

SRM Valliammai Engineering College

(An Autonomous Institution)

SRM Nagar, Kattankulathur-603203, Chengalpattu District, Tamil Nadu TEL : 044 - 27454784 / 726, FAX : 044 - 27451504

Department of Electrical and Electronics Engineering

Personal Details					
Name :	S.Balaji				
Designation :	Assistant Professor(O.G)				
Educational Qualification :	M.E., B.E, DEEE				
Experience:	7 Years and 9 Months				
Area of Specialization :	Power Electronics and Drives				
Date of Joining :	17/06/2013				
Email ID :	balajis.eee@valliammai.co.in				
Contact Numbers :	9894322041	Extn:			

Educational Details					
S.No	Degree	Branch/Specialization	Institution / University	Year	
1	Diploma	EEE	DOTE, Chennai	April 2004	
2	B.E.	EEE	Anna University, Chennai	April 2007	
3	M.E.	Power Electronics and Drives	Anna University, Chennai	June 2012	

Professional Society Memberships

- 1. Indian Society of Technical Education (ISTE): Life Member.
- 2. International Association of Engineers (IAENG).
- 3. International Association of Computer Science and Information Technology (IACSIT).
- 4. The Indian Science Congress Association (ISCA).

Publication Details

Journals:

- 1. S.Pradeepkumar, K.Karthikeyan, R.Reena, J.Santhosh, S.Balaji, "End of Train Telemetry and Vehicle Integrity Monitoring System" International Journal of Electrical Engineering and Technology (IJEET), Vol.12,Issue 03, pp.100-109, March 2021.
- Subalakshmi.K, Thilagavathy.M, Surendhar.S, Surya.J, S.Balaji, "Exam Hall Authentication Using Finger Print" International Journal of Electrical Engineering and Technology (IJEET), Vol.12,Issue 03, pp.88-93, March 2021.
- **3**. Dr.R.Arivalahan, S.Balaji, M.Kamalakannan, T.Vinoth, "Development Of Arduino Based Microcontroller Through Internet of Things (IOT) For The Measurement and Monitoring Of Process Environmental Parameters" International Journal of Electrical Engineering and Technology (IJEET), Vol.12,Issue 02, pp.50-61, February 2021.
- 4. S.HariKrishnan.S, G.Balaji, S.Gokul Raj, V.Sathish Raaj, S.Balaji, "Smart Gurney System with Remote Knowledge Communication through Cloud" International Research Journal of Engineering and Technology (IRJET), Vol.07,Issue 03, pp.187-191, Mar 2020.
- 5. R.Arivalahan, S.Balaji and P.Tamil Arasan "Investigation of Genetic Algorithm tuned PI Controller for the non-linear conical tank level process" i-manager's Journal on Instrumentation & Control

Engineering, Vol.7, Issue 2, pp.1-8, February - April 2020.

- 6. S.Gokula Krishnan, T.Gokul, J.Abinaya, M.Kanniga, S.Balaji, "GSM Based Transformer Fault Monitoring System" International Research Journal of Engineering and Technology (IRJET), Vol.6,Issue 03, pp.1554-1557, Mar 2019.
- R.Hari Priya, S.Priyanga, A.Vinitha, E.Naveen, and S.Balaji, "Piezoelectric Energy Harvester using Voltage Doubling Rectifier" International Journal for Scientific Research & Development (IJSRD), Vol.6,Issue 01, pp.1509-1511,ISSN (online): 2321-0613, Mar 2018.
- 8. R.Arivalahan, S.Balaji and P.Tamil Arasan" Development and Stability Analysis of Neuro tuned PI Controller for Non-Linear Conical Tank Level Process" International Journal of Electronics, Electrical and Computational System, Vol.6,Issue 10, pp.271-279, October 2017.
- **9**. S.Balaji,"Voltage Stability Enhancemement by Optimal Placement of STATCOM Using Genetic Algorithm" International Journal for Science and Advance Research in Technology (IJSART), Vol.No.3, Issue No2, pp.27-32, Feb-2017.

