**Faculty Vitae**

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| **Name of the Faculty** |
| Dr.V.Jayalakshmi |
| **Education** |
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| --- | --- | --- | --- | --- |
|  | Degree | Discipline | Institution | Year |
| UG | B.E | EEE | J.J.College ofEngineering andTechnology. | 2000 |
| PG |  M.Tech | Power System | National Institute ofTechnology (N.I.T),Tiruchirappalli | 2006 |
| PhD |  Ph.D. | EEE | Bharath University | 2017 |  | Bharath University | 2017 |

 |
| **Academic experience** |
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| --- | --- | --- | --- | --- |
| **Institution** | **Title** | **From** | **To** | **FT/PT** |
| Bharath Institute Of Higher Education & Research | Associate Professor | JULY2007 | Till date | FT |
| Prince Shri Venkateshwara Engineering college | Assistant Professor | June 2006 | June 2007 | FT |
| M.A.M College ofEngineering | Lecturer | June 2001 | May 2006 | FT |  |

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| **Certifications or professional registrations** |
| * Online orientation Training Programmme for Mentors -NITTTR, Chennai 14.6.2021 to 18.6.2021
* ATAL-FDP on Fundamentals of Electric Vehicles- Indian Institute of Technology Jammu. 25/10/2021 to 29/10/2021
* ATAL-FDP on Power Electronics Applications in Smart Grids And Electric Vehicles (PEASE - 2021)"- National Institute of Technology Andhra Pradesh 2021-06-25 to 2021-06-29
* Completed online certification on “Advances in Remote Sensing and geospatial technologies for Disaster early warning, monitoring and mitigation” – OFF campus outreach certificate programme by IIRS-ISRO.
* Completed“Smart Grid” –NPTEL Online course on September 2018
* Completed ”DC micro Grid” –NPTEL Online course on November 2019
 |
| **Membership in professional organizations** |
| 1. Indian Society for Technical Education-LM117499
2. IEEE Member
 |
| **Service activities (within and outside of the institution)** |
| * In charge for NAAC Criterion 2
* In charge for NBA Criterion 2
* Coordinating for ABET revision report
* Board of studies member
* Active participant syllabus revision .
* PG Project Guide and Review Committee Member
* UG Project Guide and Review Committee Member.
* Student Mentor
* Faculty In charge for M.Tech Power Systems
 |
| **List of Publications** |
| **Web of Science Journal Publications**1. R. Lavanya , Dr. V. Jayalakshmi “Comparison of VSI and Matrix converter fed Induction Motor Drive systems” Journal of Mechnaics of and Mathematical Sciences 532-541**SCOPUS Indexed Journal Publications**1. [Lavanya, R.](https://www.scopus.com/authid/detail.uri?authorId=57225330235), [Jayalakshmi, V.](https://www.scopus.com/authid/detail.uri?authorId=55810881700) “[Proportional-integral controlled boostrap converter SVM inverter based induction motor drive](https://www.scopus.com/record/display.uri?eid=2-s2.0-85104961389&origin=resultslist&sort=plf-f)” [Turkish Journal of Physiotherapy and Rehabilitation](https://www.scopus.com/sourceid/21100893337?origin=resultslist), 2021, 32(2), pp. 680–688
2. Mohan and V. Jayalakshmi “ Optimum load sharing and improving stability in

distribution network(lt)” Malaya Journal of Matematik Special Issue, Issue 2, 2020 Pages:2593-2596 1. V. Jayalakshmi “Modelling of control scheme for a stand alone wind energy conversion system” Malaya Journal of Matematik Special Issue, Issue 2, 2020

