

FACULTY PROFILE

Name of the Staff : **Dr. R.V.MAHESWARI**
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1. Personal Details:

Age : 43
 Date of Birth : 11/04/1977
 Sex & Marital Status : Female & Married
 Citizenship : Indian
 Qualification : Ph.D.,

Degree	Programme and Specialisation	Class /CGPA	Month &Year of Passing	Institute/University
Ph.D	High Voltage	-	JAN 2015	Anna University , Chennai
M.E.	High Voltage Engg	I st Class With Distinction / 86%	JUNE 2008	National Engg College Kovilpatti / Anna University, Chennai
B.E	EEE	I st Class / 77.34%	APRIL 2000	Government College of Engg, Tirunelveli / Manonmaniam Sundaranar University

Date of joining : 05.01.2001
 Present status : PROFESSOR
 Professional Experience :

Designation	Institution/ Organisation	Period	Nature of Duties
Lecturer	National Engineering College Kovilpatti	05.01.2001	Teaching and Research
Senior Lecturer		01.06.2009	
Asst Professor(SG)		01.11.2011	
Asso Professor		10.07.2013	
Professor		27.12.2017	

2. Academic Achievements

2.1 Short term Courses / Seminars / Conference/ Workshops organized : 19

S.No	Title	Period	No. of Participants	venue
1	Basics of High Voltage Lab Facility HVL'06	26 th May2006	25	National Engg. College, Kovilpatti
2	Basics of High Voltage Lab Facility HVL'07	12 th January 2008	25	National Engg. College, Kovilpatti
3	DRDO Sponsored Seminar 'Artificial Intelligence based Electrical Machines and Drives' - AIEMD'08	19 th &20 th February 2009	25	National Engg. College, Kovilpatti
4	DRDO Sponsored Seminar 'Soft Computing Techniques and its Applications in Electrical Engineering'SCTAEE'11	August 4 & 5,2011	53	National Engg. College, Kovilpatti
5	'Implementation of Soft Computing Techniques using MATLAB'	September 27 - 29,2011	27	National Engg. College, Kovilpatti
6	CSIR Sponsored Seminar 'DMCEM'2011	October 18 & 19,2011	27	National Engg. College, Kovilpatti
7	DRDO Sponsored Seminar "Energy Efficient Artificial Intelligent Drives - Recent Trends and Perspectives" EEDRTP '12	September 14 - 15, 2012	30	National Engg. College, Kovilpatti
8	'Implementation of Soft Computing Techniques using MATLAB'	October 18 & 20, 2012	30	National Engg. College, Kovilpatti
9	Research Methods for Academicians, Research Scholars & Practitioners	17 th November 2012	40	National Engg. College, Kovilpatti
10	"implementation of soft computing techniques using MATLAB"	23.10.2013 to 25.10.2013	Students	NEC, EEE,Kovilpatti
11	"Implementation of soft computing techniques using Matlab"	25.10.2014 to 27.10.2014	Students	NEC, EEE,Kovilpatti
12	FDP on "EE2353 - High Voltage	08.12.2014	Students	NEC, EEE,Kovilpatti
13	Implementation of soft computing techniques -ISCT '15"	5.08.2015 - 7.08.2015	Students	NEC, EEE,Kovilpatti
14	"Hands on training on MATLAB Toolboxes-HTMT'16"	3 rd & 4 th March 2016	Students	NEC,Kovilpatti

15	AICTE Sponsored Faculty Development on “Recent trends and applications of High Voltage Engineering”	06.11.2017-09.11.2017	Faculty	NEC, Kovilpatti
16	Application of Artificial Intelligence Techniques in High Voltage Engineering - Online Workshop	05 & 06 February 2021	Students and Staff 70	NEC, Kovilpatti
17	Condition Monitoring and Diagnosis Techniques for High Voltage Power Apparatus using Soft Computing Approaches	11.03.2022 and 13.03.2022	Students and Staff 50	NEC, Kovilpatti
18	The Institution of Engineers (India) sponsored All India Workshop on “Artificial Intelligence and Machine Learning Applications in Electrical Engineering”	13.3.2025-14.3.2025	Students	NEC, Kovilpatti
19	International Conference on Deep Tech and Sustainable Engineering Solutions (ICoDSES'26),	26.03.2026 - 2.03.2026	Faculty	NEC, Kovilpatti