Conferences:

- R.Arivalahan, S.Balaji and P.Tamil Arasan," Investigation of Genetic Algorithm tuned PI Controller for the Non-Linear Conical Tank Level Process" International Conference on Smart Automation in Computer, Electrical, Electronics And Communication Engineering (ICSA2k19)"at SRM Valliammai Engineering College, India, 6th and 7th September 2019, pp.183-186.
- R.Arivalahan, S.Balaji and P.Tamil Arasan," Modeling and Stability Analysis of Genetic Algorithm tuned PI Controller" Two Days International Conference on Contemporary Topics in Electrical and Electronics Engineering(ICCTEEE-2017)" at Karpagam College of Engineering, Coimbatore, India, 27th and 28th February 2018, pp.178-190.
- R.Arivalahan, S.Balaji and P.Tamil Arasan," Development and Stability Analysis of Neuro tuned PI Controller for Non-Linear Conical Tank Level Process" Two Days National Conference on Science, Technology and Environment: Prospects and Limitation in the 21st Century (NCSTEPL-2017)"at Bineswar Brahma Engineering College (A Govt of Assam Institute), Chandrapara, Assam, India, 30th and 31st October 2017.
- S.Balaji., "International Conference on Voltage Stability Enhancement by Optimal Placement and Capacity of STATCOM using GA" at Adhiparasakthi Engineering College, Melmaruvathur, 18 & 19th April 2012.
- 5. S.Balaji, "National Conference on Optical Location of STATCOM for Voltage Stability Enhancement" at IFET College of Engineering, Villupuram, 17th March 2012.

Books:

1. Dr.K.Elango, Dr.R.Arivalahan, Mr.S.Balaji, Mr.P.TamilArasan, "Basic Electrical, Electronics and Instrumentation Engineering", March 2019

Other Particulars

Events Conducted:

- 1. Conducted the Six Days Faculty Development Programme on "EE8015-Electric Energy Generation, Utilization and Conservation" conducted by the Department of Electrical & Electronics Engineering of SRM Valliammai Engineering College during 22nd November 2021 to 27th November 2021.
- Conducted the Six Days Faculty Development Programme on "1905601-Solid State Drives" conducted by the Department of Electrical & Electronics Engineering of SRM Valliammai Engineering College from 22nd November 2021 to 27th November 2021.
- 3. Conducted the Six Days Faculty Development Programme on "1905403-Transmission and Distribution" conducted by the Department of Electrical & Electronics Engineering of SRM

Valliammai Engineering College from 22nd November 2021 to 27th November 2021.

