



# SRM Valliammai Engineering College

(An Autonomous Institution)

SRM Nagar, Kattankulathur-603203, Kancheepuram District, Tamil Nadu


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## Department of Electronics and Instrumentation Engineering

### Personal Details

<b>Name :</b>	Dr. S. Visalakshi	
<b>Designation :</b>	Professor and Head	
<b>Educational Qualification :</b>	M.E., Ph.D	
<b>Experience:</b>	21 Years	
<b>Area of Specialization :</b>	Power system deregulation, Renewable energy systems	
<b>Date of Joining :</b>	02/12/2013	
<b>Email ID :</b>	visalakshis.eie@valliammai.co.in	
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### Educational Details

S.No	Degree	Branch/Specialization	Institution / University	Year
1	B.E.	EEE	K.L.N College of Engineering, Madurai	1999
2	M.E.	Power System	Thiagarajar College Of Engineering, Madurai	2000
3	Ph.D.	Power System deregulation	Anna University Chennai	2011

### Professional Society Memberships

1. Life Member in Indian Society for Technical Education
2. Life Member in The Institution of Engineers(India)
3. Annual Member in Indian Science Congress

### Publication Details

#### Journals:

1. Published a paper titled "Covariance Matrix Adapted Evolution Strategy based decentralized congestion management for multilateral transactions in IET Generation, Transmission and distribution" ,Vol 4, issue 3, March2010, pp. 400-417.
2. Published a paper titled "Multi objective decentralized congestion management using modified NSGA-II", Arabian journal for science and engineering, vol.36, No.5, pp.827-840, August, 2011.
3. Published a paper titled "Optimization based on PSO-ANFIS in Water bath Temperature System in International Journal of Innovative Research in Computer and Communication Engineering," Vol.2, Special Issue 1, March 2014.
4. Published a paper titled "PSO based social welfare maximization of wind thermal coordinated system in a deregulated Power market in Power Electronics and Renewable Energy Systems", Lecture notes in Electrical Engineering,326, Springer India 2015.
5. Published a paper titled "A bidirectional AC/DC converter using PWM technique for a grid tied Micro Grid System" International open journal for Engineering Research, Vol 1, Issue 3, April 2015

6. Published a paper titled "Design And Analysis Of Model Predictive Voltage And Current Controllers For Three Phase Voltage Source Inverter In Micro Grid," ARPN Journal of Engineering and applied sciences, Vol 10, No .13, July 2015
7. Published a paper titled "Network Reconfiguration with Optimal DG Integration into Distribution Network for Power Loss Minimization via AGPSO" Asian Journal of Research in Social Sciences and Humanities. Vol.6, No.10, October 2016.
8. Published a paper titled "Power loss minimization in Radial Distribution Network considering different load levels via AGPSO Part-I Using high penetrated DGs and Reconfiguration" Journal of Electrical Engineering, Romania
9. Published a paper titled "Intelligent Bidding Strategy for Wind Integrated Decentralized Electric Power Market" Interciencia Journal, Vol 42 (11), ISSN- 0378-1844, December 2017.
10. Published a paper titled "Hybrid FPABC algorithm for optimal installation of DERs and Capacitors for the electric power distribution networks" Journal of Perspectivas, Vol. 22,sp. 4, p289, Nov/Dec 2017.
11. Published a paper titled "Maritime Border Alert System and Shutdown of Outboard Motors" International Journal of Engineering Science and Computing, ISSN 2321 3361, April 2018.
12. Published a paper titled " Maximum power loss reduction via DGs simultaneously with network reconfiguration and capacitors in RDN" Journal of advanced research in dynamical and control systems, ISSN : 1943-023X, Accepted for publication on 28.4.2018
13. Published a paper titled 'Assessment of Power Loss Minimization via Optimal Allocation of DGs with Network Reconfiguration in Radial Distribution Network Considering Load Levels', Journal of Advance Research in Dynamical and Control Systems, Special Issue No. 12, pp. 56-65, Sep. 2018
14. Published a paper titled "Vehicle Control with Advanced Tyre Monitoring" International Research Journal of Engineering and Technology (IRJET), Volume 6, issue 3 March 2019.
15. Published a paper titled "IoT Based Digital Signage Board" International Journal of Engineering Science and Computing, Volume 9, issue 3 , March 2019
16. Published a paper titled "Energy Harvesting from railway track for monitoring and transportation safety", Journal of Interdisciplinary Cycle Research Volume XIII, Issue IV, April, 2021, ISSN NO: 0022-194
17. Published a paper titled, "Energy Harvester methodologies" , Journal of Interdisciplinary Cycle Research, Volume XIII, Issue IV, April/2021 ISSN NO: 0022-1945 Page No: 1408
18. Published a paper titled, "Review of vibration based energy harvesting techniques for low power devices", i - Manager's journal on Power System Engineering, ISSN: 2321 – 7499, Volume 9. No. 1, February - April 2021