2.2 STTP / Industry Know How/Seminars / Conference/ Workshops Attended: 48

S.No	Title	Period	Venue
1.	Introduction to Human interfaces and its applications in Rehabilitation Engineering	02.02.2026 to 06.02.2026	National Institute of Technology, Tiruchirapalli
2.	Semiconductor Devices and Fabrication and Layout Design	08.12. 2025 to 12.12.2025	E&ICTACADEMY and by National Engineering College, Kovilpatti
3.	SERB Sponsored five day workshop on Advancements and Innovations in High Voltage Engineering	01.03.2025 to 05.03.2025	NIT Warangal
4.	Industrial Know-How	29.01.2024 to 02.02.2024	M/S OHM Energy management Systems Private Ltd, Sriperumbudur, chennai
5.	NIRF India Rankings 2024	13.12.2023 & 14.12.2023	Institute for academic Excellence (IAE), Hyderabad
6.	Research Opportunities of Soft Computing in Engineering Applications	09.01.2023 to 13.01.2023	Government College of Technology, Coimbatore - 641 013.

7.	"National Level Workshop on Curriculum Framework 2022 for Universities, Engineering Colleges and Degree Colleges" (Sl.No. : 5424/R2022)	21st & 22nd March 2022	Institute for Academic Excellence, Hyderabad in collaboration with "Collegiate Education & Technical Education Department, Govt. of Telangana."
8.	Undergone Industry Know How at Silicon Systems, Coimbatore	15/02/21 to 16/02/21	Silicon Systems, Coimbatore
9.	One week ATAL FDP on "Artificial Intelligence"	09/11/20 to 13/11/20	National Institute of Technology, Calicut
10.	Online UHV workshop on "Inculcating Universal Human Values in Technical Education"	21-25 September, 2020	AICTE, Newdelhi
11.	One-week QIP short term course - "Engineering Optimization"	15.07-2019- 19.07.2019	Indian Institute of Science- Bengaluru
12.	Undergone Industry Know How at Enthu Technology Solutions India Pvt. Ltd., Coimbatore	22.10.2018 - 26.10.2018	Enthu Technology Solutions India Pvt. Ltd., Coimbatore
13.	Advanced condition monitoring methods for power equipment	9.7.2018 - 14.7.2018	National Institute of Technology, Calicut
14.	Training on Protection Relay-P14D	24.10.2017- 25.10.207	NEC, Kovilpatti
15.	Short -Term Course("Condition Monitoring Diagnostics & Testing of High Voltage Apparatus")	03.07.17 to 07.07.17	Indian Institute of Science- Bengaluru
16.	Industrial Know-How	2 nd -6 th May, 2017	Andrew Yule Company Limited
17.	"Applied Soft Computing Techniques."	09.06.2016 to 15.06.2016.	MIT, Anna University, and Chennai
18.	"Formulation of Research & Development Grant Proposals by Scientists and Technologies"	18.11.2015 to 20.11.2015	NEC, Kovilpatti
19.	"Intellectual Property Rights & Innovations"	07.11.2015	NEC, Kovilpatti
20.	"Hands on Training on Soft Computing Techniques using MATLAB"	09.10.2015 To 12.10.2015	MIT, Chennai
21.	NPTEL workshop organized IIT, Chennai	13.03.2015	NEC, Kovilpatti

22.	“Empowering Indian Engineering Education for Global Expectations”	07.11.2014 & 08.11.2014	NEC, Kovilpatti
23.	Soft Computing Techniques in Power System Design	24/05/10 – 06/06/10	Arunachalam College of Engineering for Women
24.	Recent Trends in condition monitoring of Power Apparatus and Systems	26/10/09 – 30/10/09	IIT Madras
25.	Time – Frequency Signal Analysis	07/07/09 – 12/07/09	IIT Madras
26.	MATLAB for Scholars and Engineers	04/08/08 – 08/08/08	Govt College of Engineering, Tirunelveli
27.	Instructional design and delivery	29/11/04 – 14/12/04	National Engineering College, Kovilpatti
28.	High Voltage Engineering	31/05/04 - 05/06/04	MEPCO, Sivakasi
29.	Power system analysis	24/09/03 – 29/09/03	National Engineering College, Kovilpatti
30.	Recent Trends in High Voltage Engineering – REHIE’08	03/10/2008	National Engineering College, Kovilpatti
31.	Embedded System Design and its application: Research Perception	19/09/08- 20/09/08	National Engineering College, Kovilpatti
32.	Modern trends in power Electronics	23/08/08	Francis Xavier Engineering College, Tirunelveli
33.	Micro Teaching	18/07/08- 19/07/07	National Engineering College, Kovilpatti
34.	Soft Computing Techniques-SCT’07	12/10/07	National Engineering College, Kovilpatti
35.	Recent Trends in Insulation Engineering – RETIE’07	1/09/07	National Engineering College, Kovilpatti
36.	Outcome based Technical Education.	25/07/07	National Engineering College, Kovilpatti
37.	AU power lab	24/05/04 – 25/05/04	Anna University, Chennai
38.	Genetic Algorithm for power systems Optimization problems	07/05/04 – 08/05/04	Arulmigu Kalasalingam College of Engg., Krishnan Kovil.
39.	Women’s Executive Development in Higher Education.	19/12/03 – 20/12/03	National Engineering College, Kovilpatti
40.	Outcome based Technical Education	25/07/07	National Engineering College, Kovilpatti
41.	FPGA-PED	14 & 15 th October 2011	National Engineering College, Kovilpatti