- Expert Lecture Delivered in the Six Days Faculty Development Programme on "1905601-Solid State Drives" conducted by the Department of Electrical & Electronics Engineering of SRM Valliammai Engineering College from 22nd November 2021 to 27th November 2021.
- 5. Conducted Workshop on the topic "Grid Connected Solar PV Systems" on 29th September 2021.
- Conducted the Six Days Faculty Development Programme on "EE8702-Power System Operation and Control" conducted by the Department of Electrical & Electronics Engineering of SRM Valliammai Engineering College during 17th May 2021 to 22nd May 2021.
- Conducted the Six Days Faculty Development Programme on "1905503-Power Electronics" conducted by the Department of Electrical & Electronics Engineering of SRM Valliammai Engineering College during 17th May 2021 to 22nd May 2021.
- Conducted the Six Days Faculty Development Programme on "1905305-Circuit Theory" conducted by the Department of Electrical & Electronics Engineering of SRM Valliammai Engineering College during 17th May 2021 to 22nd May 2021.
- 9. Conducted Guest Lecture on the topic of "Campus to Corporate Transformation & amp; Importance of Information Technology" on 10th March 2021.
- Expert Lecture Delivered in the topic of "Extra HVAC Transmission Line Component Design" in AICTE-ISTE Sponsored Six Days Induction/Refresher Programme on "Recent advancements in High Voltage Engineering" - RHVE 2K21 (Phase-III) on 03rd March 2021.
- 11. Expert Lecture Delivered in the topic of "Designing of 400V/11kV, 1MW Substation Equipment's" in AICTE-ISTE Sponsored Six Days Induction/Refresher Programme on "Recent advancements in High Voltage Engineering" - RHVE 2K21 (Phase-II) on 04th February 2021.
- 12. Online FDP on "EE8016- High Voltage Direct Current Transmission" in SRM Valliammai Engineering College dated from 23rd Nov to 28th Nov 2020.
- 13. Online FDP on "EE8004-Modern Power Converters" in SRM Valliammai Engineering College dated from 23rd Nov to 28th Nov 2020.
- 14. Online FDP on "1905402-Electrical Machines-II" in SRM Valliammai Engineering College dated from 23rd Nov to 28th Nov 2020.
- 15. Expert Lecture Delivered on "EE8004-Modern Power Converters" in SRM Valliammai Engineering College dated on 24th Nov 2020.
- Expert Lecture Delivered in the topic of "High Voltage AIS Substation Design" in AICTE-ISTE Sponsored Six Days Induction/Refresher Programme on "Recent advancements in High Voltage Engineering" - RHVE 2K20 on 03rd November 2020.
- 17. Conducted International Guest Lecture on the topic of "SCADA Systems and Smart Grid Vision" on 10th September 2020.
- 18. FDP on "EE8402-Transmission and Distribution" in SRM Valliammai Engineering College dated from 11th Nov to 22th Nov 2019.
- 19. FDP on "EE8301-Electrical Machines-I" in SRM Valliammai Engineering College dated from 06th May to 11th May 2019.
- 20. FDP on "EE8451-Linear Integrated Circuits and Applications" in SRM Valliammai Engineering College dated from 03rd Dec to 08th Dec 2018.
- 21. FDP on "EE6703-Special Electrical Machines" in SRM Valliammai Engineering College dated on 14th May & 15th May 2018.
- 22. FDP on "EE8351-Digital Logic Circuits" in SRM Valliammai Engineering College dated on 10th May & 11th May 2018.
- 23. FDP on "EE6504-Electrical Machines II" in SRM Valliammai Engineering College dated on 08th May & 09th May 2018.
- 24. FBP on "EE6009 Power Electronics for Renewable Energy Systems" in Valliammai Engineering College dated on 15th Nov &16th Nov 2017.
- 25. FDP on "EC6651- Communication Engineering" in Valliammai Engineering College dated on 13th Nov &14th Nov 2017.
- 26. FDP on "CS6456 Object Oriented Programming" in Valliammai Engineering College dated on 09th Nov & 10th Nov 2017.
- 27. Lecture Delivered on "IC6501-Control Systems" on 6th June 2016 in Valliammai Engineering College dated on 06th June 2016.

- 28. FDP on "EE6007-Micro Electro Mechanical System" in Valliammai Engineering College dated on 02nd May & 03rd May 2017.
- 29. FDP on "EE6501-Power System Analysis" in Valliammai Engineering College dated on 27th April & 28th April 2017.
- 30. FDP on "EE6302- Electromagnetic Theory" dated on 24th & 25th April 2017.
- FDP on "EE6012-Computer Aided Design of Electrical Apparatus" on 19th and 20th December 2016.
- **32**. FDP on "EE6601-Solid State Drives" on 23rd and 24th November 2016.
- **33**. FDP on "EE6401-Electric Machines-I" on 14th and 15th November 2016.
- 34. FDP on "EE6403-Discrete Time Systems and Signal Processing" in Valliammai Engineering College 10th Nov & 11th Nov 2016.
- 35. FDP on "EE6303-Linear Integrated Circuits and Applications" on 27th and 28th June 2016.
- **36**. FDP on "IC6501-Control Systems" on 6th June 2016.
- 37. FDP on "EE6403-Discrete time systems and signal processing" on 07th and 08th January 2016.
- 38. Seminar organized on "Flexible AC transmission system devices" on 9th February 2017.
- **39**. Value Added Course Conducted on "Hands-on Training on E-CAD" in 17.01.2017, 30.01.2017 to 16.02.2017.
- 40. Seminar organized on "VSI Based Variable Frequency Drives in power Electronics circuits" On 18th March 2016.
- 41. Lecture Delivered on "EE6404-Measurement & Instrumentation" on 29th Dec 2015.
- 42. Value Added Course Conducted on "Electrical Energy Audit" on 20th July 2015 to 6th August 2015.
- **43**. Workshop organized on "VHDL-Very high speed integrated circuit Hardware Description Language" On 19th September 2014.

