Name: Prof. CH MallaReddy

Designation: Assistant Professor

Qualification: M.Tech.(Electrical Engineering)

Age: 40 Years

Experience: 14Years

E-mail: mallareddychinala@orchidengg.ac.in

Area of Interest: Power Quality

Publications:

International Conference: 15
National Conference: Nil
International Journal: 20
National Journal: -Nil

Subject Taught:

- 1. Basic Electrical Engineering
- 2. Electrical Machines-I
- 3. Electrical Machines-II
- 4. Electrical Machines-III
- 5. Network Analysis
- 6. Power system-II
- 7. Electrical Machine Design
- 8. Network Analysis and Synthesis
- 9. Principles of Electrical Machine Deisgn
- 10. High Voltage Engineering
- 11. EHVAC Transmission
- 12. HVDC Transmission
- 13. Electrical Transients in Power System
- 14. AC/DC Drives

Achievements:

- 1. PG Projects guided till date 17
- 2. PG Approved Faculty
- 3. Qualified in GATE-07 with score 318

PG Project Guided:

- 1. Off board Electric vehicle battery charger using PV Array
- 2. An Induction generator based AC/Dc Hybrid electric power generation system for more electric Aircraft
- 3. Design of fault tolerant control system of VSI-Fed induction motor Drives
- 4. Boost derived hybrid converter with simultaneous DC and AC outputs
- 5. Performance Analysis of Fuzzy Logic Controller Based Hybrid Series Active Power



- Filter Working Under Unbalanced Supply Condition
- 6. FCS-MPC Dynamic reactive power control using Hybrid active power filter
- 7. Innovative hybrid Energy Storage System Design For Electric vehicles
- 8. Artificial Neural Network Based Design and Performance of Three-Phase Solar PV Integrated UPQC
- 9. Fault Detection in Photovoltaic by using wavelet transform and fuzzy logic
- 10. Improvement of Power Quality and Displacement Factor by Using IVDFC
- 11. An Islanding Detection Method for Inverter-Based Distributed Generators based on the Reactive Power Disturbance
- 12. Control Scheme based on Quasi Z-Source Network for Four Switch Three Phase Brushless DC Motor
- 13. Static Synchronous Series Compensator (SSSC) as Stability Booster of a Power System
- 14. Optimal placement of distributed generation for loss reduction in distribution system by using newton-raphson method
- 15. Recent trends in digital differential protection of power transformer
- 16. A combined vector and direct power control for DFIG based wind turbines
- 17. Instantaneous power and current strategies for current harmonics cancellation using shunt active power filter with PI and Fuzzy controllers
- 18. Comparative study of PI and Fuzzy controllers to minimize torque ripple in SR motor
- 19. An Innovative topology for harmonics and Unbalance compensation in Electric Traction System using Direct Power Control Technique
- 20. A novel technology for harmonics and unbalance compensation in electric traction system using direct power control method
- 21. A high performance SPWM controller for three phase UPS systems for High nonlinear loads
- 22. Mathematical modeling of photovoltaic cell

JOURNAL PUBLICATIONS

- Published a paper entitled "Off board Electric vehicle battery charger using PV Array" at Innovative Journal for Opportunities and Development in Science and Technology Nov 2022 with ISBN 2582-6026
- 2. Published a paper entitled "An Induction generator based AC/Dc Hybrid electric power generation system for more electric Aircraft" at IJCRT Feb 2021 ISSN: 2320-2882
- 3. Published a paper entitled "**Design of fault tolerant control system of VSI-Fed induction motor Drives**" at IJCRT Feb 2021 ISSN: 2320-2882
- 4. Published a paper entitled "Boost derived hybrid converter with simultaneous DC and AC outputs" at IJCRT Feb 2021 ISSN: 2320-2882
- 5. Published a paper entitled "Performance Analysis of Fuzzy Logic Controller Based Hybrid Series Active Power Filter Working Under Unbalanced Supply Condition" at IJSDR Dec 2020 ISSN 2455-2631
- 6. Published a paper entitled "FCS-MPC Dynamic reactive power control using Hybrid active power filter" at IJIERT May 2020 ISSN: 2394
- 7. Published a paper entitled "Cascaded Multiport Converter for SRM-Based Hybrid Electrical Vehicle" at International Journal of Trend in Scientific Research And Development Nov-Dec 2020 ISSN:2456-6470
- 8. Published a paper entitled "Innovative hybrid Energy Storage System Design For Electric vehicles" at Dogo Rangsang Research Journal Aug 2020 with ISSN (O): 2347-7180
- **9.** Published a paper entitled "A Review on Improvement of Power Quality and Displacement Factor using IVDFC" at International Research Journal of Engineering and Technology (IRJET) May 2019 with ISSN: 2395-0056
- **10.** Published a paper entitled "Artificial Neural Network Based Design and Performance of Three-Phase Solar PV Integrated UPQC" at International Journal of Innovative Research in Technology (IJIRT) July 2019 with ISSN: 2349-6002
- 11. Published a paper entitled "Fault Detection in Photovoltaic by using wavelet transform and fuzzy logic" at International Journal of Advance Research in Science and Engineering July 2019 with ISSN (O): 2319-8354
- 12. Published a paper entitled "Improvement of Power Quality and Displacement Factor by Using IVDFC" at International Journal of Advance Research in Science and Engineering July 2019 with ISSN (O): 2319-8354
- **13.** Published a paper entitled "An Islanding Detection Method for Inverter-Based Distributed Generators based on the Reactive Power Disturbance" at International Journal of Electronics, Electrical and Computational System April 2018 with ISSN 2348-117X
- **14.** Published a paper entitled "Control Scheme based on Quasi Z-Source Network for Four Switch Three Phase Brushless DC Motor" at International Journal for Scientific Research & Development July 2018 with ISSN (online): 2321-0613
- 15. Published a paper entitled "Static Synchronous Series Compensator (SSSC) as Stability Booster of a Power System" at International Journal of Engineering Trends and Technology 2017 with ISSN: 2231-5381
- 16. Published a paper entitled "Modified coupled inductor single stage boost inverter-based grid-connected photovoltaic system" at International Journal of Innovations in Engineering Research and Technology Feb 2016 with ISSN: 2394-3696
- 17. Published a paper entitled "Optimal placement of distributed generation for loss reduction in distribution system by using newton-raphson method" at International Journal of Innovations in Engineering Research and Technology Feb 2016 with ISSN: 2394-3696