42.	ISCT	29.09.2012 -1.10.2011	National Engineering College, Kovilpatti
43.	SCTACC	5 th & 6 th August 2011	National Engineering College, Kovilpatti
44.	RHVTT	23 rd November 2012	National Engineering College, Kovilpatti
45.	Research Methods for Academics, Research Scholars & Practitioners	17 th November 2012	National Engineering College, Kovilpatti
46.	Introduction to MATLAB Simulation	05.10.2013	National Engineering College, Kovilpatti
47.	RADIE	18.02.2011	National Engineering College, Kovilpatti
48.	Next Generation Technologies For Sun-Wind Energy Conversion	28/02/2014	National Engineering College, Kovilpatti

2.3 Expert Lecture Delivered : 14

S.No	Title	Venue	Date	Participants
1.	Breakdown Studies of dielectrics for different Electrode Configuration'06	National Engg. College, Kovilpatti	26 th May 2006	25
2.	Tandelta Measurement & Breakdown studies High Voltage Lab Training Programme HVL'08	National Engg. College, Kovilpatti	January 2008	25
3.	Control System - State Space Modelling	Sri Vidya College of Engg	October 2009	60
4.	'Implementation of Soft Computing Techniques using MATLAB'	National Engg. College, Kovilpatti	September 27 -29, 2011	25
5.	FDP on High Voltage Engg 'Partial Discharge Analysis'	KLN College of Information & Technology	31-08-2012	120
6.	Implementation of Support Vector Machine in High Voltage	National Engg. College, Kovilpatti	October 18 & 20, 2012	30
7.	Control System - Time domain Analysis	Sardar Raja College of Engg, Alangulam		60
8.	High voltage Engineering	Kamaraj College of Engg	January 2016	26
9	Introduction to support vector machine	Fx Engineering College	February 2017	30

10	Implementing Google Class Room	Government College of Engineering, Tirunelveli (AICTE-ISTE Refresher Programme)	16 November 2018	30
11	Condition monitoring of high voltage apparatus	Lakshmi Ammal Polytechnic College, Kovilpatti (Webminar)	July 2020	100
12	Artificial Neural Networks and its Applications	Syed Ammal Engineering College, Ramanathapuram(A TAL FDP- Phase I)	24.07.2020	100
13	Artificial Neural Networks and its Applications	Syed Ammal Engineering College, Ramanathapuram(A TAL FDP - Phase II)	14. 08.2020	100
14	Partial Discharge: Standards, Measurement Techniques and Interpretation	SRM Valliammai Engineering College, Chennai (AICTE-ISTE Refresher Programme Phase I)	02.11.2020	100
15	NIRF Ranking	Manonmanium Sundaranar University, Tirunelveli	05.05.2022	100
16	Testing of High Voltage	Karpagam Academy of Higher Education, coimbatore	02.12.2022	70
17	Synchronous Motor	Francis Xavier Engineering College, Tirunelveli 627 003, Tamil Nadu	27.03.2023	60
18	MATLAB for Beginners	Sri S. Ramasamy Naidu Memorial College, Sattur	31.01.2023	70
19	MATLAB for image Segmentation	Sri S. Ramasamy Naidu Memorial College, Sattur	09.02.2023	50
20	Advanced Technology in Microprocessor and Microcontroller	Francis Xavier Engineering College, Tirunelveli 627 003, Tamil Nadu	06.10.2023	50
21	Road Map to Image Processing	Sri S. Ramasamy Naidu Memorial College, Sattur	20.01.2024	20
22	Condition Monitoring in Power Transformers-Reviews and Challenges	Anna University Regional Campus, Coimbatore	19.10.202	50