Pages:2992-29971. V. Jayalakshmi “Using high step-up DC to DC converter, based on integrated coupled inductor and switched-capacitor for solar application” Malaya Journal of Matematik Special Issue, Issue 2, 2020 Pages:3006-3010
2. A. Ramya and V. Jayalakshmi “Dynamic optimal power flow for active distribution networks “ Malaya Journal of Matematik Special Issue, Issue 2, 2020Pages:2947-2957
3. T. Saravana Kumar and V. Jayalakshmi “Proportional resonant controlled shunt active filter system with improved dynamic time Response “ Malaya Journal of Matematik Special Issue, Issue 2, 2020 Pages:2958-2961
4. A. Amsaveni and V. Jayalakhmi “Proportional resonant controlled high gain step up converter system with improved response” Malaya Journal of Matematik Special Issue 2, 2020 Pages:2983-2991
5. R. Lavanya , Dr. V. Jayalakshmi “Proportional-Integral Controlled Boostrap Converter Svm Inverter Based Induction Motor Drive “ Turkish Journal of Physiotherapy and Rehabilitation; 32(2) 2020 ISSN 2651-4451 | e-ISSN 2651-446X
6. N.Ravichandran, V.Jayalakshmi “Power transformer fault analysis by duval triangle method based on dissolved gas analysis” International Journal of Innovative Technology and Exploring Engineering (IJITEE) , ISSN: 2278-3075, Volume-8 Issue-6S, April 2019.
7. K.Sakthivel, V.Jayalakshmi, G.Rajakumari “Modeling and Simulation of a Grid-Tied Solar PV System” International Journal of Recent Technology and Engineering (IJRTE) ISSN: 2277-3878, Volume-7 Issue-6S2, April 2019
8. [Rangaswamy, T.R.](https://www.scopus.com/authid/detail.uri?authorId=6508024921), [Prakash, D.](https://www.scopus.com/authid/detail.uri?authorId=57201374026), [Jayalakshmi, V.](https://www.scopus.com/authid/detail.uri?authorId=55810881700) “[Advancement in protection systems in a thermal power plant](https://www.scopus.com/record/display.uri?eid=2-s2.0-85073756107&origin=resultslist&sort=plf-f)” International Journal of Engineering and Advanced Technology, 2019, 8(6 Special Issue 2), pp. 784–787
9. [Jayalakshmi, V.](https://www.scopus.com/authid/detail.uri?authorId=55810881700), [Rathika, R.](https://www.scopus.com/authid/detail.uri?authorId=57209249650), [Prakash, S.](https://www.scopus.com/authid/detail.uri?authorId=57221661472) “[A control scheme for current with cancellation of back EMF and tracing fault adapted commutation shift for SRM drive](https://www.scopus.com/record/display.uri?eid=2-s2.0-85073748344&origin=resultslist&sort=plf-f)” International Journal of Engineering and Advanced Technology, 2019, 8(6 Special Issue 2), pp. 109–112
10. [Jayalakshmi, V.](https://www.scopus.com/authid/detail.uri?authorId=55810881700), [Sakthivel, K.](https://www.scopus.com/authid/detail.uri?authorId=57196356684), [Sherine, S.](https://www.scopus.com/authid/detail.uri?authorId=56893722400) “[Wind power management using IoT and wi-fi](https://www.scopus.com/record/display.uri?eid=2-s2.0-85073741853&origin=resultslist&sort=plf-f)” International Journal of Engineering and Advanced Technology, 2019, 8(6 Special Issue 2), pp. 28–30
11. [Jayalakshmi, V.](https://www.scopus.com/authid/detail.uri?authorId=55810881700), [Sakthivel, K.](https://www.scopus.com/authid/detail.uri?authorId=57196356684), [Sherine, S.](https://www.scopus.com/authid/detail.uri?authorId=56893722400) “[Optimum load sharing and improving stability in distribution network(LT)](https://www.scopus.com/record/display.uri?eid=2-s2.0-85073730831&origin=resultslist&sort=plf-f)” International Journal of Engineering and Advanced Technology, 2019, 8(6 Special Issue 2), pp. 19–23
12. [Jayalakshmi, V.](https://www.scopus.com/authid/detail.uri?authorId=55810881700), [Sakthivel, K.](https://www.scopus.com/authid/detail.uri?authorId=57196356684), [Sherine, S.](https://www.scopus.com/authid/detail.uri?authorId=56893722400) “[DC microgrid for wind and solar power integration](https://www.scopus.com/record/display.uri?eid=2-s2.0-85073729157&origin=resultslist&sort=plf-f)” International Journal of Engineering and Advanced Technology, 2019, 8(6 Special Issue 2), pp. 24–27
