Application of MATLAB/Simulink to	07.12. 2017	09.12.2017	Bapatla Engineering, Guntur

	Electrical Systems			
12.	Digital Power and Motor Control Using C2000	21.12. 2017	22.12. 017	KCG College of Technology
13.	Design and Development of feedback controllers for Power Electronics Converters based system	23.11. 2017	25.11.2017	Karpagam College of Engineering
14.	Real Time Engineering Simulators	27.09.2008		IIT Chennai
15.	RTOS for Real Time Embedded Applications	01.02.2007	02.02.2007	College of Engineering, Guindy.
16.	Virtual Instrumentation	24.01.2007	25.01.2007	

### **PROGRAMMES ACTED AS RESOURCE PERSON:**

Sl. No.	Date	Topic	College	Acted as
1.	06.05.25	FDP on Electron Devices & Circuits, Industrial Instrumentatin and Process control systems	SRM Valliammai Engineering College	Guest Speaker
2.	10.05.23	International Conference on Advancements In Electrical Electronics Communication Computing And Automation (ICAECA) 2023	Kumaraguru College of Technology, Coimbatore	Technical Reviewer
3.	29.12.2021 and 30.12.2021	International Conference on Advances in Science, Engineering & Technology (ICASET -2021)	IFERP and Karpagam Institute of Technology, Coimbatore	National Advisory committee
4.	8.10.2021 and 09.10.2021	International Conference on Advancements in Electrical, Electronics, Communication, Computing and Automation (ICAECA-2021)	Kumaraguru College of Technology, Coimbatore	Technical Reviewer
5.	06.05.2021 and 07.05.2021	International Conference on Emerging Electrical Systems and Control (ICEESC-21)	Sethu Institute of Technology -Virudhunagar	National Advisory committee
6.	25.02.2020	Project Review	Dr. N.G.P Institute of Technology	Academic Expert
7.	29.07.2019	Recent trends in power electronics and its applications	Dr. N.G.P Institute of Technology	Guest lecture
8.	09.03.2018 & 10.03.2018	Development of Renewable energy sources for rural electrification	Karpagam college of Engineering, Coimbatore	Resource person
9.	27.02.2018& 28.02.2018	International Conference on Contemporary topics in	Karpagam college of Engineering, Coimbatore	Chair Person

		Electrical and Electronics Engineering		
10.	02.01.2018	Electromechanical Energy conversion and concepts in rotating machines	Narasu's Sarathy institute of technology, Salem	Guest lecture
11.	25.11.2017	Design and Development of feedback controllers for Power Electronics Converters based system	Karpagam College of Engineering	Resource person
12.	17.11.2017	BoS Meeting	National Engineering College, Kovilpatti	Alumni member
13.	27.01.2014	BoS Meeting	National Engineering College, Kovilpatti	Alumni member
14.	07.03.2013	2013 – International conference on computer communications and informatics	Sri Shakthi institute of engineering and technology, Coimbatore	Reviewer for conference paper
15.	11.05.2012	BoS Meeting	National Engineering College, Kovilpatti	Alumni member
16.	13.01.2012	Electrical Machines -I	Vel tech High tech Dr. Rangarajan Dr. Sakunthala Engg., college, Chennai	Guest lecture
17.	02.01.2012	Modern Trends in Electrical Motor Drives	Selvam College of Technology, Namakkal	Chief guest and Resource person
18.	05.08.2011	Comparison of special machine performances	Vel tech multi tech Dr. Rangarajan Dr. Sakunthala Engg college, Chennai	Key note address and Paper presentation