

RESEARCH PROFILE

Name Dr. R. MADAVAN
Designation Associate Professor
Department Electrical and Electronics Engineering
Email madavan@psr.edu.in
Mobile 9952297231



EDUCATIONAL PROFILE

Category	Name of the Degree	Specialization	Year of Passing	Name of the College	Name of the University	% of Marks obtained	Class obtained
UG	BE	Electrical and Electronics Engineering	2008	National Engineering college	Anna University,	67.2%	I
PG	ME	High Voltage Engineering	2011	National Engineering college	Anna University,	7.5	I
PH.D	PH.D	High Voltage Engineering	2018	-	Anna University	Y	-

Ph. D. Thesis : Performance Analysis of alternative Liquid Insulation for Transformers

RESEARCH PROFILE

✚ No. of publications (As on November 2019)

- Journal:09
- International Conference:09
- National Conference: 10
- Editorial Board:
- Book: 01

✚ CitationDetails:

✚ Scopus:	✚ Web of Science	✚ GoogleScholar:
○ Article: 14	○ Article: 13	○ Article: 16
○ Citation: 96	○ Citation: 77	○ Citation: 131
○ h index: 5	○ h index: 4	○ h index: 6

LIST OF PUBLICATIONS

JOURNALS:

1. **Dr.R.Madavan** and S.Saroja, "Decision Making on State of Transformers based on Insulation Condition using AHP and TOPSIS methods" IET Science, Measurement and Technology, DOI: [10.1049/iet-smt.2018.5337](https://doi.org/10.1049/iet-smt.2018.5337), 2019 (**Impact Factor: 1.895**).
2. S.Saroja, T.Revathi and **R.Madavan**, "Multi-objective League Championship Algorithm for Real-Time Task Scheduling", Neural Computing and Applications, 2019. (**Accepted for publication**) (**Impact factor – 4.213**)
3. **R Madavan**, S Senthil Kumar, M Willuice Iruthyarajan, "A comparative investigation on effects of nanoparticles on characteristics of natural esters-based nanofluids", Colloids and Surfaces A: Physicochemical and Engineering Aspects, Vol. 556, pp.30-36, 2018. (**Impact factor – 2.829**)
4. **Madavan R** and Sujatha Balaraman, "Comparison of antioxidant influence on mineral oil and natural ester properties under accelerated aging conditions" IEEE Transactions on Dielectrics and Electrical Insulation, Vol.24, No.5, 2017.
5. **R.Madavan**, Sujatha Balaraman and S.Saroja Subbaraj, "Multi-criteria decision – making methods for grading high performance transformer oil with antioxidants under accelerated aging conditions", IET Generation, Transmission & Distribution, Vol.11 No.16, pp.4051-4058, 2017. (**Impact Factor-2.618**)
6. **Madavan R** and Sujatha Balaraman, "Investigation on effects of different types of nanoparticles on critical parameters of nano-liquid insulation systems" Journal of Molecular Liquids, Elsevier Publishers, Vol.230 pp. 437–444, 2017. (**Impact Factor – 4.513**)
7. **Madavan Rengaraj**, Sujatha balaraman. "Failure analysis of transformer liquid- solid insulation system under selective environmental conditions using weibull statistics method" Engineering failure analysis 1350-6307(2017).
8. **Madavan Rengaraj** "Mathematical Modeling on AC Pollution Flashover Performance of Glass and Composite Insulator" Journal of Electrical Engineering and Technology Vol 10, pp. 709-718, 2015.
9. **Madavan R** "Enhancement of Critical Parameters of Transformer oil using Nanoparticles" Arabian Journal of Science and Engineering Vol 38, pp. 2725-2733, 2013.

INTERNATIONAL CONFERENCE PUBLICATIONS

1. N.B.Prakash, G.Shiny, G.Kannayeram, **R.Madavan** and R.Saravanan, "Statistical analysis of silicon grease coated bushings characteristics under various contaminated conditions", International Conference on Innovation in Electrical, Electronics and Intelligent Computing, 19- 20 July 2019
2. **Mr. R. Madavan** attended an International Conference on Soft Computing in Data Analytics on the title of "Fuzzy Logic-Based Decision Making for Selection of Optimized Liquid Insulation Blend" on 10-11th march 2018 at Sri Sivan College of engineering college.
3. **R.Madavan** published a paper in National Conference on Engineering applications'18, Universal College of Engineering & Technology, Vallioor, "Analysis of aging rate of oil impregnated insulating paper using IPT", held on 16th March, 2018.

4. **R.Madavan** published a paper in National Conference on Engineering applications'18, Universal College of Engineering & Technology, Vallioor, "Selection of optimum liquid insulation blend using optimisation techniques", held on 16th March, 2018.
5. **Mr. R. Madavan** attended an International Conference on Recent Trends in Electrical, Electronics and Communication Engineering (REECE'17) on the title of, "Selection of optimum liquid insulation blend using optimization techniques", on 16&18 March 2017 at Sri Sivani College of Engineering srikakulam, Andhra Pradesh.
6. **Mr. R. Madavan** attended an 10th International Conference on Intelligent Systems and Control on the title of "Analysis of bushing performance under different polluted environment", on 7th -8th Jan. 2016 Karpagam College of Engineering.
7. **Mr. R. Madavan** attended an International Conference on Energy Efficient Technologies for Sustainability "Effect of combination of pollutants on the performance of the bushing" on 7-8 April 2016 at St. Xavier's Catholic College of Engineering, Chunkankadai.
8. **Mr. R. Madavan** attended an International Conference on the title of Condition Assessment Techniques in Electrical Systems on the title of "Performance analysis of transformer liquid insulation system under various environmental conditions" on 10th -12th Dec. 2015 at Central Power Research Institute, Bangalore.
9. **Mr. R. Madavan** attended an IEEE International Conference on Innovations in Information, Embedded and Communication Systems "Enhancement of characteristic performance of silicone oil with semi conductive nano particles" at Karpagam College of Engineering on 19th - 20th March 2015
10. **Mr. R. Madavan** attended an International Conference on Circuits, on the title of Power and Computing Technologies "Investigation of critical parameters of insulating mineral oil using semiconductive nanoparticles" on 20-21 March 2013 at Noorul Islam Centre for Higher Education
11. **Mr. R. Madavan** attended an IEEE International Conference on the title of "Nanoelectronics ICONE A study on enhancement of critical parameters of transformer oil using nanomaterials" on 25th & 26th February, 2011 at muthayammal engineering college.

RESEARCH SCHOLARS

S.No.	Candidate Name	Title/Area of Research	Remark
1.	M.Yamuna	Liquid Dielectrics	Doing Course Work
2	K.Gengadevi	Solid insulation	Doing Course Work

RECOGNITIONS:

+ Advisory Member:

Dr.R.Madavan	Advisory Committee Member – International Conference	APC Mahalakshmi College
	Advisory Committee Member – International Conference	Sri Sairam College of Engineering Bangalore, Karnataka

+ Reviewer:

- IEEE Access
- Journal of Molecular liquids.
- Engineering failure analysis

- IET Nanodielectrics
- IET Generation and transmission and distribution
- IET Science and measurement and technology
- International Journal of Electrical Power and Energy Systems
- Cellulose
- Surface review and letters
- Lubrication science
- International journal of Emerging electric power systems