

**EXCELLENCE IN EDUCATION; SERVICE TO SOCIETY** 

(ESTD, UNDER AP PRIVATE UNIVERSITIES (ESTABLISHMENT AND REGULATION) ACT, 2016)

Rajampet, Annamayya District, A.P - 516126, INDIA

### **Faculty Profile**

### **Basic Information:**

NAME : Dr. S. Sarada

DESIGNATION : Assistant Professor

DEPARTMENT : EEE

DATE OF BIRTH : 01/03/1984

DATE OF JOINING : 08/12/2007

EMAIL ID : saradasasi@gmail.com

EMPLOYEE ID : 13



#### **Academic Profile:**

| Qualification | Name of the Board/University                                | YEAR |
|---------------|---|------|
| Ph. D.        | J. N. T. University, Anantapur (Autonomous)                 | 2024 |
| M. Tech       | S. K. D. University, Anantapur                              | 2010 |
| B. Tech       | Vaagdevi Institute of Technology and Science,<br>Proddatur. | 2007 |

#### **Research Details:**

| 1. Areas of Specialization :           | Power Electronics & Drives   |
|--|--|
| 2. No. of Publications :               | 46   |
| 3. Awards Received :                   | <ol> <li>Best Paper Award in 2025 IEEE International<br/>Conference in Advances in Power, Signal, and<br/>Information Technology (APSIT), at Siksha 'O'<br/>Anusandhan University, Bhubaneswar, Odisha.</li> <li>Best Paper Award in 2020 International<br/>Conference on Computing, Communication,<br/>Electrical and Electronics Engineering<br/>(ICCCEEE).</li> </ol> |
| 4. Research Guidance                   |  |
| No. of PhD Guided:                     | 01   |
| No. of M. Tech. Guided:                | 10   |
| No. of B. Tech. Guided:                | 30 Batches   |
| 5. Details of Professional Membership: | IEI, Associate Member  |



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| 6. Subjects Taught : | 1. Fundamentals of Electrical & Electronic Engineering |
|----------------------|--|
|                      | 2. Electronic Devices & Circuits                       |
|                      | 3. Electrical Machines-I                               |
|                      | 4. Electrical Machines-II                              |
|                      | 5. Electrical Machines-III                             |
|                      | 6. Generation of Electrical Power                      |
|                      | 7. Transmission of Electrical Power                    |
|                      | 8. Electrical Circuit Theory                           |
|                      | 9. Principles of Electrical Engineering                |
|                      | 10. Linear Control Systems                             |
|                      | 11. Micro Processors & Micro Controllers               |
|                      | 12. Basic Electrical Engineering                       |
|                      | 13. Reactive Power Control & Management (M. Tech)      |
|                      | 14. Energy Conversion Systems (M. Tech)                |
|                      |  |

### **Publication Details:**

|     | Title   | Publisher   | Published<br>Year |
|-----|---|---|-------------------|
|     | An Enhanced Low Switching Frequency Modulation-Based Symmetric Multi-Level Inverter for Harmonic Mitigation.                      | IEEE  | 2025              |
| 2)  | FCS-MPC Based Grid-Tied Self-Balanced Switched Capacitor Reduced Switch Nine Level Inverter.                                      | IEEE  | 2024              |
| 3)  | Single Phase Grid Connected Nine Level<br>Quadruple Boost Inverter with Current Control<br>and Active Damping Capability          | IEEE  | 2024              |
| 4)  | Improving of Voltage Gain Ability by Using Seven<br>Level and Nine Level Switched Capacitor<br>Multilevel Inverters               | IEEE  | 2024              |
| 5)  | Predictive Control of 1-Φ Grid Connected Reduced Switch 7-Level Triple Boost Inverter   | International Journal of<br>Innovations in Engineering and<br>Science               | 2023              |
| 6)  | Comparative Switching and Conduction Loss<br>Analysis of a SVPWM and DPWM based DTC of<br>Open-End Winding Induction Motor Drive. | International Journal of<br>Renewable Energy Research                               | 2022              |
| 7)  | A Model Predictive Control of 1-Φ Grid Connected Reduced Switch 7-Level Inverter  | International Journal of Food and Nutritional Sciences                              | 2022              |
| 8)  | Reduction of Common Mode Voltage for 3-Level<br>Inverter Fed DTC of open-end Winding Induction<br>Motor Drive                     | Test Engineering and<br>Management  | 2020              |
| 9)  | A Scalar Based SVPWM and DPWM Techniques for 3-Level Inverter fed DTC of Open-End Winding Induction Motor Drive.                  | Journal of Advanced Research in<br>Dynamical & Control Systems                      | 2019              |
| 10) | Power quality improvement in PV flyback microinverter using adaptive fuzzy-PR controller  | International Journal of<br>Technical Innovation in Modern<br>Engineering & Science | 2018              |



