

## **Curriculum Vitae**

N.Rajesh Babu  
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Vijayawada-520012

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### **Experience:**

Teaching: 14+ Years

### **Career Profile**

Year	Organization	Role
2023 to Till Date	PSCMR CET, Vijayawada	Assistant Professor in EEE Dept
2016-2023	DVR & Dr HS MIC College of Technology, Kanchikacherla	Assistant Professor in EEE Dept
2012-2016	Usha Rama College of Engg & Tech, Telaprolu	Assistant Professor in EEE Dept
2009-2012	Vikas College of Engg & Tech, Nunna	Assistant Professor in EEE Dept

### **Qualification**

Degree	Board / University	Date of Completion	% Marks
Ph.D (Pursuing)	JNTUK		
M.Tech (I & CS)	JNTUK	Feb 2010	72
B.Tech (EEE)	JNTUH	May 2006	60
Diploma (EEE)	SBTET	April 2003	62
INTER in EDAR (Vocational)	Intermediate	March 2001	90
SSC	Secondary Education	March 1999	60

### **The subjects handled:**

- Electrical Machines-I
- Electrical Machines-II
- Electrical Machines-III
- D.C Machines
- A.C Machines
- Power Systems -I
- Switch Gear & Protection
- Utilization of Electrical Energy
- Electrical Measurements
- Instrumentation
- Renewable Energy Systems
- Non- Conventional Energy Systems
- High Voltage Engineering
- Electrical Distribution Systems
- Power Quality
- Energy Audit Conservation & Management
- Managerial Economics & Financial Analysis

### **Certifications**

<b>Certification</b>	<b>Date Certified</b>
NPTEL Online Certification - Non- Conventional Energy Resources	April -2019
NPTEL Online Certification - Introduction to Smart Grid	September -2019
Coursera - AI for Everyone	25/05/2020
Coursera - Safety in the Utility Industry	25/05/2020
Coursera - Electric Power Systems	25/05/2020
Coursera - Energy The Enterprize	25/05/2020
Coursera - AI for Everyone	25/05/2020

## **Affiliation to Professional Bodies**

IAENG membership : 173125

IAER Membership : 1912002

IREM membership ID : AM101000583310

ISRD membership ID: M4150901712

## **Publications**

**1.ISSN 2277-2685 IJESR/June 2014/ Vol-4/Issue-6/365-373 (IJESR)(3.47)**

**Published By :- Society of Scientific Research and Education(SSRE)**

ENHANCEMENT OF POWER QUALITY FEATURES USING DSTATCOM WITH APPLICATION TO DIFFERENT LOAD CONDITIONS

**2.International Journal of Electrical and Electronics Engineering (IJEET)(2.01)**

**ISSN: ISSN : 2319-8885 Volume-4, Issue-3, 2014**

Performance Evaluation of DSTATCOM Fed BLDC Drive with Improved Power Quality Features

**3.ISSN 2319-8885 Vol.04,Issue.50, December-2015, Pages:10837-10841 (IJSETR)(5.762)**

Analysis of 4-Leg Active Power filter Performance under Conventional and Fuzzy Integrated Predictive Control Techniques for Power Quality Improvement

*N. RAJESH BABU*

**4.International Journal of Electrical Power and Power Electronics(IJEPPE)(3.1)**

Fuzzy Logic Control Approach for Cascaded Modular Multi-Level Inverters with Active & Reactive power Control of Large scale Grid Connected PV systems

**5.Imperial Journal of Interdisciplinary Research (IJIR)(1.756)**

**Vol-3, Issue-4, 2017 ISSN: 2454-1362, <http://www.onlinejournal.in>**

Admittance Based LMS Technique for Single-Stage SPV Generation to Grid Integration Using PI Control

**6.International Journal of Scientific Research in Engineering (IJSRE) Vol. 1 (4), April, 2017 (3.27)**

CASCADED MODULAR MULTI-LEVEL INVERTERS WITH ACTIVE & REACTIVE POWER CONTROL OF LARGE SCALE GRID CONNECTED PV SYSTEM WITH FUZZY LOGIC CONTROL APPROACH (ISSN:1117-3259)

**7. International Journal of Scientific Research in Engineering (IJSRE) Vol. 1 (4), April, 2017 (3.27)**

**INTEGRATION OF SINGLE-STAGE SPV GENERATION USING PI CONTROL WITH ADMITTANCE BASED LMS TECHNIQUE (ISSN:1117-3259)**

**8. International Journal of Modern Trends in Engineering Research(IJMTER)(4.364)**

**ACTIVE & REACTIVE POWER CONTROL OF LARGE SCALE GRID CONNECTED PV SYSTEM BY CASCADED MODULAR MULTI-LEVEL INVERTERS WITH FUZZY LOGIC CONTROL APPROACH**

**9. International Journal of Innovative Engineering & Management Research(IJIEMR)(5.812)**

Vol06 Issue12, Dec2017 ISSN 2456 – 5083 [www.ijiemr.org](http://www.ijiemr.org)