2.4 Membership in Professional bodies :

Name of Society	Grade of Membership
ISTE	Life Member
Institute of Engineers (India)	Associate Member

2.5 Research Achievements : 23

International Journal Publication

S.No	Title of the Paper	Name of the Journal	Vol. No & Page No.	Month & Year
1.	Non Linear Support Vector Machine Based Partial Discharge Patterns Recognition Using Fractal Features	Journal of Intelligent and Fuzzy System I.F = 0.788	Vol.27, No.5.: pp. 2649-2664 DOI: 10.3233/IFS-141237	2014
2.	Partial Discharge Signal Denoising using Adaptive Translation Invariant Wavelet Transform – Online Measurement	Journal of Electrical Engineering and Technology (JEET) I.F = 0.725	Vol.9, No.2: pp. 695-706 DOI:10.5370/JEET.2014.9.2.695	2014
3.	Extraction of Wave Parameters for Classification of Partial Discharge Signal Using Pearson Cross Correlation Method	Australian Journal of Electrical & Electronics Engineering (AJEEE)	Vol. 11, No. 1: pp. 105-118 DOI: 10.7158/1448837X.2014.11464417	2014
4.	Analysis of Stress Control on 33kV Non-Ceramic Insulators using FEM	Taylor & Francis Electric Power System & Components I.F = 0.690	Vol.43, No.5. : pp. 566- 577 DOI:10.1080/15325008.2014.994242	2015
5.	Support Vector Machine Based Denoising Technique for Removal of White Noise in Partial Discharge Signal	Taylor & Francis Electric Power System & Components I.F = 0.690	Vol.42, No.14. : pp. 1611-1622 https://doi.org/10.1080/15325008.2014.943826	2014
6.	Genetic Algorithm Based Automated Threshold Estimation in Translation Invariant Wavelet Transform for Denoising PD Signal	International Journal for Computation and Mathematics in Electrical and Electronic Engineering I.F = 0.440	Vol.34, No.14. : pp. 1252-1269 DOI:10.1108/COMPEL-12-2014-0332	2015
7.	Recognition of multiple partial discharge patterns by multi-class support vector machine using fractal image processing technique	IET Science, Measurement & Technology I.F = 1.336	Vol. 12, Issue 8, pp. 1031 – 1038 https://doi.org/10.1049/iet-smt.2018.5020	2018

8.	Fractal Features based Roller Bearing Fault Analysis using Multi Support Vector Machine	Journal of Electrical Engineering	Vol 19 No 1 pp. 8-8	2019
9.	Partial discharge pattern analysis using multi-class support vector machine to estimate cavity size and position in solid insulation	Soft Computing IF = 3.050	24, 10645–10656 https://doi.org/10.1007/s00500-019-04570-7	2020
10.	Recognition of pollution layer location in 11 kV polymer insulators used in smart power grid using dual-input VGG Convolutional Neural Network,	Energy Reports IF = 4.36	7, 7878-7889 https://doi.org/10.1016/j.egy.2020.12.044 2352-4847/© 2021, Elsevier	2021
11.	Performance enhancement of SRM using smart bacterial foraging optimization algorithm based speed and current PID controllers	Computers and Electrical Engineering IF=4.9	Vol. 95, 107398, https://doi.org/10.1016/j.compeleceng.2021.107398	2021
12.	Deep Learning Based Power Transformer Monitoring Using Partial Discharge Patterns	Intelligent Automation & Soft Computing IF = 1.647	Vol. 34, No. 3, 1441-1454 https://doi.org/10.32604/iasc.2022.024128	2022
13.	Enhanced Particle Swarm Optimization based Convolution Neural Network hyperparameters tuning for Transformer failure diagnosis under Complex Data Sources	Electrical Engineering – Springer IF = 1.836	104, pages 2621–2636 https://doi.org/10.1007/s00202-022-01501-y	2022
14.	Recognition of Shed damage on 11kV Polymer Insulator using Bayesian Optimized Convolution Neural Network	Soft Computing – Springer IF = 3.643	26, pages 6857–6869 https://doi.org/10.1007/s00500-021-06629-w	2022
15.	Recognition of Fused Partial Discharge Patterns in High Voltage Insulation Systems: A Hybrid DCNN and SVM Based Approach	IETE Journal of Research IF: 2.333	https://doi.org/10.1080/03772063.2022.2038702	2022
16.	Development of sustainable polybenzoxazine-based organic–inorganic hybrid	Journal of Materials Science: Materials in	https://doi.org/10.1007/s10854-022-09805-2	2023