Events Attended:

- 1. Participated in the Six Days Faculty Development Programme on "EE8015-Electric Energy Generation, Utilization and Conservation" conducted by the Department of Electrical & Electronics Engineering of SRM Valliammai Engineering College during 22nd November 2021 to 27th November 2021.
- Participated in the Six Days Faculty Development Programme on "1905403-Transmission and Distribution" conducted by the Department of Electrical & Electronics Engineering of SRM Valliammai Engineering College from 22nd November 2021 to 27th November 2021.
- Participated and Successfully Completed the 5-day online FDP on the theme "Inculcating Universal Human Values in Technical Education" organized by All India Council for Technical Education (AICTE) from 27th September 2021 to 1st October 2021.
- Participated in the Seminar on "Electrical Panel Drafting using AutoCAD" conducted by the Department of Electrical & Electronics Engineering of SRM Valliammai Engineering College on 02nd September 2021.
- Participated in the Guest Lecture on "Embedded Based Applications in Electrical Engineering" conducted by the Department of Electrical & Electronics Engineering of SRM Valliammai Engineering College on 18th August 2021.
- 6. Participated & Completed Successfully AICTE Training And Learning (ATAL) Academy Online Elementary FDP on "DESIGN AND DEVELOPMENT OF ELECTRIC VEHICLE" from 09-07-2021 to 13-07-2021 at Francis Xavier Engineering College.
- 7. Participated & Completed Successfully AICTE Training And Learning (ATAL) Academy Online Elementary FDP on "ELECTRIC VEHICLES" from 07-09-2021 to 11-06-2021 at National Institute of Technology Tiruchirappalli.
- Participated & Completed Successfully AICTE Training And Learning (ATAL) Academy Online Elementary FDP on "GLOBAL WARMING & IMPACTS OF POWER ELECTRONICS TOWARDS GREEN TECHNOLOGY" from 24-05-2021 to 28-05-2021 at SRM Valliammai Engineering College.
- Participated in the Six Days Faculty Development Programme on "EE8702-Power System Operation and Control" conducted by the Department of Electrical & Electronics Engineering of SRM Valliammai Engineering College during 17th May 2021 to 22nd May 2021.