**PERFORMANCE EVALUATION OF PHOTO VOLTAIC CELL FED THREE-PHASE SWITCHED CAPACITOR MULTI LEVEL INVERTER USING MULTIPLE DC-LINKS**

**10. International Journal of Scientific Research and Review(IJSRR)(6.1)**

**Volume 7, Issue 1, 2018 ISSN NO: 2279-543X**

**Photo Voltaic Cell Fed Three-Phase Switched Capacitor Multi Level Inverter Using Multiple DC-Links for Performance Improvement**

**11. Sustainable Computing: Informatics and Systems (SCI Free)**

doi: 10.4108/ew.v9i40.2139

**Battery energy integrated active power filter for harmonic compensation and active power injection**

**12. EAI Endorsed Transactions on Energy Web (Free Scopus)**

<https://doi.org/10.1016/j.suscom.2022.100664>

**Power Quality Improvement using Parallel Connected FACTS Device with simplified d-q control**

### **Conferences, Seminars, Workshops & Guest Lectures Attended**

1. Attended & Presented Research Paper in 3<sup>rd</sup> International Conference on Sustainable Manufacturing, Materials and Technologies ICSMMT 2021 with title "Analysis of APF for Compensation of Harmonics using IRP and SRF Control "
2. Participated in 2-day course on VLSI DESIGN Conducted by IETE, Hyderabad.
3. Participated in 2-day Intensive Training Programme on Nation Building Through Personality Development & Career Planning conducted by National Institute of Ecology & Environment, Kakinada.
4. Participated in 2-day Workshop on SPGRES-13 in Andhra University.
5. Participated in 1-day Workshop on Energy Conservation & Audit in KLU.
6. Participated in 2-day Workshop on Indian Power Scenario in URCE.
7. Participated in Two Day Workshop on "Multilevel Inverters & Micro grids"

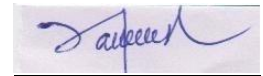
8. Participated in 3-day Workshop on Renewable Energies & Grid Integration Systems in VRSE.
9. Participated in 1-day FDP on Research Guidelines & Methodologies in DVR & Dr HS MIC College of Tech.
10. Participated in 1-day FDP on Computational Techniques Using MATLAB(R 2016a) in DVR & Dr HS MIC College of Tech.
11. Participated in Two Day National Seminar on “Role of Smart Grids in Smart Cities: Challenges & Solutions” in DVR & Dr HS MIC College of Tech.
12. Participated in 2-day Workshop on Research Tool for Advanced Modeling and Analysis of Electrical Utilities in UCE, JNTUV.
1. Participated in 2-day Workshop on Smart & Green Technologies for Sustainable Energy in KLU.
13. Participated in One Day National workshop on “Emerging Trends in Power System Deregulation & Renewable Energy Control” in URCE.
14. Participated in Five-Day Continuing Education Program on “Advanced Technologies in Power Engineering” in NITW
15. Participated in Five-Day Short Term Course(STC) on “Power Electronics Applications in Power Quality, Drives and Renewable Energy Systems (PEAS – 2018)” in NITA
16. Participated in Two-Day Workshop on “Integration of Renewable Energy Sources & Emerging Challenges” in ANUCE.
17. Participated in 5-day Workshop on Emerging Trends in Teaching Technology
18. Participated in 5-day Workshop on AI & ML
19. Participated in 5-day Workshop on Research Innovative & Recent Trends in Electrical Engg
20. Participated in 5-day Workshop on Online Faculty Development Program on Artificial Intelligence
21. STC on Advanced Simulation Tools for Power Electronics, Electro magnetic and Power Systems
22. Participated in 5-day Workshop on “Technological Advances in Power Switching Converters for Renewable Energy Sources and Fuel Cell Technology for E-vehicles”
23. Participated in National Level 5 Day FDP on LATEX
24. Participated in 5-day Workshop on “Tools for Scientific Communication and Effective Teaching”
25. Participated in 5-day Workshop on Recent Innovations & Technologies in Electric Vehicles
26. Participated in 5-day Workshop on IGEN PIT FDP on Renewable Energy Systems
27. Participated in 5-day Workshop on “DESIGN OF SOLAR PV SYSTEM USING PVSYST SOFTWARE”
28. Participated in 5-day Workshop on Electrical Power Grid Modernization Trends, Challenges & Opportunities
29. Participated in 6-day Workshop on Electric Vehicles
30. Participated in 6-day Workshop on Explore Electrical Engineering in Industrial Applications
31. Participated in 6-day Workshop on Emerging Trends & Challenges In Electrical Engg
32. Participated in 6-day Workshop on Computational Intelligence and Modeling in Modern Power System”
33. Participated in 6-day Workshop on “INTEGRATION OF GREEN ENERGY WITH SMART POWER SYSTEMS”
34. Participated in 5-day Workshop on "Insights of control systems & signal systems

