Dr. Deepika Vinothini T, M.E.,Ph.D.,
Assistant Professor / EEE
Velammal College of Engineering & Technology
email: tdv@vcet.ac.in

PROFESSIONAL EXPERIENCE

1.Institute Name	Velammal College of Engineering and Technology
Duration	June 2024 to till date
Designation	Assistant Professor
2. Institute Name	Velammal College of Engineering and Technology
Duration	July 2011 to November 2018 (7 Years 4 Months)
Designation	Assistant Professor

ACADEMIC QUALIFICATION

S.No	Degree / Branch	University	Year
1	Ph.D, - Faculty of Electrical Engineering	Anna University-Chennai	2023
2	M.E., / Power Electronics and Drives	Anna University, Trichy	2012
3	B.E., / Electrical and Electronics Engineering	Anna University-Chennai	2009

AREA OF RESEARCH INTERESTS

- Artificial Intelligence, Renewable Energies, Hybrid Energies, Power Electronics and Applications, Control Systems Algorithms, Smart Cities, Smart Home Management & Health Devices.

RESEARCH PUBLICATIONS : PAPERS PUBLISHED IN INTERNATIONAL JOURNALS

1. Barsana Banu J, Karthigaivel R and **Deepika Vinothini T, "** Techno-economic study of grid integrated solar fed home energy management system", **Transactions on storage (Revision submitted).**

2. **Deepika Vinothini T**, Karthigaivel R and Barsana Banu J, " Development of Sliding Mode Control-Adaptive Neuro-Fuzzy Inference Strategy Algorithm for Three Phase 15 Level MLI", **Taylor & Francis- IETE Journal of Research.**

3. Barsana Banu J, **Deepika Vinothini T**, Karthigaivel R," Performance investigation of double input enhanced converter for hybrid renewable energy", **Elsevier-Materials Today**: Proceedings, Vol. 90, Part 1, pp. 107-112, 2023.

4. **Deepika Vinothini T**,Karthigaivel R and Barsana Banu J," Selective Harmonics Elimination Technique for Artificial Bee Colony Implementation", **Computer Systems Science and Engineering Journal (Tech Science Press),** Vol. 45, no. 3. pp. 2721- 2740, 2023.

5. R.S.Kirthiraj, K.Jaya Ganesh , A.Manoj Nirmal and **T.Deepika Vinothini**," Traffic Violation Detection System using Loss Differentiation Rate Adaption (LORA)" " **International Journal of Advanced Research Methodology in Engineering & Technology**" Special Issue, pp-135-140,ISSN 2456-6446,2018.

6. A.Shunmugalatha, **T.Deepika Vinothini**, K.Blessie Esther ,V.L. Megha Lakshmi and A.Monisha "Systematic Vehicle Trace with Relay Control and Pulse Surveillance", **International Journal of Advanced Research**, Vol 5 ,No 3, pp.187-196,2017.

7. **T.Deepika Vinothini**, K.Blessie Esther,V.L.Megha Lakshmi and A.Monisha Devi,"Efficacious Pulse Surveillance and Vehicle Trace using Arduino", "Journal of Advances in Communication Engineering and its Innovations" Mantech Publications ,Volume 2 ,No.1, pp-1-18,2017.

8. **T.Deepika Vinothini**, R.Kiruthika, P.Padma Devi and P.Uma Devi, (2016)"Design and Implementation of a Novel Transformer less DC to DC converter for LED Display Application", **Global Research and Development Journal for Engineering**, pp. 312-316,2016.

9. Akilesh.T, Aparajitha.S, Roshan Zabir.A, **Deepika Vinothini.T**(2015),"Design and Implementation of User Specificable Domestic Energy Saver using GSM", **International Journal of Electrical and Computing Engineering**,Vol 1,No 3,pp 21-25.

PAPERS PRESENTED @ IEEE SPONSORED INTERNATIONAL CONFERENCES

1. Barsana banu J, Karthigaivel R, Jeyashanthi J and **Deepika vinothini T**, "Study of Home Energy Management(HEM) considering Grid-Integrated solar", **IEEE 3rd International Conference for Innovation in Technology (INOCON),** 04-06 March 2024, Sai Vidya Institute of Technology, Bengaluru, India.

2. Barsana banu J, Karthigaivel R, **Deepika vinothini T** and Jeyashanthi J, "Development of a three- level soft switching topology for renewable energy applications with multiple operating modes : Development of three-level soft switching topology ", 3rd **International Conference on Advances in Electrical, Computing, Communications and Sustainable Technologies (ICAECT 2023)**, 05-06 January 2023, Shri Shankaracharya Technical Campus (SSTC),India.

3. Padma Priya S ,Radhika A and, **Deepika Vinothini T**, "MPPT and SEPIC based controller development for energy utilization in cubesats" **Annual IEEE India International Conference INDICON**,Kochi, India,7-9, pp. 143-148, December, 2012.