	nanocomposites for high voltage insulator applications	Electronics IF:2.779		
17.	Breakdown Voltage Prediction by Utilizing the Behavior of Natural Ester for Transformer Applications	Intelligent Automation and Soft Computing IF 3.401	Vol.35, No.3, pp. 2717-2736 https://doi.org/10.32604/iasc.2023.029950	2023
18.	Partial discharge based recognition of water droplets location in high voltage insulator using convolutional neural network - Bacterial foraging algorithm based optimized machine learning classifier	Measurement IF 5.2	Vol. 221, 15 November 2023, 113527 https://doi.org/10.1016/j.measurement.2023.113527	2023
19.	A mathematical model for investigation of dry band location on 22 kV bushing with and without RTV coating: Experimental study	MethodsX IF 1.6	Volume 12, June 2024, 102579 https://doi.org/10.1016/j.mex.2024.102579	2024
20.	Optimized Deep Neural Network for Defect Recognition in Switched Reluctance Motors With Unbalanced Partial Discharge Datasets	IEEE Power Electronics Magazine IF 2.6	vol. 12, no. 3, pp. 65-77, Sept. 2025 doi: 10.1109/MPEL.2025.3593772	2025
21.	An experimental study of the flashover performances of outdoor high-voltage polymeric insulators under fan-shaped pollution and dry band location	Electrical Engineering IF 1.9	Volume 107, pages 5719–5735, (2025) https://doi.org/10.1007/s00202-024-02825-7	2025
22.	A hybrid approach for investigation of electrical characteristics for rod to point electrode in gas insulators	Discover Applied Sciences	Volume 7, 903, August 2025 https://doi.org/10.1007/s42452-025-07556-3	2025

23.	Assessing the impact of natural ester oil on RTV silicone rubber for transformer applications	Electrical Engineering IF 1.9	Volume 107, pages 14811–14825, (2025) https://doi.org/10.1007/s00202-025-03297-z	2025
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2.6 National Journal Publications

S.No	Title of the Paper	Name of the Journal	Vol.No & Page No.	Month & Year
1.	Torque Ripple Minimisation in SRM using TSF and Multi Leel Converter	Nice Journal of Emerging Technologies	Vol. : 5 No. : 1 Pg No. 51-54	2009
2.	Partial Discharge Modeling Based on Cavities of Different Shapes Within Solid Dielectrics	International Journal of Communications and Engineering	Vol 4, No.4: pp. 138-144.	2012
3.	A new empirical approach in modeling of ac flashover voltage for polluted porcelain insulators	International Journal of Advanced Engineering Applications	Vol 7, Iss2, pp. 33-41	2014
4.	Design of High voltage Transformer using Finite Element Method	International Journal of Scientific & Technology Research	Volume 9, Issue 03, March 2020 Pg No. 5351-5355	2020
5.	Influence The Effect Of Cavity Size And Position In High Voltage Cable By Using Finite Element Method	International Journal of Scientific & Technology Research (IJSTR)	ISSN 2277-8616, Volume 9 Issue 02, pp. No. 2706 – 2710, February 2020	2020
6.	Measurement and Denoising of Partial Discharge Signal in High Voltage Cables using Wavelet Transform	International Journal of Engineering and Advanced Technology (IJEAT)	ISSN: 2249 – 8958, Volume-9 Issue-2, December, 2019	2019
7.	Development of Partial Discharge Signal in Ester Oil Impregnated Paper	International Journal of Innovative Technology and Exploring Engineering (IJITEE)	ISSN: 2278-3075, Volume-9 Issue-4, February 2020	2020

2.7 International Conference Publications

S.No	Title of the Paper	Name of the Conference	Organizer	Month & Year
1.	Surface Discharge Analysis of Insulators in EHV/UHV Line	ICEE 2009	Pondicherry Engg. College Pondicherry	2009
2.	Partial Discharge Analysis and Recognition using Wavelet Transform	ICETES – 2010	Noorul Islam College of Engg. Kumaracoil	2010