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| 11) Adaptive Fuzzy Proportional Resonant Controller for Photo Voltaic Flyback Micro Inverter with Hybrid Mode                       | International Journal of<br>Research                                     | 2018 |
|---|--|------|
| 12) A RCC MPPT based open-end winding induction motor drive for pumping applications  | International Journal of Current<br>Science                              | 2017 |
| 13) Brushless DC motor Drive for solar photovoltaic array fed water pumping system by using fuzzy logic controller                  | International journal of<br>Electrical Engineering                       | 2017 |
| 14) An improved efficiency of fuzzy logic control of BLDC motor for solar photo voltaic array fed water pumping system              | International Journal of<br>Electrical and Computer<br>Engineering       | 2017 |
| 15) Solar PV array fed water pumping using BLDC motor drive with BOOST-BUCK converter   | ICIOTSC-2017   | 2017 |
| 16) Brushless DC motor drive for solar photo voltaic array fed water pumping system by using fuzzy logic controller                 | ICIOTSC-2017   | 2017 |
| 17) Maximum power tracking Scheme For synchronous wind power Generators   | International Journal of<br>Current Science                              | 2016 |
| 18) Simulation of Five Level Cascaded Inverter by Using Carrier Based Neutral Voltage Modulation Technique                          | International Journal of Control<br>Theory and Applications              | 2016 |
| 19) Hybrid filter with CPPM for suppression of common mode voltage and differential mode harmonics in three phase PV inverter       | International Journal of<br>Electrical Engineering                       | 2016 |
| 20) Suppression of common mode voltage and differential mode harmonics in three phase inverter using hybrid filter                  | NCRAIPES-2016  | 2016 |
| 21) Real time implementation of multilevel inverter for 3P4W Distribution network using ANFIS control                               | Indian Journal of Science and Technology                                 | 2015 |
| 22) Improvement of Power Quality Using Cascaded Voltage and Current Control for Inverter in Microgrids                              | International Journal of<br>Electrical Engineering                       | 2015 |
| 23) Implementation of Network Fault Tolerant VSC-<br>HVDC Transmission System by Using Fuzzy Logic<br>Controller                    | International Journal of Control<br>Theory and Applications              | 2015 |
| 24) Multilevel Cascaded Inverters Under Unbalanced DC Source with a Carrier- Based Neutral Voltage Modulation Strategy              | ICETER   | 2015 |
| 25) Implementation of Network Fault Tolerant VSC-<br>HVDC Transmission System   | ICETER   | 2015 |
| 26) Battery Energy Storage System in DFIG Based<br>Wind Energy Conversion System  | International Journal of<br>Computer Science and<br>Information Security | 2014 |
| 27) Low Frequency Oscillation Damped by using D-FACTS Controller  | International Journal of<br>Computer Science and<br>Information Security | 2014 |
| 28) Fuzzy Logic Based Matrix Converter and Unified Power quality Conditioner for Frequency Regulation and Power Quality Improvement | International Journal of<br>Applied Engineering Research                 | 2014 |
| 29) Reduction of Voltage Imbalance in Two Feeder Distribution System using IUPQC  | International Journal of<br>Engineering Research and<br>Development      | 2014 |



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| 30) Damping of Power System Oscillations by using DPFC Controller" presented in International Conference on Innovative in Electrical & Electronics Engineering | ICIEEE  | 2014 |
|--|---|------|
| 31) Diminution of Voltage Imbalance in a Two-Feeder Distribution System using IUPQC  | ICEECSIT  | 2014 |
| 32) Mitigation of Voltage Imbalance in a Two-Feeder Distribution System using IUPQC  | ICAESA  | 2014 |
| 33) Grid power leveling of DFIG based Wind Energy Conversion system  | NCES14  | 2014 |
| 34) Performance of Matrix Converter Based Unified Power Quality Conditioner using Fuzzy Logic  | NCES14  | 2014 |
| 35) Modeling and Analysis of UPFC connected Single<br>Machine System with PSS design using Sliding<br>Mode Control Technique                                   | International Journal of Recent<br>Advance in Engineering and<br>Technology | 2013 |
| 36) Improving Power Quality by Simultaneous<br>Compensation Voltage and Current in a Multi Bus<br>Multi Feeder System using MC-UPQC                            | International Journal of Recent<br>Advance in Engineering and<br>Technology | 2013 |
| 37) Reactive Power Compensation and harmonic elimination by Fuzzy Logic Controlled shunt active Power filter   | International Journal of Recent<br>Advance in Engineering and<br>Technology | 2013 |
| 38) Improving Power Quality by Simultaneous<br>Compensation Voltage and Current in a Multi Bus<br>Multi Feeder System using MC-UPQC                            | ICGEST  | 2013 |
| 39) Modeling and Analysis of UPFC connected Single<br>Machine System with PSS design using Sliding<br>Mode Control Technique                                   | ICEEE2013   | 2013 |
| 40) Reactive Power Compensation and harmonic elimination by Fuzzy Logic Controlled shunt active Power filter   | ICEEE2013   | 2013 |
| 41) Control Scheme of Multi Level Cascaded H-<br>Bridge STATCOM  | International Journal of Modern Engineering Research                        | 2012 |
| 42) Power Flow Control by using DPFC   | International Journal of Modern<br>Engineering Research                     | 2012 |
| 43) Grid Interconnection of Renewable Energy Sources at the Distribution Level using Fuzzy Logic Controller"   | International Journal of<br>Engineering Research &<br>Technology            | 2012 |
| 44) Control Scheme of Multi level Cascaded H-Bridge STATCOM  | NCES12  | 2012 |
| 45) Power Flow Control by using DPFC   | NCES12  | 2012 |
| 46) Power-Quality Improvement Features at the Distribution Level with Grid Interconnection of Renewable Energy Sources   | NCES12  | 2012 |

### Patent Details:

| Title of Patent  | Submitted/Published/Awarded |
|--|-----------------------------|
| PATSP-Electric Motor: Predict and Auto Control<br>the Speed, Torque and Power of the Electric<br>Motor | Published                   |