

Dr. A.Radhika, M.E., Ph.D.

Associate Professor - EEE Department

Velammal College of Engineering and Technology, Madurai

ark@vcet.ac.in

Educational Qualification:

S.No	Degree	Year	Subject	University/Institution
1.	Ph.D	2017	Electrical	Anna university
2.	M.E.	2009	PED	Anna university
3.	B.E.	2003	EEE	Madurai Kamaraj University

Experience in Years:

Sl. No.	Designation	Institution	Duration		Experience (in years)
			From	To	
1.	Associate Professor	Velammal College of Engineering and Technology, Madurai	April 2020	Till date	3 Years 10 Months
2.	Assistant Professor	Velammal College of Engineering and Technology, Madurai	January 2011	March 2020	9 Years 3 Months
3.	Lecture	Raja college of Engineering and Technology, Madurai	February 2008	July 2010	2 yrs 5 months
4.	Lecture	Pandian Saraswathi yadava Engineering college, Sivagangai	January 2004	January 2008	4 yrs
		TOTAL			19 Years and 06 Months

Interested Research Areas:

- Power Electronics and Drives
- Renewable Energy Systems

- Smart Grid
- Soft computing system
- Applied Electronics

Ph.D Guidance:

Anna University recognized supervisor : Electrical Engineering
 Supervisor Number : 3530012

S.No	Scholar Name	Affiliation	Category	Status
1.	K.Santha sheela	Anna University, Chennai.	Part -Time	Confermation completed
2.	C.B.Selva lakshmi	Anna University Chennai.	Part -Time	Course work Completed
3.	J.Prakash	Anna University Chennai.	Part -Time	Course work Registered
4.	C.Immanuvel	Anna University	Part -Time	To apply for Ph.D.
5.	M.Amal raj	AnnaUniversity Chennai.	Full-Time	To apply for Ph.D.
6.	R.Anu	AnnaUniversity Chennai.	Full-Time	To apply for Ph.D.

Funded Research Projects:

S.No	Academic Year	Project Title with PI/Co-PI	Funding agency	Duration	Sanctioned Amount	Status of Project
1.	2019-2020	Modernization and Removal of Obsolescence (MODROB) Dr.A.Shunmugalatha Dr.S.Dhanalakshmi Dr.A.Radhika	AICTE	2 Years	Rs.8 Lakhs	Ongoing
2.	2017	International Conferences Dr.A.Shunmugalatha Dr.S.Dhanalakshmi Dr.A.Radhika	AICTE	6 Months	Rs 5Lakhs	Completed
3.	2017	International Conferences Dr.A.Shunmugalatha Dr.S.Dhanalakshmi Dr.A.Radhika	IE(I)	6 Months	Rs: 20,000	Completed
4.	2012	FDP Dr.A.Shunmugalatha	Anna Universit	6 Months	Rs:10,000	Completed

		Dr.A.Radhika	y			
5.	2019-20	Dr.A.Shunmugalatha Dr.A.Radhika	IEDC	1year	Rs:1.00,000	Ongoing Project
6.	2020-21	Dr.A.Shunmugalatha Dr.A.Radhika	IEDC	1year	Rs:1.00,000	Submitted
7.	2018-19	Dr.A.Shunmugalatha Dr.A.Radhika	IEDC	1year	Rs:1.00,000	Completed
8.	2017-18	Dr.A.Shunmugalatha Dr.A.Radhika	IEDC	1year	Rs:1.00,000	Completed
9.	2023	Dr.A.Radhika	MSME	11Months	Rs.7.5Lakhs	Ongoing
10.	2022-23	Dr.A.Radhika	TNSCST	6 Months	Rs.7500	Ongoing

Book publication details:

S.No	Title	Publication Company	Year	Status
1.	E-Vehicle	Scientific International Publication	2023	Published
2.	Measurement and Instrumentation	Rudra publication	2021	Published
3.	Biomedical Instrumentation	Shanlux publication	2020	Published
4.	Solid state drives	=	-	Final draft - Approved for publication

Patent rights received:-

Publications Details:-

1. Patent Journal Publication Details:

Sl.No	Title of the Invention	Application No	Status
1.	A Novel Photovoltaic Power Harvesting System Using a Transformerless H6 Single-Phase Inverter with Improved Grid Current Quality	201841037668A Date: 19.10.2018	Published
2.	Surveillance Robot for Thermal Vision and Obstacle	380854-001 Date: 06.03.2023	Review