3.	Torque Ripple Minimisation in SRM using TSF and Multi Leel Converter	ICETES - 2010	Noorul Islam College of Engg. Kumaracoil	2010
4.	An Improved Threshold Estimation for Partial Discharge Signal Denoising Using Wavelet Transform	IEEE International Conference on Circuits, Power and Computing Technologies, ICCPCT-2013	Noorul Islam Centre for Higher Eductaion, Kumaracoil	21 st and 22 nd March 2013
5.	Modelling of Partial Discharge Behaviour in a Cavity within the Solid Dielectrics.	IEEE International Conference on Circuits, Power and Computing Technologies, ICCPCT-2013	Noorul Islam Centre for Higher Eductaion, Kumaracoil	21 st and 22 nd March 2013
6.	Modelling of Pollution Flashover Performance on Various Types of Porcelain Insulators.	ICACT -2013	J.K.K.Nattraja College of Engg and Technology, Namakkal	8 th & 9 th March 2013
7.	Employing Mathematical Morphological filters for Partial Discharge Signal Denoising.	IEEE International Conference on Circuits, Power and Computing Technologies, ICCPCT-2014	Noorul Islam Centre for Higher Eductaion, Kumaracoil	21 st and 22 nd March 2014
8.	Modeling and Behaviour of Partial Discharge in Nano Composite Materials	IEEE International Conference on Circuits, Power and Computing Technologies, ICCPCT-2014	Noorul Islam Centre for Higher Eductaion, Kumaracoil	21 st and 22 nd March 2014
9.	Electric Field Analysis of Composite Insulator under Wet Conditions Using Charge Simulation Method	International Conference on Renewable Energy Utilisation	Coimbatore Institute of Technology, Coimbatore	2016
10.	Electric Field Analysis of Composite Insulator under dry Conditions Using Charge Simulation Method	IEEE International Conference on Energy Efficient Technologies for Sustainability	Nagercoil	2016
11.	Prediction of Flashover Voltage of Ceramic And Non-Ceramic Pin Insulator Using Artificial Neural Network	7 th International Conference on Advanced Computing	---	2016
12.	Comparison of Flashover Performance of Ceramic and Non-ceramic Disc Insulators for Soluble Pollution Materials	International Conference on Renewable Energy Utilization	Coimbatore Institute of Technology, Coimbatore	2016
13.	Enhancing the properties of used mineral oil by regeneration process	ICAEEICB'17	Prathyusha Engineering Collge, Chennai	2017
14.	A Comprehensive Study and Prediction of Flashover Voltage of 11kv Bushing with Various Pollutions Using Support Vector Machine	IEEE International Conference on Innovation in Power and advanced computing technologies IPACT'19	VIT Vellore	22 th & 23 rd March 2019

15.	Experimental Study of Electrical Characteristics of High Voltage Bushing under Single Dry Band Conditions	IEEE International Conference on Electrical Energy systems ISEES'19	SSN College of Engineering, Chennai	21 st and 22 nd February 2019
16.	Development of Partial Discharge Signal in Ester Oil Impregnated Paper	International Journal of Innovative Technology and Exploring Engineering (IJITEE)	ISSN: 2278-3075, Volume-9 Issue-4	2020
17.	Investigation of Pollution Severity and Dry Band Characteristics on 11kV Composite Insulator	International Conference on Advances and Developments in Electrical and Electronics Engineering (ICADEE)	Karpagam college of Engineering Coimbatore	2020
18.	Recognition of Partial Discharge Signal Using Deep Learning Algorithm	International Conference on Power Electronics and Renewable Energy Systems: ICPERES 2021	SRM Institute of Science and Technology	2021
19.	Analysis of Electrical Characteristics of the Three Phase Transformer using Finite Element Method	International Conference on Smart Grids, Structures and Materials (ICSGSM2021)	KL (Deemed University)Vijaya wada,	2021
20.	Partial Discharge Properties and Trap Parameters of Oil-Impregnated Paper Insulation Aged under Voltage Stress	International Conference on Power Electronics and Renewable Energy Systems (ICPERES 2021),	SRM Institute of Science and Technology	2021
21.	Transformer Oil Quality Assessment using Machine Learning Techniques.	International Conference on Computer Communication and Informatics	Sri Shakthi Institute of Engineering and Technology	2022
22.	Investigation and Performance of Pollution layer Location on 11kV Polymer Insulator”	International Conference on Computer Communication and Informatics	Sri Shakthi Institute of Engineering and Technology	2022
23.	Support Vector Machine based recognition of cavity size and location in High voltage cable	International Conference on Electrical, Electronics, Information and Communication Technologies	K.Ramakrishna College of Engineering, Trichy	2022