- 10. Participated in the Six Days Faculty Development Programme on "1905503-Power Electronics" conducted by the Department of Electrical & Electronics Engineering of SRM Valliammai Engineering College during 17th May 2021 to 22nd May 2021.
- Participated in the Six Days Faculty Development Programme on "1905305-Circuit Theory" conducted by the Department of Electrical & Electronics Engineering of SRM Valliammai Engineering College during 17th May 2021 to 22nd May 2021.
- 12. Successfully completed "30 Days Internship on Matlab Master Class Series 2020" at Pantech Prolab India Pvt. Ltd. in association with IETE Mumbai from 15-03-2021 to 13-04-2021.
- 13. Participated in the Inspirational Talk on "Interactive session / Mentoring session with Successful Start-up Founders(Entrepreneurs in Campus)" conducted by the Department of Electrical & Electronics Engineering of SRM Valliammai Engineering College on 18th March 2021.
- 14. Successfully completed "30 Days Internship on Matlab Simulink" at Pantech Prolab India Pvt. Ltd. in association with Andhra Pradesh State Skill Development Corporation (APSSDC) from 25-01-2021 to 25-02-2021.
- 15. Participated in the Guest Lecture on "Micro & Nano Technology An Introduction and MEMS & Commercial Micro Sensors in Novel Applications" conducted by the Department of Electrical & Electronics Engineering of SRM Valliammai Engineering College on 18th February 2021.
- 16. Participated in the AICTE-ISTE Sponsored Six Days Induction/Refresher Programme on "Recent advancements in High Voltage Engineering" - RHVE 2K21 (Phase-II) conducted by the Department of Electrical & Electronics Engineering of SRM Valliammai Engineering College form 03rd February 2021 to 09th February 2021.
- 17. Participated & Completed Successfully AICTE Training and Learning (ATAL) Academy Online FDP on "Energy Engineering" from 25-12-2020 to 29-12-2020 at National Institute of Technology Delhi.
- Attended Six Days Short Term Training Programme on "Artificial Intelligence and Machine Learning Algorithms for Cyber Security Solutions" organized by the Department of Information Technology, S.A.Engineering College from 4th December to 19th December, 2020.
- 19. Participated & Completed Successfully AICTE Training and Learning (ATAL) Academy Online FDP on "Artificial Intelligence" from 07-12-2020 to 11-12-2020 at Sri Sairam Engineering College.
- 20. Online FDP on "EE8016- High Voltage Direct Current Transmission" in SRM Valliammai Engineering College dated from 23rd Nov to 28th Nov 2020.
- 21. Online FDP on "EE8004-Modern Power Converters" in SRM Valliammai Engineering College dated from 23rd Nov to 28th Nov 2020.
- 22. Attended the Tamilmandram in the title of "Inayavazhi Santhai Paduthal Thavigallum Vaippukalum" conducted by SRM Valliammai Engineering College on 23rd Nov 2020.
- 23. Participated in the AICTE-ISTE Sponsored Six Days Induction/Refresher Programme on "Recent advancements in High Voltage Engineering" - RHVE 2K20 conducted by the Department of Electrical & Electronics Engineering of SRM Valliammai Engineering College form 02nd Nov 2020 to 07th Nov 2020.
- 24. Participated in the International Guest Lecture on "Artificial Intelligence in Electrical Engineering" conducted by the Department of Electrical & Electronics Engineering of SRM Valliammai Engineering College on 11th October 2020.
- 25. Successfully completed "30 Days Internship on AI Master Class" at Pantech Prolab India Pvt. Ltd. in association with Andhra Pradesh State Skill Development Corporation (APSSDC) from 04-10-2020 to 05-11-2020.
- 26. Participated & Completed successfully AICTE Training and Learning (ATAL) Academy Online FDP on "Artificial Intelligence" from 14-09-2020 to 18-09-2020 at Srinivasa Ramanujan Centre, SASTRA Deemed to be University.
- 27. Attended One day webinar on "The Excellence in Teaching and Learning" Organized by SRM Valliammai Engineering College in association with ISTE on 07th September 2020.
- 28. Successfully completed a short course on "Learn to Design your own Solar Home System", Organized by Energy Swaraj Foundation in association with SRM Valliammai Engineering College dated on 02nd July 2020.
- 29. Online FDP on "1905304-Analog Electronics" in SRM Valliammai Engineering College dated from 11th May to 16th May 2020.