PAPERS PUBLISHED IN INTERNATIONAL CONFERENCES

1. Barsana Banu J, **Deepika Vinothini T** and Karthigaivel R, "Performance Analysis of Multi Input DC-DC Converter with MPPT for Hybrid Renewable Energy Systems", **3rd International Conference on Future Technologies in Manufacturing, Automation, Design & Energy (ICOFT 2022)**, 14-16 December 2022, National Institute of Technology, Puducherry, India.

2. **T.Deepika Vinothini**, N.K.AathiSangar, M.Karuppasamy,"Automatic Timing Pulley Inspection Unit", **International conference on Power and Energy Systems (ICPES-2017)**, held at Velammal college of Engineering & Technology, Madurai, during 21-22 April 2017.

3. **T.Deepika Vinothini**, K.Blessie Esther, V.L.Megha Lakshmi, A.Monisha Devi, " Efficacious Pulse surveillance and Vehicle trace using Arduino",**International conference on Power and Energy Systems(ICPES-2017)**, held at Velammal college of Engineering & Technology, Madurai, during 21-22 April 2017.

4. **T.Deepika Vinothini**, K.Blessie Esther, and K.Gayathri " Design and Implementation of Buck-Boost converter with Flyback Snubber", **International conference of Engineering and Technology(ICIET-2016)**, held at K.L.N. College of Engineering, Madurai, on 06 April, 2016.

5. **T.Deepika Vinothini**,R.Kiruthika,P.Padmadevi and P**.Uma Devi**, " Design and Implementation of a Novel Transformer less DC to DC converter for LED display application", **International conference of Engineering and Technology(ICIET-2016),** held at K.L.N. College of Engineering, Madurai, on 06 April, 2016.

6. **T.Deepika Vinothini**, V.Swathi Lakshmi and S.Vijaya Lakshmi "Design of Multifunctional three phase Induction motor for small scale industries", **International conference on Technical Innovation in Electrical,Electronics , Computer & Communications (ICTIEECC 2016)**, held at PET Engineering College, Vallioor, on 23 March, 2016.

7. **T.Deepika Vinothini**, T.Akilesh, S.Aparajitha and A.Roshan Zabir, (2015) "Design and Implementation of User Specifiable Domestic Energy Saver using GSM", **International Conference by International Institute of Scientific Research and technology (IISRT)**, INDIA to be held on 13 March 2015.

8. S.Lakshmi Priya,K. PeriyaDuraichi and **T.Deepika Vinothini**, "A Universal grid connected fuel cell inverter for residential as well as commercial applications" **International Conference on Engineering and Technology**, held at Sri venkateswara Engineering college,Chennai, pp. 30-33, 18 April, 2013.

PAPERS PUBLISHED IN NATIONAL CONFERENCES

1. S.Maheshwari,T.Sangeetha C.Vaishnavi and **T. Deepika Vinothini** "An optimum way of reducing Number of switches in Eleven level inverter with symmetric and Asymmetric topology", **National conference on Emerging Trends in Engineering Design and Manufacturing**",Hindusthan Institute of Technology,Coimbatore,22 March 2018.

2. **T.Deepika Vinothini**,K.Blessie Esther,V.L.Megha Lakshmi and A.Monisha Devi "Systematic Vehicle Trace with Relay control and pulse surveillance", National conference on Innovoations in Engineering,Science and Technology,held at Ramco Insitute of Technology, Rajapalayam, 24-25 March 2017.

3. **T.Deepika Vinothini**, P.Priyanka, A.M.Rajam and B.Sushmithaa, "A Novel ZVZCS Full Bridge DC/DC Converter used for Electric Vehicle", **Natioanl conference on Energy Conversion and Conservation**, at Care Group of Institutions,Trichy on 27th March 2015.

4. **T.Deepika Vinothini**, G.Maharajothi and A.Priyadharshini, "Pre-Processing of PPG Signals With Performance Based Methods" **National Conference on Electrical Systems and Renewable Energy**, held at Angel college of Engineering. & Technology, Tirupur on March 3, 2013, pp. 12-16.

5. **T.Deepika Vinothini** "An Isolated Bidirectional Full Bridge Buck-Boost Converter with Flyback Snubber" in the **National Conference on "Innovations in Power Electronics,Control & Systems"** organized by the Department of EEE at M.A.M College of Engineering,Trichy on 18th and 19th March 2011.

6. **T.Deepika Vinothini** "Transdermal Drug Delivery System", **National Conference on "Recent Trends in Electrical Drives and Control"** on 19th March 2010 at Department of EEE, Saveetha Engineering College,Chennai.

COURSES / TRAININGS / WORKSHOPS/WEBINARS ATTENDED

1. Participated in the Faculty Development program on "**Interactive Approaches in Handling Renewable Energy Systems Laboratory for the New Normal**" organized by SSN College of Engineering during June 29 – July 02, 2021.