24.	Investigation of high voltage dielectric barrier and their effect on berakdown voltage using numerical method	International Conference on Circuits, Communication, Control, and Computing (IC4 2022),	M.S. Ramaiah Institute of Technology, Bangalore	2022
25.	Investigation of Electric field distribution on a 33kV polymer insulator under polluted conditions using finite element method	International Conference on Circuits, Communication, Control, and Computing (IC4 2022),	M.S. Ramaiah Institute of Technology, Bangalore	2022
26.	Recognition of Power Transformer Defect Identification Based on Dissolved Gas Analysis using Support-Vector Machine Approach	6th International Conference on Electronics, Communication and Aerospace Technology [ICECA 2022],	RVS Technical Campus, Coimbatore	2022
27.	Fuzzy based pollution severity prediction in polymer insulator using harmonic analyzer	International Conference on Automation, Computing and Renewable Systems (ICACRS 2022)	Mount Zion College of Engineering and Technology, Pudukkottai	2022
28.	Investigation of Electrical Characteristics for Different Geometrical Dimensions of 11 kV Insulators Under Finite Element Method	Proceedings of International Conference on Power Electronics and Renewable Energy Systems: ICPERES	SRM Institute of Science and Technology	2022
29.	Recognition of Partial Discharge Signal Using Deep Learning Algorithm	Proceedings of International Conference on Power Electronics and Renewable Energy Systems: ICPERES	SRM Institute of Science and Technology	2022
30.	A Comparative Study of Field Distribution Properties of Different Types of Oils Using Comsol	Proceedings of International Conference on Power Electronics and Renewable Energy Systems: ICPERES	SRM Institute of Science and Technology	2022
31.	Investigation of High Voltage dielectric barrier and their effect on breakdown voltage using Numerical method	4th International Conference on Circuits, Control, Communication and Computing, I4C 2022 ,pp. 293–297	M S Ramaiah Institute of Technology, Bengaluru	2022

32.	FEM Based Investigation of Electrical Characteristics in Three Phase Transformers	7th International Conference on Electronics, Communication and Aerospace Technology, ICECA 2023 - Proceedings, 2023, pp. 7-12	RVS Technical Campus, Coimbatore	2023
33.	Enhancement of Dielectric Characteristics of Blended Natural Ester Oil with Transformer Oil with Optimal Ratio using Grey Relational Analysis	IEEE International Conference on Intelligent Techniques in Control, Optimization and Signal Processing, INCOS 2024 - Proceedings, 2024	Kalasalingam Academy of Research and Education, Virudhunagar, Tamil Nadu	2024
34.	Partial Discharge Characteristics in Bushing under Dry and Wet Configuration	5th International Conference on Electronics and Sustainable Communication Systems Icesc 2024 Proceedings	Hindustan Institute of Technology in Coimbatore, India	2024
35.	Weather Monitoring System for Plants using ESP32	Proceedings 2025 5th International Conference on Expert Clouds and Applications Icoeca 2025	RV College of Engineering, Bengaluru, India.	2025
36.	Impact of Pollution on the Performance of High-Voltage Insulators under Alternating Current	Proceedings of 5th International Conference on Trends in Material Science and Inventive Materials Ictmim	Rohini College of Engineering and Technology Kanyakumari, India	2025
37.	Simulation and Characterization of Dielectric Behavior of Pure SF6 and N2 for High-Voltage Applications Using FEM	International Conference on Electrical Energy Systems Icees	Sri Sivasubramaniya Nadar (SSN) College of Engineering, Chennai,	2025
38.	Dielectric and Physicochemical Performance of Rice Bran Oil and Used Mineral Oil Blends as Sustainable Insulating Fluids for High-Voltage Applications	International Conference on Intelligent Computing, Information and Control Systems (ICOIICS), Lalitpur, Nepal	Nepal College of Information Technology (NCIT) in Balkumari, Lalitpur, Nepal	2025