#### **Conferences:**

1. Presented a paper titled "Novel approach to forward market Congestion management using Modified NSGA-II" in SEMMCO 2010, Swarm, Evolutionary and Mimetic Computing, 18th December 2010.
2. Presented a paper titled "Minimization of Losses by Optimal placement and sizing of Capacitors in a Radial Distribution Network with Distributed Generation using Gravitational Search Algorithm" in International conference on advanced computing machines and embedded technology, ICACT, 2013.
3. Presented a paper titled "Evolutionary algorithms based centralized congestion management for multilateral transactions" in International Conference on Intelligent Instrumentation, Optimization and Signal Processing, 2013.
4. Presented a paper titled "Energy Management system for a Poly generation Micro grid" in IEEE sponsored international conference on renewable energy and sustainable energy , ICRESE,2013
5. Presented a paper titled "PSO based social welfare maximization of wind thermal coordinated system in a deregulated Power market" in International Conference on Power Electronics and Renewable Energy System, ICPERES'14.

6. Presented a paper titled "Optimization based on PSO-ANFIS in Water bath Temperature Control System" in International Conference on Global Innovations in Computing Technology, ICGICT'14, March 2014.
7. Presented a paper titled "Design Optimization of PM AC Synchronous Machines Using Differential Evolution and Computationally Efficient-FEA" in the Proceedings of the International Conference on Science and Innovative Engineering 5th & 6th April 2014.
8. Presented a paper titled "Regenerative Control of DC Drive System" IEEE International Conference on Advanced Communication Control and Computing Technologies ICACCT, May 2014.
9. Presented a paper titled "A Bidirectional AC/DC Converter Using Simplified PWM Technique for Grid Tied Micro Grid Systems" in International Conference on Recent Innovations In Engineering and Technology (ICRIET'15), Feb. 2015
10. Presented a paper "Fuzzy pattern recognition approach to power system security assessment" in National Conference on Intelligent and Efficient Electrical Systems, PSG College of Technology, Coimbatore, Jan 2001.
11. Presented a paper titled "Design Optimization of PM AC Machines Using Differential Evolution and FEA" in National Conference on Innovative Techniques in Power Engineering and Drives, ITPED-2014, March 2014.
12. Presented a paper titled " A Bidirectional AC/DC Converter Using Simplified PWM Technique for Grid Tied Micro Grid Systems" International Conference on Recent Innovations In Engineering and Technology" ICRIET'15, Feb. 2015
13. Presented a paper titled "Implementation and Performance Analysis of Bidirectional AC/DC Converter Using Simplified PWM Technique for Grid Tied Micro Grid Systems" in National Conference on Recent Trends in Power, Control, Networking, Embedded and Communication Engineering (RTPCNEC – 2015), March,2015
14. Presented a paper titled, "Design and Analysis of model predictive voltage/current control for three phase voltage source inverter in microgrid", International Conference on recent trends in Engineering research, April, 2015.
15. Presented a paper titled, "Assessment of power loss minimization via optimal allocation of DGS with network reconfiguration in radial distribution network considering load levels" International Conference on Engineering and Technology, Karpagam College of Engineering, Coimbatore, December 2016.
16. Presented a paper titled paper titled, "A Firefly Algorithm Based Cost Optimization Scheme in Microgrid" International Conference on Engineering and Technology, Karpagam College of Engineering, Coimbatore, December 2016.
17. Presented a paper titled "Application of AGPSO for Power loss minimization in Radial Distribution Network Distribution Network via DG units, Capacitors and NR, 1st International Conf. on Power Engineering, Computing and Control,( PECCON-2017), VIT University, Chennai Campus, 2-4 March 2017, Energy Procedia 117 (2017), pp. 190-200 (DOI: 10.1016/j.egypro.2017.05.122

