Department of Electrical And Electronics Engineering

Name	Dr.B.MEENAKSHI SUNDARAM
Date of Birth	20.05.1972
Unique ID	1-721572394
Educational Qualifications	*B.E(EEE),M.E(POWER ELECTRONICS AND DRIVES),Ph.D(POWER ELECTRONICS)*
Designation	PROFESSOR AND DEAN(EDC)
Email ID	meenakshisundaram@sethu.ac.in
Alternate Email ID	bmsapk@gmail.com

Experience	Industry	Teaching	Total
	1	24	25

Date of Joining the Institution	04-07-2011
Area of Specialization	***Power Electronics for Renewable Energy Sources***
Courses taught	***Power Electronics and Drives, Power System, Power Quality & Electrical Machines***
Research Focus	***Power Electronics for Renewable Energy Sources, Artificial Intelligence***
Research guidance (Number of Scholars)	***Two***
Subject Competency	***Power Electronics and Drives, Power System, Power Quality & Electrical Machines***

No. of papers published	National Journals	International Journals	Conferences
	05	***13***	***15***

PG Specialization	***Power Electronics and Drives***
Ph.D. Specialization	***Power Electronics for Renewable Energy Sources***
Projects Carried out	***01(DST FUNDED PROJECT)*** ***01(AICTE FUNDED PROJECT)*** ***01(MSME FUNDED PROJECT)***
Patents (Filed & Granted)	***(GRANTED -01,PUBLISHED-02)***
No. of Books published with details (Name of the book, Publisher with ISBN, year of publication, etc.)	***02 (POWER ELECTRONICS,SHANLAX PUBLICATIONS, ISBN :978-93-80686-72-1, 2019)*** ***(NEURAL NETWORK AND FUZZY SYSTEM,,NOTION PRESS, ISBN :9798896731511,2024)***

Academic Credentials

Level	Degree	Specialization	University	Year of Completion
UG	BE	**Electrical and Electronics Engineering**	**Kamarajar University, Madurai.**	**1993**
PG	ME	**Power Electronics and Drives**	**Anna University, Chennai**	**2004**
Ph.D.		**Power Electronics for Renewable Energy Sources**	**Anna University, Chennai**	**2018**

Details of Journal Publication:

Sl.No	Year	Journal Type	Name of the Journal and Publications	Paper Tile	Publication Details
1.	2025	SCI(SCOPUS)	IEEE Internet of Things, IEEE	Syner-Dandelion Optimization Integrated Temporal Recurrent Transformer Network for Accurate Energy Load Forecasting in IoT-Smart Grids	Published in online DOI: 10.1109/JIOT.2025.3590389 18-07-2025
2	2025	SCI(SCOPUS)	Journal of the Chinese Institute of Engineers,Taylor and Francis	A novel decentralized dynamic state estimation methodology for effective frequency monitoring in smart grids	Published in online DOI: 10.1080/02533839.2025.2505715 04-06-2025
3.	2025	SCI(SCOPUS)	Journal of the Chinese Institute of Engineers,Taylor and Francis	Solar integrated interleaved Luo converter for brushless DC motor using whale optimization	VOL. 48, NO. 4, 394–408
4.	2025	SCI(SCOPUS)	Journal of Solar Energy, Elsevier Ltd	Advanced control of solar-powered automated drying systems to enhance grain quality using a hybrid HOA-CINN approach	https://doi.org/10.1016/j.solener.2025.113467
5.	2025	SCI(SCOPUS)	Electrical Engineering Springer Publications	IntDEM: an intelligent deep optimized energy management system for IoT-enabled smart grid applications	Vol.107:1925–1947
6.	2022	SCI(SCOPUS)	Energies, MDPI	Performance Enhancement of Partial Shaded Photovoltaic System by Thermal Image Processing- Based Reconfiguration Algorithm – A Detailed Experimentation	Vol .15 Issue 22, 8450-8478
7.	2021	SCI(SCOPUS)	IEEE Access,IEEE	L-shape propagated array configuration with dynamic reconfiguration algorithm for enhancing energy conversion rate of partial shaded photovoltaic systems	Vol.9. 97661-97674.July2021