1. International Journal Publication Details:

- Radhika, A & Shunmugalatha, A, ‘A Novel Photo Voltaic Power harvesting system using Transformerless H6 Single Phase Inverter with improved grid current quality’, has been published in Journal of Power Electronics (JPE) vol.no.16, doi.org:10.6113 , no. 2, ISSN (online): 2093-4718.
- Radhika, A, ‘An Effective Compensation of Power Quality Issues Using MPPT based Cuckoo search optimization approach, has been published in Journal of Soft Computing, Springer Soft Computing (2020) 24:16719-16725 DOI 10.1007/s00500-020-04966-w
- Radhika, A & Shunmugalatha, A 2014, ‘Minimization of harmonics in stand - Alone hybrid renewable energy system using three phase bridge inverter’, has been published in IJAER, vol. no. 9, pp. 8464-8470 (Annexure – II), Version 2014.1, Sl. No: 8565, ISSN 0973-4562.
- Radhika, A & Shunmugalatha, A 2015, ‘Augmentation of photovoltaic power into grid for power quality improvement using Unified Power Quality Conditioner (UPQC) with P&O based MPPT’, has been published in International Journal of Advanced Research in Electrical, Electronics & Instrumentation Engineering (IJAREEIE), vol. 4, no. 5, ISSN (online): 2278-8875.
- Radhika, A 2012, ‘Adjacent Possible Switching Diode Clamped Multilevel Inverter With Single Carrier Sinusoidal PWM’ has been published in IJERIA, vol. no. 5, pp. 97-110 (Annexure – II), Version 2012, ISSN 0974-1518
- Radhika, A 2012, ‘Autonomous Line Following surveillance Robot fitted with Pi-Camera, Thermal Sensing and Obstacle Detection Capability has been published in International Journal of Advanced Science and Technology, Vol.29 No.03 Year: July2020 pp 14212-14217No.03
- Radhika, A ‘Optimal Placement and Sizing of Multi type FACTS Devices for the Reduction of Real power loss and Enhancement of voltage stability using CLPSO and SLPSO has been published in Journal of Electrical Engineering, Vol.20 No.04 Year: June2020
- Radhika, A 2012, Mitigation of Power Quality Issues using PV-UPQC and MTG-UPQC in Distribution System has been published in IJERIA, Vol.20 No.04Year: June 2020
- Radhika, A 2012, ‘Fault Detection in Overhead lines using IoT’ has been published in International Research Journal of Engineering & Technology (IRJET), Vol. No. 07 Issue: 07Year: July 2020

- Radhika, A 2012 ‘ Smart and adaptive street lighting system using IoT’ has been published in International Research Journal of Modernization in Engineering Technology and Scienc Vol. No. 03 Issue: 04 Year: April 2021
- Radhika, A 2012 ‘ ‘IOT BASED SMART FARM has been published in International Research Journal of Modernization in Engineering Technology IRJMETS/Certificate/Volume 4/Issue 06/40600073556 june-2022
- Radhika, A, ‘A Critical Survey On Efficiency And Security Of Internet Of Things Based Intelligent Transport System’has been published in Journal of NeuroQuantology|(2022) doi: 10.48047/NQ.2022.20.20.NQ109094
- Radhika, A” A Systematic Review and Meta-Analysis of Digital Eye Strain” has been published in Industrial Engineering journal “Vol XVI & Issue No 3 March -2023
- Radhika, A” Predicting Energy usage for smart home using smart switch” has been published in European Chemical Bulletin“doi: 10.48047/ecb/2023.12.si7.107 July-2023

4. International Conference Presentation Details:

1. Radhika, A & Shunmugalatha, A 2016, presented a paper on ‘Enhancement of DC microgrid to overcome the sparsity of electricity in pastoral spot using Renewable energy source’, in the IEEE International Conference on Computing Technologies and Intelligent data Engineering-(ICCTIDE’16) conducted by National Engg College. Kovilpatti, on January 07-09, To be published on IEEE Digital Xplore.
2. Radhika, A, Shunmugalatha, A 2014, presented a paper on ‘Modified Interleaved Buck -Boost H6 inverter using Renewable energy with unipolar and Bipolar pulse Width Modulation Techniques’, in the 1stInternational Conference on Power and Energy System-(ICPES’13) conducted by Velammal College of Engg. & Tech, Madurai on December 19-21.
3. Radhika, A, Shunmugalatha, A 2017, presented a paper on ‘Partial shading detection and DMPPT of PV Arrays using voltage equalisation ’, in the 2nd International Conference on Power and Energy System-(ICPES’17) conducted by Velammal College of Engg. & Tech, Madurai .
4. Radhika, A, Shunmugalatha, A 2017, presented a paper on ‘Energy consumption analyzer and solar panel monitoring using mobile application’, in the 2nd International Conference on Power and Energy System-(ICPES’17) conducted by Velammal College of Engg. & Tech, Madurai.