- 18. Published a paper entitled "Advanced Power Controlling Techniques for DFIG-based Wind Turbines- A review" at A Multidisciplinary Peer Reviewed Journal May 2016 with ISSN 2454-7875
- 19. Published a paper entitled "Recent trends in digital differential protection of power transformer" at International Journal of Innovations in Engineering Research and Technology April 2015 with ISSN: 2394-3696
- 20. Published a paper entitled "A combined vector and direct power control for DFIG based wind turbines" at International Journal of Innovations in Engineering Research and Technology, June 2016 with ISSN: 2394-3696
- 21. Published a paper entitled "Instantaneous power and current strategies for current harmonics cancellation using shunt active power filter with PI and Fuzzy controllers" at International Journal of Innovations in Engineering Research and Technology, April 2015 with ISSN: 2394-3696
- 22. Published a paper entitled "Comparative study of PI and Fuzzy controllers to minimize torque ripple in SR motor" at International Journal of Innovations in Engineering Research and Technology Oct 2016 with ISSN: 2454-7875
- 23. Published a paper entitled "An Innovative topology for harmonics and Unbalance compensation in Electric Traction System using Direct Power Control Technique" at International Journal of Innovative Research in Science, Engineering and Technology Dec 2015 with ISSN: 2319-8753
- 24. Published a paper entitled "A novel technology for harmonics and unbalance compensation in electric traction system using direct power control method" at IJIERT Aug 2015 ISSN: 2394-3696
- 25. Published a paper entitled "Load frequency control of deregulated power system using different fuzzy controllers" at IJSR may 2015 with ISBN 2319-7064
- 26. Published a paper entitled "A high performance SPWM controller for three phase UPS systems for High nonlinear loads" at International Journal of Innovations in Engineering Research and Technology ,May 2015 with ISSN: 2394-3696
- 27. Published a paper entitled "Mathematical modeling of photovoltaic cell" at International Journal of Science and Research ,2013with ISSN: 2319-7064

CONFERENCES

- 1. Presented a paper entitled "Fuzzy Type-1 controller based PV-Hybrid series Active power filter" at National conference on Recent trends in science and Advances in Engineering organized by FTC, Sangola, 30th June 2022.
- 2. Presented a paper entitled "Load Frequency Control of Deregulated Power System using different Fuzzy controllers" at International conference (ICEESPEEE-09) organized by SRM University, Chennai April 2009.
- 3. Presented a paper entitled "Instantaneous power and current strategies for current harmonics cancellation using shunt active power filter with PI and Fuzzy controllers" at International conference on recent innovations in Engineering, Science & Technology held at Pune on 10th May 2015.
- 4. Presented a paper entitled "**Design of digital differential relay for protection of power transformer**" at International conference on recent innovations in Engineering, Science & Technology held at pune on 28th June 2015.
- 5. Presented a paper entitled "Isalnding detection arrangement for grid on sensing voltage or frequency variation" at International conference on recent innovations in Engineering, Science & Technology held at pune on 28th June 2015