### Research and Development Details

1. Recognized Supervisor (Recog. No: 1830287) of Anna University, Chennai for guiding Ph.D. scholars of this University under the Faculty of Electrical Engineering.
2. Published a Book titled " Basic Electrical, Electronics, Measurements and Instrumentation Engineering - Volume – 1" SCM Publishers, January 2018, ISBN : 978-81-935988-5-6
3. Patent pending titled "Balanced Vessel motion of marine Vehicles using Stewart Platform", Application No: 201841011610 dated 28.3.2018.
4. Submitted Project Proposal to DST under Device Development Programme titled "Intelligent Solid Waste segregator" for the total cost Rs. 10,08,000/-
5. Submitted Project Proposal to DST under Materials for energy storage scheme titled " Integrated Compact Solar Energy Charger and Storage Device" for the total cost of Rs. 98,00,000/-
6. Has Organized one day National Workshop on Industrial Automation on 28th October,,2010 at St. Joseph's College of Engineering, Chennai
7. Has Organized one day National Conference on Emerging Techniques in Electrical Engineering in Association with IEEE Student Chapter on 16th April, 2011 at St. Joseph's College of Engineering, Chennai.
8. Has organized one day National Conference on Emerging Trends in Electronics, Instrumentation and Control in Association with ISA student Charter on 3rd May, 2014 at Valliammai Engineering

College, Chennai.

9. Has Handled a session in Short Term Training Programme on Power System Operation and Control sponsored by ISTE-SRM University on 12th May,2014 at Valliammai Engineering College, Chennai
10. Has organized one day National Conference on Emerging Trends in Electronics, Instrumentation and Control in Association with ISA student Charter on 11th April, 2015 at Valliammai Engineering College, Chennai.
11. Has organized National Research Conference on Emerging Technologies in Engineering (NRCETE-16) at Valliammai Engineering College on 23.4.2016
12. Has organized one day National Seminar on Emerging Technologies in Engineering (NSETTE -17) at Valliammai Engineering College on 1.4.2017
13. Has organized a National Seminar on Emerging Technologies in Engineering (NSETTE -18) at Valliammai Engineering College on 7.4.2018.
14. Project Coordinator for AICTE sponsored MODROBS “Field bus and DCS Work Station”. Sanctioned amount Rs. 18,82,000/- (ongoing Project)
15. Published a Book titled “ Basic Electrical, Electronics, Measurements Engineering” SCM Publishers, January 2018, ISBN : 978-81-935988-9-4

### Other Particulars

- Has attended the one day workshop on DSP Applications in Power Electronics and Drives on 4th June 2002 at PSNA College of Engineering and Technology, Dindigul
- Has attended the one day workshop on Mipower on June 2001 at PSNA College of Engineering and Technology, Dindigul
- Has attended the short term course on Evolutionary Multi objective Optimization Algorithm on 19th – 21st July 2007 at Thiagarajar College of Engineering, Madurai
- Has attended the one day Faculty Induction Programme on 22nd February 2014 at Valliammai Engineering College, Chennai
- Has attended four days certificate course on “Intellectual Property Rights Procedures and Best Practices” organized by Centre for Intellectual Property Rights, Anna University, Chennai from 3.5.2017 to 6.5.2017
- Has attended two days Faculty Development Programme on Computer Architecture at Valliammai Engineering College on 14.5.2018 and 15.5.2018