5. Radhika, A 2019, presented a paper on 'An improved efficiency in load by synchronizing solar and biomass using arduino controller' in the International Conference on Modern Research & Computational in Electrical Technology (ICMRCET-2019) conducted CMR college of Engg. &Tech,Hyderabad.on July 09th-10th

5. National Conference Presentation Details:

1. Radhika, A & Shunmugalatha, A 2015, presented a paper on 'Voltage Profile Improvement using Unified Power Quality Conditioner (UPQC) with Rooftop PVs', (NPEC 2015) conducted by Thiagarajar College of Engineering, Madurai.
2. Radhika, A & Shunmugalatha, A 2014, presented a paper on 'Optimization and control strategy for standalone hybrid renewable energy', in National Conference on Intelligent Control & System Dynamics (NCICSD'14) conducted by Sai Ram Engineering College, Chennai on March 13.
3. Radhika, A & Shunmugalatha, A 2016, presented a paper on 'Implementation of DC microgrid in pastoral areas to overcome scarcity of electricity using Renewable energy source', (NCPRES 2016) conducted by Velammal College of Engg. & Tech, Madurai on January 29-30.
4. Radhika, A, Shunmugalatha, A 2014, presented a paper on 'Generation of electricity using Renewable energy sources', (All India Seminar on the topic "Water and Energy" conducted by IEI, Madurai on March 08-09.

- **Reviewer for Journal:**

- IET Circuits, Devices & Systems
- IET Power electronic
- IET renewable energy source.
- Elsevier-Energy reports

- **Events Organized:**

- Organized "AICTE sponsored International Conferences on Power and energy system-ICPES-17" on march 2017
- Organized "International Conferences on Power and energy system-ICPES-17" on march 2017
- Organized two days FDP on "Research issues in Electrical Engineering" on 10.02.2011 to 11.02.2011.
- Resource person in "project contest" conducted by Latha Mathavan Engineering College Session chair in the International conference conducted by vellammal college Engineering and technology.

- Resource person in “IEEE project contest” conducted by vellammal college Engineering and technology. Organized webinar on “Engineering Design parameters and its Pragmatic impacts during Wind & Solar PV projects execution” on 03.08.2020
- Organized one week an Online FDP titled “Recent Trends in Electrical Energy Conservation and Grid Technology” on 12.10.2020 To 19.10.2020

Department/Institute Responsibility	Paper presentation Chair person	Resource person
<ul style="list-style-type: none"> ➤ Governing boby member ➤ NBA Coordinator ➤ Anna university Coordinator ➤ BoS incharge 	<p>Title: IEEE International conferences</p> <p>College: Sai Ram Eng. college,Chennai</p> <p>Date: 10.12.2020</p>	<p>Title: Technical complexities in grid connected solar PV plan</p> <p>College: Jai shriram Eng. college,Tirupur</p> <p>Date: 08.10.2020</p>

6. Google Scholar report:

10/8/2020		Radhika A - Google Scholar	
 Radhika A VCET, Madurai Power Electronics Harmonics reduction		All	Since 2015
		Citations	13
		h-index	2
		i10-index	0
TITLE	CITED BY	YEAR	
A novel photovoltaic power harvesting system using a transformerless H6 single-phase inverter with improved grid current quality A Radhika, A Shunmugalatha Journal of Power Electronics 16 (2), 654-665	10	2016	
MPPT and SEPIC based controller development for energy utilisation in CubeSats PS Padma, A Radhika, VT Deepika 2012 Annual IEEE India Conference (INDICON), 143-148	5	2012	
Enhancement of dc microgrid to overcome the sparsity of electricity in pastoral spot using renewable energy source A Radhika, A Shunmugalatha, API Ronisha 2016 International Conference on Computing Technologies and Intelligent Data ...	1	2016	
Mitigation of Power Quality Issues using PV-UPQC and MTG-UPQC in Distribution System A Radhika IJERIA 20 (4)		2020	
Optimal Placement and Sizing of Multi type FACTS Devices for the Reduction of Real power loss and Enhancement of voltage stability using CLPSO and SLPSO A Radhika Journal of Electrical Engineering 20 (4)		2020	
An Effective Compensation of Power Quality Issues Using MPPT based Cuckoo search optimization approach. 6. Radhika, A Journal of Soft Computing, Springer 1 (1)		2020	
Augmentation of photovoltaic power into grid for power quality improvement using Unified Power Quality Conditioner (UPQC) with P&O based MPPT A 4. Radhika, A & Shunmugalatha International Journal of Advanced Research in Electrical, Electronics ...		2015	