13. [Rangaswamy, T.R.](https://www.scopus.com/authid/detail.uri?authorId=6508024921), [Jayalakshmi, V.](https://www.scopus.com/authid/detail.uri?authorId=55810881700) “[On line dirt based soot blowing system using fuzzy logic for utility boilers](https://www.scopus.com/record/display.uri?eid=2-s2.0-85070950452&origin=resultslist&sort=plf-f)” International Journal of Recent Technology and Engineering, 2019, 8(2), pp. 1669–1671
14. [Sakthivel, K.](https://www.scopus.com/authid/detail.uri?authorId=57196356684), [Jayalakshmi, V.](https://www.scopus.com/authid/detail.uri?authorId=55810881700) “[Maximum power extraction by using converters for hybrid renewable energy source fed micro-grid](https://www.scopus.com/record/display.uri?eid=2-s2.0-85067850419&origin=resultslist&sort=plf-f)” International Journal of Innovative Technology and Exploring Engineering, 2019, 8(8), pp. 2085–2097
15. [Ravichandran, N.](https://www.scopus.com/authid/detail.uri?authorId=57209448719), [Jayalakshmi, V.](https://www.scopus.com/authid/detail.uri?authorId=55810881700)”[Investigations on power transformer faults based on dissolved gas analysis](https://www.scopus.com/record/display.uri?eid=2-s2.0-85066980708&origin=resultslist&sort=plf-f)” International Journal of Innovative Technology and Exploring Engineering, 2019, 8(6), pp. 296–299
16. [Sakthivel, K.](https://www.scopus.com/authid/detail.uri?authorId=57196356684), [Jayalakshmi, V.](https://www.scopus.com/authid/detail.uri?authorId=55810881700), [Prakash, S.](https://www.scopus.com/authid/detail.uri?authorId=57221661472) “[Performance analysis of wind and photovoltaic system fed micro grid using fuzzy logic controller](https://www.scopus.com/record/display.uri?eid=2-s2.0-85067335333&origin=resultslist&sort=plf-f)” Journal of Advanced Research in Dynamical and Control Systems, 2019, 11(1), pp. 686–696
17. [Sakthivel, K.](https://www.scopus.com/authid/detail.uri?authorId=57196356684), [Jayalakshmi, V.](https://www.scopus.com/authid/detail.uri?authorId=55810881700) “[Hybrid renewable power generation scheme for grid integration](https://www.scopus.com/record/display.uri?eid=2-s2.0-85063688436&origin=resultslist&sort=plf-f)” International Journal of Innovative Technology and Exploring Engineering, 2019, 8(5s), pp. 630–634
18. Dr.V.Jayalakshmi, Shekhar Kumar, “Implementation of five level inverter for STATCOM”, International Journal of Pure and Applied Mathematics , Volume 119, No. 12 (2018), 8011-8024.
19. [Meenakshi, N.](https://www.scopus.com/authid/detail.uri?authorId=56925211400), [Jayalakshmi, V.](https://www.scopus.com/authid/detail.uri?authorId=55810881700)[Multilevel neutral point diode clamped inverter based on SVPWM](https://www.scopus.com/record/display.uri?eid=2-s2.0-84945281148&origin=resultslist&sort=plf-f) International Journal of Applied Engineering Research, 2015, 9(22), pp. 6873–6878
20. Jayalakshmi.V, “Wireless Sensor Network for Performance Monitoring of Electrical Machine” Middle-East Journal of Scientific Research 20 (8): pp.996-999, 2014.
21. Jayalakshmi.V, “Variable Speed Cage Machine Wind Generation Unit “Middle-East Journal of Scientific Research 20 (11): pp.1670-1676, 2014
22. Jayalakshmi.V and Dr.N.O.Gunasekhar, “Dynamic Voltage Restorer using Three Phase AC-AC Converter” Journal of Theoretical and Applied Information Technology 10th June 2014. Vol. 64 No.1 pp.142-147.
23. Jayalakshmi.V and Dr.N.O.Gunasekhar , “Mitigation of Voltage Sag by Dynamic Voltage Restorer using Single Phase Z Source Inverter” International Journal of Applied Engineering Research, Volume 9, Number 17 (2014) pp. 4181-4188