- 6. Presented a paper entitled "An Islanding Detection Method for Inverter-Based Distributed Generators based on the Reactive Power Disturbance", ICEECE, Hyderabad on 27th and 28th April 2018.
- 7. Presented a paper entitled "Comparative study of PI and Fuzzy controllers to minimize torque ripple in SR motor" at NCRDDEMS, Pune March 2016.
- 8. Presented a paper entitled "Load flow analysis for 220 kv lines a case study" at ICRIEST,Pune,2015
- 9. Presented a paper entitled "A Combined Vector and Direct Power Control for DFIG-based Wind Turbines", ICITER Pune, 2016
- 10. Presented a paper entitled "Power quality improvement of grid connected wind energy system", ICAEST-Solapur,2016
- Presented a paper entitled "Fault Deletion in PV system by using wavelet transmission & Fuzzy logic", 5th International Conference on Innovations Research in Engineering, Science & Technology Nagpur India 22nd 23rd March 2019
- 12. Presented a paper entitled "Improvement of power quality and displacement factor by using IVDFC", 5th International Conference on Innovations Research in Engineering, Science & Technology Nagpur India 22nd 23rd March 2019
- 13. Presented a paper entitled "Induction Motor control with a small DC-Link Capacitor Inverter fed by Three Phase Diode front and Rectifiers", 4th International Conference on Innovations in Electrical & Electronics Engineering (ICIEEE-2019), Nagpur 26th-27th July 2019
- 14. Presented a paper entitled "**Power system load and frequency co-operative controlling by using differential games**", 4th International Conference on Innovations in Electrical & Electronics Engineering (ICIEEE-2019), Nagpur 26th-27th July 2019
- 15. Presented a paper entitled "Artificial Neural Network based Design and Performance of Three-Phase Solar PV Integrated UPQC", 2nd International Conference on Latest Advancements & Future Trends in Engineering, Science & Management, Osmania University, Hyderabad India 14th July 2019
- 16. Presented a paper entitled ""Cascaded Multiport Converter for SRM-Based Hybrid Electrical Vehicle"", at "Techno-Societal 2020 International Conference", at Pandharpur, India on 11th and 12nd December, 2020
- 17. Presented a paper entitled "Innovative Hybrid Energy Storage System Design For Electric Vehicles" at International Multidisciplinary Conference on Covid19 changes in Socio Cultural Economical, Commercial, Educational Literacy, Science and Technological Scenario from 17 th to 21 st August 2020.
- 18. Presented a paper entitled "Performance Analysis of Fuzzy Logic Controller Based Hybrid Series Active Power Filter Working Under Unbalanced Supply Condition", at "Techno-Societal 2020 International Conference", at Pandharpur, India on 11th and 12nd December, 2020
- 19. Presented a paper entitled "A High performance SPWM controller for three-phase UPS systems high non linear loads", at "International conference on Electrical, Electronics & Communication Engineering", Chennai, India on 7th Feb, 2016
- 20. Presented a paper entitled "Control scheme based on Quasi Z-Source network for four switch three phase brushless DC motor", at "International conference on Electrical, Electronics & Communication Engineering", Chennai, India on 7th July, 2018

WORKSHOPS

- 1. Attended one week Faculty Development Program on "RECENT TRENDS IN ELECTRICAL, ELECTRONICS AND TELECOMMUNICATION ENGG" organized by Fabtech Technical Campus, College of Engineering and Research, Sangola, Maharashtra during 16th to 21st August 2022
- 2. Participated one-week AICTE-ISTE approved refreshers programme on "Battery Energy Storage System and Its Management", organized by Trinity college of Engineering and Research, Pune, Maharashtra during 20th to 24th January 2022
- 3. Attended Five Days National Level Faculty Development Program on "**Renewable Energy for Sustainable Development**" organized by Bharatratna Indira Gandhi College of Engineering, Solapur, Maharashtra during 1st to 5th March 2022
- 4. Attended AICTE ISTE APPROVED PROGRAM ON "INNOVATIVE TEACHING LEARNING METHODS" organized by VIDHYA PRATISTAN KAMALNAYAN BAJAJ INST.OF TECH, BARARAMATI, Maharashtra during 22nd to 28th April 2021
- 5. Attended ONE WEEK FDP ON "ENERGY AND ENVIRONMENTAL SCIENCE TECHNOLOGY AND MANAGEMENT FOR SUSTAINABLE DEVELOPMENT" organized by DY PATIL INSTITUTE OF TECHNOLOGY, PIMPRI, Maharashtra during 20th to 25th May 2021
- 6. Attended ONLINE FACULTY DEVELOPMENT PROGRAM ON THE "ROLE OF NATIONAL EDUCATION POLICY FOR NATIONAL DEVELOPMENT" organized by KARMAYOGI ENGINEERING COLLEGE, SHELVE PANDHARPUR, Maharashtra during 30th March 2021
- 7. Participated Faculty development programme on "**Research Methodology**", organized by Fabtech technical campus, Sangola during 20th and 21st April 2018
- 8. Participated in one day workshop on "One day Workshop on Electrical Earthing ,safety and Power quality issues" organized by Department of electrical engineering, FTC Sangola on 04-05-2017
- Participated one week ISTE short term training programme on "Advanced Teaching Methodology and Soft skill", organized by Fabtech technical campus, Sangola during 19th to 23rd june 2017

Professional Membership:

ISTE(Lifetime Membership)