

Dr. S. HEMALATHA No: 6, Ganapathi Salai
New Perungalathur Chennai-600 063, India
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Full Name (in block letters) : **Dr. S. HEMALATHA**
Specialization : Power Electronics and Drives
Spouse's Name : Dr. T. Sunder selwyn
Date of Birth : 11.09.1975
Nationality : Indian
Gender : Female

Degree	Specialization	Institution	Year of Passing
PhD	Faculty of Electrical Engineering Nanogrid	College of Engineering Guindy, Anna University, Chennai	January 2018
M.E.	Power Electronics and Drives	Govt. College of Engineering Tirunelveli-627 007	April 2005
B.E.	Electrical and Electronics Engineering	Mepco- Schlenk Engineering college Sivakasi, Madurai Kamaraj University,	April 1996

Total Experience : **19 years 6 months**

Academic Experience : **19 years 6 months**

Sl. No.	Name of the Employer	Position Held	Date		Experience
			From	To	
1	Sri Ramanujar Engineering College, Vandalur, Chennai	Assistant Professor	09/06/2005	03/01/2012	6 Years& 7 months
2	Prince Dr.K.Vasudevan College of Engineering and Technology, Chennai- 600127	Assistant Professor	05/01/2012	01/06/2013	1 years & 5 months
3	Prince Shri Venkateshwara Padmavathy Engineering college Chennai- 600127	Associate Professor	03/06/2013	Till date	6 Years& 6 months
Total Academic Experience				19 Years & 6 months	

ACADEMIC ACHIEVEMENTS

Present Position : **Associate Professor**
Prince Shri Venkateshwara Padmavathy
Engineering College, ,Ponmar
Chennai- 600127

Responsibility Held :

1. HOD/ EEE in PDKVCET
2. Organizing committee in National conference 'NACPED-'05.
3. Planning and periodical monitoring of Student performance
4. Monitoring the performance of teaching learning Process,
5. Budget Planning and utilization.

6. Identifying slow learners and providing extra care.
7. Encouraging the grimy layer students in develop their talents.
8. ISO, NAAC and NBA activities
9. Class Co-ordinator
10. College Attendance In charge
11. Lab In charge Power Electronics Lab

Research Area : **Modeling and Power Control Strategy of the Nanogrid for Standalone Rustic Electrification**

Publications :

International Journal	8
International Conference	2
National Conference	4
Patent applied	1

Paper Published

International Journal

1. **S Hemalatha, SC Mohan** “**Centralized power control strategy for 25 kw nano grid for rustic electrification**” 2012 IEEE - International Conference on Emerging Trends in Science, Engineering and Technology (INCOSET), pp. 456-461, 2012.
2. **S Hemalatha, SC Mohan**, “**Cost Optimization of Power Generation Systems Using Bat Algorithm for Remote Health Facilities**” Journal of Medical Imaging and Health Informatics 6, 1–6,2016.
3. **S Hemalatha, SC Mohan**, “**Harmonic Control of Nano-Hybrid Power Generation for Rural Zone**” International Journal of Applied Engineering Research 10 (Number 8), pp.6015- 6020, 2015.
4. **S Hemalatha, SC Mohan**, “**Design a Fuzzy Logic Control Strategy of Nano-Hybrid Power Generation for Rural Precinct**” International Journal of Applied Engineering Research (IJAER) 10 (11), pp.10241-10245, 2015

5. **S Hemalatha**, SC Mohan, “**Modelling of Nano-Hybrid Power Generation for Rural Zone**” International Journal of Applied Engineering Research (IJAER) 10 (Number 11, pp.10254-10256, 2015
6. **S Hemalatha**, G.Kalapriyadharshini and , K.Presilla Vasanthini “ Design of Active and Reactive Power Control Management for Fuel cell based Grid Connected Systems” International Journal of Engineering Trends and Technology (IJETT) Volume 51 Number 3 September 2017 .
7. G.Kalapriyadharshini, K.Presilla Vasanthini and **S Hemalatha**, “Investigation of Transient Stability for Variable Speed Wind Turbine driving a Permanent Magnet Synchronous Generator” International Journal of Innovative Research in Science, Engineering and Technology , Vol. 6, Issue 9, September 2017.
8. K.PresillaVasanthini, **S.Hemalatha** and G.Kalapriyadharshini, “Power Quality Enhancement by Modulated Power Filter Compensator in Low Voltage Distribution Wind Turbines” International Journal of Innovative Research in Science, Engineering and Technology , Vol. 6, Issue 9, September 2017.
9. TS Selwyn, S Hemalatha, Condition monitoring and vibration analysis of asynchronous generator of the wind turbine at high uncertain windy regions in India,Materials Today: Proceedings 46, 3639-3643, 2021
10. G Indira, AS Valarmathy, P Chandrakala, S Hemalatha , Development of an efficient inverter for self powered sand sieving machine, AIP Conference Proceedings 2393 (1)2022.
11. S Hemalatha, TS Selwyn , Computation of mechanical reliability for Sub-assemblies of 250 kW wind turbine through sensitivity analysis, Materials Today: Proceedings 46, 3180-3186,2021.
12. TS Selwyn, S Hemalatha ,Experimental analysis of mechanical vibration in 225 kW wind turbine gear box, Materials Today: Proceedings 46, 3292-3296,2021.
13. P Chandrakala, S Hemalatha, GG Indira, MJ Murali, P Harish, Energy harvesting using automobile chargers with wireless power transfer, AIP Conference Proceedings 2393 (1), 2022
14. MJ Murali, R Harish, AS Valarmathy, G Indira, S Hemalatha, ANFIS based MPPT for grid PV generation system using QZSI, AIP Conference Proceedings 2393 (1) 2022.
15. W Alghamdi, R Salama, S Hemalatha, LH Alzubaidi, U Akrom, Quantum Computing: Algorithms, Architectures, and Applications, E3S Web of Conferences 399, 04041, 2023