**International Journal** 1. Dr. V. Jayalakshmi “Co-Design of PV Array and DC to AC Inverter with Sepic Converter Based MPPT Technique” International Journal of All Research Education & Scientific Methods IJARESM, Impact Factor: 7.429, Volume 9 Issue 8, August- 2021
2. V Jayalakshmi, M.Kalavathy, “Cascaded Seven Levels H-Bridge Inverter Control of DSTATCOM for Compensation of Reactive Power and Harmonics” International Journal of Science and Research (IJSR), January 2013Vol 1, Issue1, pp 596-600.
3. V.Jayalakshmi Ms. K. Anusuya, “Efficiency Enhancement of Leakage Current Reduction in Three Phase Transformer less Solar Systems” IOSR Journal of Electrical and Electronics Engineering (IOSR-JEEE) Dec 2013 Volume 3, Issue 5 pp. 46-55
4. V. Jayalakshmi, Jafar Ali and S.P.Vijayaragavan, “ Simulation of an Interline Dynamic Voltage Restoring and Displacement Factor Controlling Device(IVDFC)” International Journal of Advanced Research in Electrical, Electronics and Instrumentation Engineering, Vol. 4, Issue 3, March 2015 pp.1285-1293.

**International Conference Publications**1. Dr.V. Jayalakshmi “Power Quality Enhancement using Distributed Power Flow Controller” at The 2 nd International Virtual Conference on Science and Technology (SUT-IVCST 2021) Suranaree University of Technology, Thailand hold on 6 th August, 2021.
2. Dr.V. Jayalakshmi “Design Of Wind Driven Pmsg Based Z-Source Inverter Fed Three Phase Load For Stand-Alone Applications” International Level Virtual Conference on Disruptive Technologies in Maritime Sector: Industry 4.0” from 28 th June 2021 to 29 th June 2021 organized by the Department of Marine Engineering, AMET Deemed to be University,Chennai.
3. Dr.V. Jayalakshmi “A Low Cost Single Phase Grid Connected Reduced Switch Pv Inverter Based On Time Frame Switching Scheme” International Level Virtual Conference on Disruptive Technologies in Maritime Sector: Industry 4.0” from 28 th June 2021 to 29 th June 2021 organized by the Department of Marine Engineering, AMET Deemed to be University,Chennai.
4. A. Amsaveni ; C. Sharmeela ; V. Jeyalakshmi ; S. Prakash Power Quality Assessment for Indian Railway Traction A Case study 2018 International Conference on Recent Trends in Electrical, Control and Communication (RTECC) IEEE Xplore 2018 pp. 143 - 149
5. Jayalakshmi.V and Dr.N.O.Gunasekhar, “Implementation of Discrete PWM Control Scheme on Dynamic Voltage Restorer for the Mitigation of Voltage Sag /Swell”. 2013 International Conference on Energy Efficient Technologies for Sustainability.pp-1036-1040.
 |
| **List of Workshop Attended** |
| 1. Attended two days workshop on “Simulation Software’s For Engineering Applications” conducted by SRM University
2. Attended two days workshop on “Soft Computing Techniques For Power Engineers” conducted by SRM University
3. Attended three days workshop on “Research Article Writing And Publication” conducted by Bharath University
4. Attended two days workshop on “Matlab &Simulink” conducted by Bharath University
5. Attended three days workshop on “Design And Implementation of Grid Integrated Solar PV System With Research Perspective”conducted by St. Joseph’s Institute of Technology
6. Attended two days workshop on “Power System Studies Using ETAP & DIgSILENT” conducted by S.A.Engineering College
7. Attended one day workshop on “How To Write Good Scientific Project Proposals” conducted by Syed Ammal Engineering College
8. Attended one day workshop “One day Workshop on eSim,a First Course in the IoT Series for Teachers ” organised by the Teaching Learning Centre ICT at IIT Bombay **21** September 2019.
9. Attended one day workshop “One day Workshop on Arduino” organised by the Teaching Learning Centre ICT at IIT Bombay 8 th Feb 2020.
 |
| **Books to be Published** |
| * Book Title : Digital Electronics
* ISBN Number : 978-93-5351-726-7
* Book Title : POWER QUALITY
* ISBN Number : 978-93-5680-024-3
* Book Title : Power System Protection and Switchgear
* ISBN Number : 978-93-5680-630-6
* Book Title : Transmission and distribution
* ISBN Number : 978-93-5701-288-1
 |
| **Personal Information** |
| 1. Spouse Name : Mr.P.Dhanasekaran
2. Date of Birth : 04, April, 1979
3. Marital Status : Married
4. Nationality : Indian
 |
| **Declaration** |
|  I hereby declare that all the information furnished above is true to the best of my knowledge and belief.Place : Chennai Date : 21.11.2019 (V. JAYALAKSHMI)  |