35. Participated in 5-day Workshop on "Real-time Aspects of Power System Scenario"
36. Participated in 5-day Workshop on "AI Techniques to Electrical Engineering"
37. Participated in 5-day Workshop on "Power Electronics Application in Smart Grid and Electric Vehicle"
38. Participated in 5-day Workshop on "Micro Grid: Fundamentals, Control and Stability Aspects"
39. Participated in 5-day Workshop on Real Time Typhoon HIL Simulation Applications for PS, PE Based RES, EH & Micro grids
40. Participated in 5-day Workshop on Recent Trends & Challenges in Smart grid Technology
41. Participated in 5-day Workshop on "Future Energy Trends & its Impact",
42. Participated in 5-day Workshop on SMART GRIDS AND ELECTRIC VEHICLES"
43. Participated in 5-day Workshop on Block chain Technology in Electrical Power Systems Applications
44. Participated in 5-day Workshop on Energy Storage
45. Participated in 5-day Workshop on Industrial Automation using PLC/SCADA with IoT"
46. Participated in 5-day Workshop on India's paradigm shift towards renewable energy resources integrating with the grid-issues
47. Participated in 5-day Workshop on Recent Advances in Electrical Energy Management, Control and Automation"
48. Participated in 5-day Workshop on FDP on Emerging Technologies in Electrical Engineering
49. Participated in 6-day Workshop on Emerging Trends & Challenges In Electrical Engg
50. Participated in 6-day Workshop on "INTEGRATION OF GREEN ENERGY WITH SMART POWER SYSTEMS"
51. Participated in 6-day Workshop on Recent Trends in Microgrid Technologies
52. in 6-day Workshop on SIMULATION TOOLS FOR POWER ELECTRONICS AND POWER SYSTEMS
53. Participated in 6-day Workshop on Smart Grid Technology
54. Participated in 6-day Workshop on Current Trends in Power Systems and Power Electronics" (CRTPSPE 2020).
55. Participated in 6-day Workshop on "Cyber Physical Systems (CPS) Design Techniques and Applications"
56. Participated in 6-day Workshop on Research perspectives & Sustainable applications of AI in Electrical Engineering
57. Participated in 6-day Workshop on RECENT DEVELOPMENTS AND ENTREPRENEURSHIP INSUSTAINABLE GREEN ENERGY TECHNOLOGIES AND SMART GRIDS – Series B
58. Participated in 6-day Workshop on Automation And Intelligent Control of Electrical Systems - Phase-II"
59. Participated in 6-day Workshop on Power Electronics base Drives and Control"
60. Participated in 6-day Workshop on "ELECTRIC CARS TECHNOLOGIES AND MODERN POWER SYSTEM" SERIES-III
61. Participated in 6-day Workshop on RECENT DEVELOPMENTS AND ENTREPRENEURSHIP IN SUSTAINABLE GREEN ENERGY TECHNOLOGIES AND SMART GRIDS - Series C"
62. Participated in 6-day Workshop on Role of E V in Smart Cities Vision of India: Opportunities and Challenges
63. Participated in 6-day Workshop on "Role of Smart Technology in Maritime Industries".

- 64.Participated in 6-day Workshop on Embedding Soft Skills in Technical Education-its Impact and Effectiveness on Employability
- 65.Participated in 6-day Workshop on IoT based Control Strategies for AC/DC Microgrids in Smart City Implementation”
- 66.Participated in 6-day Workshop on Role of Artificial Intelligence in Engineering Applications
- 67.Participated in 6-day Workshop on Recent Trends in Power Electronics and IoT Applications to Electric Vehicles”
- 68.Participated in 6-day Workshop on Recent Challenges & Emerging Opportunities in Electric Vehicles
- 69.Participated in 6-day Workshop on “Electric Vehicles: A Green Approach for Sustainable
- 70.Participated in 6-day Workshop on Development of Transportation in India ”
- 71.Participated in 6-day Workshop on Role of Smart Technology in Maritime Industries
- 72.Participated in 6-day Workshop on CYBER SECURITY IN IoT ENABLED SMART GRID
- 73.Participated in 6-day Workshop on Power System Modeling and Simulations
- 74.Participated in 6-day Workshop on Applications of Power Electronics to Renewable Energy sources and Power Quality Improvement Devices”
- 75.Participated in 6-day Workshop on “Simulation Tools for Electrical Engineering & its real time applications”
- 76."A ONE WEEK NATIONAL LEVEL ONLINE FACULTY DEVELOPMENT PROGRAM ON RECENT TRENDS IN ELECTRICAL ENGINEERING"
- 77.One Week online Faculty Development Programme on “Recent Advancements in Generation and Control in Modern Power Systems”
- 78.One Week Short Term Training Program on “ Soft Computing Techniques in Electrical Systems”
- 79.One Week Online Faculty Development Programme on“Research Opportunities in Electrical Power Engineering”
- 80.Participated in 6-day Workshop on Recent Advancements in Power Electronics and Drives for the Integration of Future Energy Sources
- 81.Participated in 6-day Workshop on "Electric Vehicles-Technological Advancements and Trends"

### **Events organized/ Conducted**

- 1.Organized Workshop on PLC in DVR & Dr HS MIC College of Tech.
- 2.Organized Workshop on “Autonomous Robotics” in DVR & Dr HS MIC College of Tech.
- 3.Organized Workshop on “Internet of Things” in DVR & Dr HS MIC College of Tech.



**Signature**