2.8 National Conference Publications

S.No	Title of the Paper	Name of the Conference	Organizer	Month & Year
1	An unified approach to image compression using transform & spatial coding techniques		PES College of Engineering, mandya, karnataka university of mysore	11-12 July 2003
2	Effect of corona discharge on the design of high voltage equipment	APECT/08	FX Engg., College, Tirunelveli,	2008
3	Generation of high frequency high voltage (HFHV) signals	PEDAC'09	Govt. College Of Engg.,Tirunelveli	2009
4	Denoising of Partial Discharge Signal using wavelet transform	NPES'10	Kalasalingam University, Virudhunagar ,	2010
5	Partial Discharge Pattern Recognition using Fractal Image Compression Technique	INSTRUVISION - 2010	Kamaraj College of Engg, Virudhunagar	2010
6	Impulse generation using Electronic component	INSTRUVISION - 2010	Kamaraj College of Engg, Virudhunagar	2010
7	Estimation of Fractal Dimension of Partial Discharge Waveform using Affinity Transformation.	PECON2K11	Govt. College Of Engg.,Tirunelveli	2011
8	A New Method for Feature Extraction of Partial Discharge Waveform using Least Square Error Method.	PECON2K11	Govt. College Of Engg.,Tirunelveli	2011
9	Extraction of Wave parameter for Classification of Partial Discharge using Pearson's Correlation Method	PECON2K11	Govt. College Of Engg.,Tirunelveli	2011
10	Analysis of Partial Discharge Signal Using Advanced Wavelet Transform Techniques	NACCEPA	Govt. College Of Engg.,Tirunelveli	2013
11	Comparison of Pollution Flashover Performance on Various Types of Porcelain Insulators.	Recent Trends in Power System	Sastra University SRC, Kumbakonam.	February 2013
12	Analysis Of Pollution Flashover Performance On Various Types Of Insulators Using Fuzzy Logic	Intelligent Computing and Automation.	Kamaraj College Of Engineering And Technology, Virudhunagar.	April 2013
13	Modeling of Nano Composite polymer Dielectrics and Electrical Stress	-	Alagappa Chettiar College of Engg and Technology	12 th March 2014

14	Investigation of electric field distribution on ac composites insulator using corona ring	ICIIECS'15	Karpagam College of Engineering, Coimbatore	2015
15	Evaluation of critical field strength inside gas insulated switchgear for specific particles of defined geometry	National conference on emerging trends in electronics (ETEIC'15)	---	2015

2.9 Patent **Patent Granted**

Patent No 535373, Application No: 202241002946, Title An Apparatus for the surveilling of the water from a potable water source.

Contributions to the College

- ❖ Research Coordinator
- ❖ Associate warden – Ladies Hostel(2023-2025)
- ❖ Practical time table coordinator
- ❖ PG project coordinator
- ❖ EEE Association incharge (2013-2016)
- ❖ Parent teachers Association incharge (2013-2015)
- ❖ Board of study member-NEC (Autonomous scheme)
- ❖ High voltage laboratory Incharge

Conference attended – Session Chair:

- ICCPCT-2014 at Noorul Islam University, Kumaracoil, March, 2015.
- ICCPCT-2014 at Noorul Islam University, Kumaracoil, March, 2015
- International Web Conference on Smart Engineering Technologies 2020 on 26.06.2020 and 27.06.2020, Ramco institute of Technology, Rajapalayam

Reviewer of the following International Conference:

- ICCPCT-2014 at Noorul Islam University, Kumaracoil, March, 2014 &2015.
- International Web Conference on Smart Engineering Technologies 2020 on 26.06.2020 and 27.06.2020, Ramco institute of Technology, Rajapalayam

Reviewer of the following International/National Journals:

- ❖ International Journal of Electrical Power and Energy Systems.
- ❖ Journal of Intelligent and Fuzzy Systems.
- ❖ Electric Power Components and Systems.
- ❖ Journal of Electrical Engineering and Technology
- ❖ IET Science, Measurement and Technology

Ph. D Scholars

Produced three Ph. D scholar and guiding 8 Ph. D scholars under Anna University, Chennai

Project

1. Completed “Investigation on Electrical and Physical Property of Mineral Oil with Nano Composites and Antioxidants” funded by IE(I) - The Institution of Engineers (India).

2. Completed “Biometric Based Water Dispenser” funded by Newgen IEDC, DST New Delhi.
3. Ongoing Project for “Condition Monitoring of Power Apparatus” funded by DST FIST, New Delhi
4. Completed “Smart Water Quality Dispenser” funded by Newgen IEDC, DST New Delhi.
5. Completed “IOT based Chick Incubator” funded by Newgen IEDC, DST New Delhi.