16. AS Valarmathy, P Chandrakala, S Hemalatha, G Kalapriyadarshini, Sepic with magnetic coupling for high voltage applications, AIP Conference Proceedings 2393, 2022
17. S Hemalatha, G Kalapriyadarshini, MJ Murali, R Harish, AS Valarmathy, A comparative performance analysis and luminous characteristics of different commercial LED lighting systems, AIP Conference Proceedings 2393, 2022.
18. S. Hemalatha, Monitoring of Real Time Machine Health and Fault Recognition Using Wireless Communication, International Journal of Management Technology and Engineering 9 (3), 6364-6369, 2019
19. S. Hemalatha, T. Sunder Selwyn, Reduced Switch Count Multi-Level Converter Integrated With Photo-Voltaic For Power Quality Enhancement, Journal of Applied Science and Computation 5 (4), 825-830, 2018
20. S. Hemalatha, A PFC Single Coupled-Inductor Multiple- Output Led Driver without Electrolytic Capacitor, International Journal of Research 6 (10), 712 -717, 2017
21. S. Hemalatha, Ranjani B, Dr.Sunder Selwyn T, Design of a Smart Home appliance framework based on the Internet of Things for remote operations in India, International Journal of Advanced in Management, Technology and Engineering ...2017
22. R.Kesavan, T.Sunder Selwyn, S. Hemalatha, Computation And Corroboration Of Robustness Of Reliability Of Wind Turbine Components By Sensitivity Analysis, International Journal of Applied Engineering Research. ISSN 0973-4562 9 pp 26, 2014
23. M Manikandan, S Hemalatha, A Chandramauli, S Ambrose, Z Alsalami "Surface Roughness Analysis in AWJM for Enhanced Workpiece Quality" E3S Web of Conferences 491, 04019,2024
24. V Syambabu, K Kalaiselvi, S Derisha Mahil, S Hemalatha, Badi Alekhya, N Kanagavalli Cutting-Edge Robotic Arm Design: Harnessing Flex Sensors and Novel Controller Framework to Meet Real-World Innovations 2024 International Conference on Intelligent Systems for Cybersecurity pg 1-6,2024

International Conference

1. **S Hemalatha**, TS Selwyn, DR Kesavan, "Techno Economic Considerations of Wind Power Generation" International Conference on Emerging Trends in Energy and Environment, Chennai Vol.1, Issue-1, pp 117-123.

2. **Hemalatha, S** & Chandramohan, S, ‘Design and control of hybrid nanogrid power generation for rural zone’, International Conference on Green Technology in Engineering and applied sciences” Organized by Adiparasakthi engineering College, Melmaruvathur, India

National Conference

1. **S Hemalatha**, Sujatha balaraman “Design and implementation of High frequency digital controller IC for DC-DC converter”, National conference on PEDC-2005,31st march organized by Alagappa chettiar college of engineering & technology, karaikudi
2. **S Hemalatha**, Sujatha balaraman “CPLD implementation of multiple digital PWM generation for high frequency AC-DC converter”, National conference on emerging trends in electrical engineering and power drives’ NACPED-05,20th APRIL 2005 organized by Government college of engineering, Tirunelveli.
3. **S Hemalatha**, “Comparision of power quality management of variable speed wind energy converters within doubly fed induction and synchronous generator” National conference on “Entrepreneurial excellence in current scenario”, EECS-2010,29th January 2010, organized by GKM college of engineering & technology, Chennai-600 0063.
4. **S Hemalatha**, Dr. S. Chandramohan “ Modelling and simulation of an overall hybrid energy conversion system for rural development” National conference on “Recent trends in mechanical Engineering”, RTME-2011,26th March 2011, organized by GKM college of engineering & technology, Chennai-600 0063.

Patent applied : **Design of Autonomous Mobile Robot Using Sensor Fusion for Dynamic Interaction**

Award : **“Best Researcher award” from Organization of science & Innovative engineering and Technology, IEEE Product Safety Engineering Society associated with New Horizon College of Engineering, Bangalore**

Membership in the Professional Societies :

1. Life member in International Association of Engineers

2. Life member in Indian Society for Technical Education (ISTE)

Subjects Taken

B.E. Electrical Engineering

1. Electrical Machines
2. Electrical Drives and Control
3. Power System Operation and Control
4. Power Quality
5. Power Electronics
6. Control system Engineering
7. Linear Integrated Circuits
8. Circuit Analysis
9. Electro Magnetic Theory

Software Skills :

1. Matlab
2. Pspice, MI-POWER

References

- 1. Dr. R. KESAVAN, Ph.D**
Professor, Production Technology
Madras Institute of Technology,
Chromepet,
Anna University,
Chennai – 600 025
- 2. Dr. R.P. KUMUDINI DEVI**
Professor / Electrical Engineering
College of Engineering Guindy
Anna University,
Chennai – 600 025