- 30. Online FDP on "EE88551-Microprocessors and Microcontrollers" in SRM Valliammai Engineering College dated from 11th May 2020 to 16th May 2020.
- 31. Successfully Attended the India First Leadership Talk webinar with Prof. D.P. Singh, Chairman UGC Broadcasted on 9th May 2020 by MHRD's Innovation Cell.
- 32. Workshop Attended on One Day Hands on "Workshop on Renewable Energy Systems Laboratory" Organized by Department of Electrical and Electronics Engineering at Loyola-ICAM College of Engineering and Technology, Nungambakkam, Chennai on 07-12-2019.
- 33. FDP on "EE8402-Transmission and Distribution" in SRM Valliammai Engineering College dated on 11th Nov and 22th Nov 2019.
- 34. FDP on "EE8301-Electrical Machines-I" in SRM Valliammai Engineering College dated 06th May to 11th May 2019.
- **35**. FDP on "EE8451-Linear Integrated Circuits and Applications" in SRM Valliammai Engineering College dated 03rd Dec to 08th Dec 2018.
- 36. FDP on "EE6703-Special Electrical Machines" in SRM Valliammai Engineering College dated on 14th May & 15th May 2018.
- 37. FDP on "EE8351-Digital Logic Circuits" in SRM Valliammai Engineering College dated on 10th May & 11th May 2018.
- 38. FDP on "EE6504-Electrical Machines II" in SRM Valliammai Engineering College dated on 08th May & 09th May 2018.
- 39. FBP on "EE6009 Power Electronics for Renewable Energy Systems" in Valliammai Engineering College dated on 15th Nov &16th Nov 2017.
- 40. FDP on "EC6651- Communication Engineering" in Valliammai Engineering College dated on 13th Nov &14th Nov 2017.
- 41. FDP on "CS6456 Object Oriented Programming" in Valliammai Engineering College dated on 09th Nov & 10th Nov 2017.
- 42. FDP on "EE6007-Micro Electro Mechanical System" in Valliammai Engineering College dated on 02nd May & 03rd May 2017.
- 43. FDP on "EE6501-Power System Analysis" in Valliammai Engineering College dated on 27th April & 28th April 2017.
- 44. FDP on "EE6302- Electromagnetic Theory" dated on 24th & 25th April 2017.
- 45. FDP on "EE6012-Computer Aided Design of Electrical Apparatus" on 19th and 20th December 2016.
- **46**. FDP on "EE6601-Solid State Drives" on 23rd and 24th November 2016.
- 47. FDP on "EE6401-Electric Machines-I" on 14th and 15th November 2016.
- 48. FDP on "EE6403-Discrete Time Systems and Signal Processing" in Valliammai Engineering College 10th Nov & 11th Nov 2016.
- 49. FDP on "EE6303-Linear Integrated Circuits and Applications" on 27th and 28th June 2016.
- 50. FDP on "IC6501-Control Systems" on 6th June 2016.
- 51. FDP on "EE6503-Power Electronics" in Sri Sai Ram Engineering College dated on 01st June to 08th June 2015.
- 52. FDP on "EE6302-Electromagnetic theory" in Tagore Engineering College dated on 23rd June to 30th June 2014.
- **53**. Workshop Attended on ,"NPTEL Workshop" Organised by National programme on technology enhancement learning (IIM Madras) at Arunai College of Engineering Conducted on 13-07-2013.
- 54. Seminar Attended on AICTE sponsored National Seminar on "Power Quality Issues, Problem & Solutions" at Adhiparasakthi Engineering College, Melmaruvathur dated on 14th July & 15th July 2011.

U.G Projects Guided:

- 1. "End of Train Telemetry and Vehicle Integrity Monitoring System" 2021
- 2. "Exam Hall Authentication Using Finger Print" 2021
- 3. "Smart Gurney System with Remote Knowledge Communication through Cloud" 2020.
- 4. "GSM Based Transformer Fault Monitoring System" 2019.
- 5. "Piezoelectric Energy Harvester using Voltage Doubling Rectifier", 2018.

- 6. Design and Fabrication of chopper for electricity generation using speed Braker, 2016.
- 7. GSM based monthly energy billing via SMS, 2016.
- 8. Harmonic mitigation using transformer less hybrid power filter based on SSTL inverter with renewable integration, 2015.
- 9. Photovoltaic power increment aided incremental conductance MPPT with two phase tracing, 2014.
- 10. Design and implementation of energy efficient power electronics interface on wind energy conversion system, 2013.

Online Course Certification:

- 1. NITTT Course on "Module 1_Orientation Towards Technical Education and Curriculum Aspects" February 2021.
- 2. NPTEL Course on "Body Language: Key to Professional Success", September 2019.
- 3. NPTEL Course on "Control systems", November 2018.
- 4. NPTEL Course on "Introduction to Research", April 2018.
- 5. NPTEL Course on "Control systems", November 2017.
- 6. NPTEL Course on "Basic Electronics", May 2017.
- 7. NPTEL Course on "Introduction to Research", April 2016.