2. Attended online webinar on "**Power Distribution in High-Rise buildings @ Dubai**" conducted on 28th August 2020 organized by Department of EEE, Velammal College of Engineering and Technology.

3. Attended online webinar on "**Engineering Design Parameters and its Pragmetic Impacts during Wind & Solar PV Project Execution**" conducted on 3rd August 2020 organized by Department of EEE, Velammal College of Engineering and Technology.

4. Attended online webinar on "**Introduction of IOT Controllers**" conducted on 1st August 2020 organized by Department of EEE, Adhi College of Engineering and Technology.

5. Attended webinar on "**Role of Electrical Engineers in Hybrid electrical vehicle**" organized by Department of EEE, Park College of Engineering and Technology on 15th July 2020.

6. Attended online webinar on "**Design and Analysis of Motors used in Electric Vehicle**" conducted on 12th July 2020 organized by Department of EEE, Rajalakshmi Engineering College.

7. Attended AICTE Sponsored Faculty Development Programme on "Applicati**on of Soft Computing Techniques to Power quality and Energy Conservation Issues in Renewable Energy Systems** conducted on 4th to 17th November 2019 organized by Department of EEE, PSNA College of Engineering and Technology.

8. Attended Technology Based Entrepreneurship Development Programme on "**Motor Rewinding**", organized by VCET, Madurai & Entrepreneurship Development Institute of India(EDII),Ahmadabad under DST-NIMAT 8.01.18 to 16.02.18.

9. Attended Technology Based Entrepreneurship Development Programme on "**Motor Rewinding**", organized by VCET, Madurai & Entrepreneurship Development Institute of India(EDII),Ahmadabad under DST-NIMAT during 6 January 2017 to 18 February 2017.

10. Short term course on "**Recent Advances in UHV Transmission and Distribution**" Under the Quality Improvement Programme of AICTE, IISC, Bangalore, during 19-23 December, 2016.

11. Attended one day workshop on "**Power Management Lab Kit Workshop**" held at Velammal College of Engineering and Technology, Madurai, on 21 & 22 November 2016.

12. Attended two day workshop on "**Enhancing Energy Efficiency in Renewable Energy System**" organized by Department of EEE, Thiagarajar College of Engineering, Madurai on 18th and 19th March 2016.

13. Two day workshop on "**PIC Microcontroller and its Applications**" organized by EEE department, PSNA College of Engineering & Technology, Dindigul, during 14 and 15 December 2015.

14. Attended Two day Faculty Development Programme on "**MATLAB Applications to Engineering Problems**" held at Velammal College of Engineering and Technology, Madurai, from 14 to 15 October 2015.

15. Attended Two day National Seminar on "**Energy Storage Devices- ESD'15**" organized by Department of Chemistry and Physics, Velammal College of Engineering and Technology held on 8th and 9th October 2015.

16. Centre for Faculty development, Anna University Chennai sponsored Faculty Development Programme on"**EE6302-Electromagnetic Theory**" organized by EEE department, Syed Ammal Engineering College, Ramanathapuram 16 to 22 June 2014.

17. Attended Two day Faculty Development Programme on "**MATLAB Applications for Research Engineering Problems**" held at Velammal College of Engineering and Technology, Madurai, from 08 - 09 October 2014.

18. Attended Two day Faculty Development Programme on "**Research Methodologies**" held at Velammal College of Engineering and Technology, Madurai, from 12 to 14 March 2013.

19. Attended National level seminar on, "**Renewable Energy Explorer**", held at NPR College of Engineering and Technology, Madurai on 27 August, 2012.

20. Faculty Development program on "**Advanced technologies in distributed generation systems and micro grids**" organized by EEE department Velammal College of Engineering and Technology, Madurai, 21 April 2012.

21. One day Faculty Development program on "**Issues in restructured electrical power market**" organized by EEE department, Velammal College of Engineering and Technology, Madurai, on 18 February 2012.

22. One day Faculty Development program on "**Team building and leadership skills**" organized by EEE department, Velammal College of Engineering and Technology, Madurai, on 04 February 2012.

23. Faculty Development program on "**Corporate communication and organizational dynamics**" organized by EEE department Velammal College of Engineering and Technology, Madurai, on 14 and 15 November 2011.

24. One day Faculty Development program on "**Mathematical methods for electrical Engineers**" organized by EEE department, Velammal College of Engineering and Technology, Madurai, on 01 October 2011.

25. Attended Two days National Workshop on " **Recent Trends in Communication Technology**" organized by Department of EEE, Sudharshan Engineering College, Pudukottai on 24th and 25th September 2010.

26. Attended One Day National Seminar on " **Intelligent Technique**" organized by Department of EEE , Mount Zion College of Engineering and Technology on 1st April 2010

Google Scholar Report