Sl.No	Year	Journal Type	Name of the Journal and Publications	Paper Tile	Publication Details
8.	2021	UGC Journal	SSRG International Journal of Computer Science and Engineering	Iot Based Power Monitoring System	Volume 8 Issue 4, 4-7, April 2021, ISSN: 2348 – 8387
9.	2020	SCI(SCOPUS)	Journal of Solar Energy, Elsevier Ltd	Mitigation of mismatch losses in solar PV system – Two-step reconfiguration approach	Vol. 206. 640–654.August 2020
10.	2019	SCI(SCOPUS)	Journal of Electrical Engineering & Technology, Springer	Combination of Novel Converter Topology and Improved MPPT Algorithm for Harnessing Maximum Power from Grid Connected Solar PV Systems	Vol.14.733-746. March 2019
11.	2017	SCI(SCOPUS)	Simulation: Transactions of the Society for Modeling and Simulation International, SAGE Publications	Simulation of FPGA controlled Single Stage Boost Inverter for the Applications of Grid Connected Photovoltaic System	Vol 1, 1-11, May 2017
12.	2016	UGC Journal	Circuits and Systems, Scientific and Research	Intelligent-Based Maximum Power Extraction on Grid-Integrated Multilevel Inverter-Fed Wind-Driven Induction Generators	7, 2551-2567
13.	2014	UGC Journal	International Journal of Innovative Research in Science, Engineering and Technology,	A high efficiency DC- DC Converter with FLC for Solar PV	vol.3, Special issue 3, March 2014
14.	2014	UGC Journal	International Journal of Applied Engineering Research	A Sliding Mode control based Single stage Boost Inverter for Photovoltaic Applications	ISSN 0973-4562 Vol. 9 No.24 (2014) pp. 8076-8084.
15.	2013	UGC Journal	I-manager's Journal on Instrumentation & control engineering	A Novel Approach in Touch Technology For Handled system Applications	Vol 1. No.1 November 2012- January 2013
16.	2013	UGC Journal	I-manager's Journal on Instrumentation & contol engineering	Design and Development of Robotic Technology for Trouble shooting the faults found in Transmission Line System	Vol 1. No.2. February- April 2013
17.	2013	UGC Journal	International Journal of Emerging Trends in Engineering and Development	Emerging of Recent Trend in Transmission Line System using Robotic Technology	Issue 3,Vol.2 (May 2013)
18.	2008	UGC Journal	International Journal of Electrical and Power Engineering	A Fuzzy logic controlled sliding Mode control (SMC) of Inverter in shunt Active power filter for power quality improvement	vol.2(6),398-402,2008

Details of Conference attended:

Sl.No	Year	Conference	Place	Paper Tile	Publication Details
1.	2018	Conference	Mepco Schlenk Engineering College, Sivakasi.	Comparative analysis of various reconfiguration algorithms for Solar PV Systems	International Conference on Recent Advancements in Electrical, Electronics and Control Engineering
2.	2013	Conference	Velammal college of Engg & Technology, held on Dec-2013.	A Novel MPPT Techniques for Grid Connected Wind Energy Conversion System	Proceedings of International Conference ICPES- 13, Velammal college of Engg & Technology, held on Dec-2013
3.	2012	Conference	Kalasalingam University, held on Dec-2012	Design and Development of Robotic Technology for Trouble shooting the faults found in Transmission Line System	Proceedings of International Conference ICPES- 12
4.	2012	Conference	Kalasalingam University held on Dec-2012	A Novel Approach in Touch Technology For Handled system Applications	Proceedings of International Conference ICPES
5.	2011	Conference	PSG College of Technology, Coimbatore. Dec 2011	Reduction of Switching losses in Induction Motor By Using Soft Switching Inverter	Proceedings of International Conference ICEPEC-2011
6.	2010	Conference	K.L.N college of Engineering	Improved Z Source inverter with reduced Z source capacitor voltage stress and soft start capability using fuzzy set	Proceedings of National Conference
7.	2009	Conference	Proceedings of National Conference	Analysis of Resonant complications on Z-Source current type inverter fed IM drive	Vellammal College of Engineering , 2nd Feb 2009
8.	2008	Conference	Proceedings of 4th National Conference PEDC'08 on 13th march 2008	A Fuzzy logic controlled sliding Mode control (SMC) of Inverter in shunt Active power filter for power quality improvement	A.C.C.E.T, Karaikudi
9.	2007	Conference	Proceedings of National Conference	Unit Commitment using Genetic Algorithm	Adhiyaman College of Engineering, Hosur
10.	2006	Conference	Proceedings of National Conference	Algorithm for Classification of Edge Components in images	Government College of Engineering, Tirunelveli, Apr 5, 2006.
11.	2006	Conference	Proceedings of National Conference	Stability Routing Protocol for Sensors in MANE	Government College of Engineering, Tirunelveli, Apr 5, 2006.
12.	2005	Conference	Proceedings of International Conference	Simulation of Low Cost Fuzzy Logic based Closed Loop Speed Control of PMBLDC Drive	PETISCON 05, Kolkata, Jan 28 & 29, 2005.
13.	2005	Conference	Proceedings of National Conference	A Low Cost Sensor Less Controller for Switched Reluctance Motor	KSR College of Technology, Tiruchengode, July 30 & 31, 2005
14.	2004	Conference	proceedings of National Conference	Neural Network Controller for UPS Inverter Applications	St. Joseph College of Engineering, Chennai, Jan 23 & 24, 2004.

Sl.No	Year	Conference	Place	Paper Tile	Publication Details

Details of Book Chapter and Books Published:

S. No.	Title of the Book	Publisher	Year
1.	Power Electronics.	Shanlax Publications	2019
2.	Neural Networks and Fuzzy Systems	Notion Press	2024

Details of Patents Filed and Granted:

Patent Granted with details

1.Tittle of the Invention : Maximum Power Extraction Using Innovative Algorithm for Solar Photovoltaic Systems

Name of the inventors : A, Srinivasan, B. Meenakshi Sundaram, S. Devakirubakaran

Patent Filed Date : 10/08/2018

Status : Granted (21.02.2024)

Patents published with details

1. Tittle of the Invention: Go safety at anywhere at any time

Name of the inventors : P. Meenalochini G.SoundraDevi B. Meenakshi Sundaram

Patent Published Date : 14/10/2022

2. **Tittle of the Invention:**Developing Hybrid Quantum-Classical Models for IoT Applications in Smart Cities

Name of the inventors: Dr. Rajkumar Bhimashankar Kulkarni, Mrs. Malathi. P, R. Anant, B. Meenakshi Sundaram, Dr. R. Sathishkumar

Patent Published Date : 24/01/2025

Expert Lecture Delivered:

- Acted as Resource person and delivered a inaugural address on –Entrepreneurship|| at St. Michael college of Engineering, Kalaiyarkoil. Sivagangai.
- Delivered a Guest Lecture on —Women Entrepreneurship|| at SFR College of Arts and Science,Sivakasi on 12th December 2017
- Delivered a Session on —Hybrid EV || in the Workshop held atSethu Institute of Technology, Kariapatti.
- Acted as a resource person in Energy Conservation day organized by TANGEDCO on 24-12-2023.
- Acted as Resource person and delivered a Guest Lecture on Entrepreneurship-Present Scenario in Ayya Nadar Janaki Ammal College. Sivaksi on 11.07.2025