

Dr. Majety Vasavi Uma Maheswari B.Tech (EEE), M.Tech (PE&ED), Ph.D (Power Electronics, Renewable Energy Sources)

Assistant Professor

Department of EEE

Dr YSR ANU College of Engineering & Technology

Acharya Nagarjuna University

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Academic Qualifications:

Ph. D – Power Electronics and Renewable Energy Sources, “Control of Grid Connected DFIG Wind Turbine Systems Using AI & Evolutionary Algorithms”, JNTUH,2021.

M. Tech - Power Electronics & Electric drives, First Class & Distinction (83%), Vignan College of Engineering, Vadlamudi, Guntur, India, 2007-2009.

B.Tech - Electrical & Electronics Engineering, First Class & Distinction(83%), JNTUK, Kakinada India, 1999-2003.

Experience:

1. Assistant Professor, Department of Electrical & Electronics Engineering, ANU College of Engineering and Technology, Acharya Nagarjuna University, Guntur, 22/08/2012 to till date
2. Associate Professor, Department of Electrical & Electronics Engineering, Universal College of Engineering, Perecharla, Guntur, A.P., India, 01/05/2010 to 21/08/2012.
3. Assistant Professor, Department of Electrical & Electronics Engineering, KITS Engineering College, Vinjanampadu, Guntur, 01/05/2008 to 30/04/2010.
4. Assistant Professor, Department of Electrical & Electronics Engineering, Vignan College of Engineering, Vadlamudi, Guntur, A.P., India, 30/04/2007 to 31/05/2008.
5. Assistant Professor, Department of Electrical & Electronics Engineering, Bapatla College of Engineering, Bapatla, Guntur, A.P., India, 30/04/2004 to 30/04/2007.

Subjects Handled in the Department:

For U.G : Power Electronics
HVDC Transmission
FACTS Controllers
Industrial Drives,
Electrical Machines-I
Electrical Measurements
Generation of Electrical Power
Electrical Machines-II
Electrical Machines-III
Electrical Circuit Analysis
Network Analysis
Digital Logic Design
Switching Theory and Logic Design
Electrical Technology
Basic Electrical and Electronics Engineering
Artificial Intelligence Techniques
Analysis of Power Electronic Converters
Non-Conventional Energy Sources
Wind and Solar Power Generation

For P.G : Power Quality
Modern Power Electronic Converters
Solid State Power Electronic Converters
Advanced Power Electronic Converters
HVDC Transmission

Labs Handled : Electrical Machines 1
Electrical Machines-III
Power Electronics
Electrical Technology
Electrical Measurements
Electrical Machines-II
Basics of Matlab.

Research Interests:

Multi-Level Inverters, Electrical Vehicles, Power electronics, Renewable energy sources.

Research Activities:

1. No of Patents	: 01
2. No of journal papers published	: 21
3. No of conference papers presented	: 07
4. No. of workshops , FDP's Organized/attended	: 18

Patents:

1. Patent application publication on “Improvement in Power Quality Achieved through the Implementation of an Artificial Intelligence (AI) Based Dynamic Voltage Restorer (DVR)”
Indian Patent publication on 18th November 2022. (Application No: 202241063159)

Journals:

1. Published paper on “ Power Quality Enrichment in EV Charging Stations through intelligent Active Power Filters’, in Neuro Quant ology, October 2022, Volume 20, Issue 10, Page 11573-11579. (**Scopus Indexed**)
2. Published paper on “ Tuning POD controller using Artificial Neural Network for SSSC in Power Transmission line’, in Neuro Quant ology, June 2022, Volume 20, Issue 6, Pages 879-886. (**Scopus Indexed**)
3. Published paper on “ Design and Performance Monitoring of Artificial Neural Network based three-Phase Solar PV System with Integrated UPQC’, in Neuro Quant ology, September 2022, Volume 20, Issue 10, pages 9658-9669. (**Scopus Indexed**)
4. Published paper on “ Three-Phase Solar PV Design with Integrated UPQC and performance monitoring by ANN’, in International Journal for Modern Trends in Science and Technology, August2022, page no 221-230,ISSN: 2455-3778. (**UGC Publication**)
5. Published paper on “ Improved Power Quality by using Active Power Filters in EV Charging Stations’, in International Journal for Modern Trends in Science and Technology, August2022, page no 278-284,ISSN: 2455-3778. (**UGC Publication**)
6. Published paper on “ Compare the effectiveness of SSSC in Transmission network using PI and ANN control with PD controller’, in International Journal for Modern Trends in Science and Technology, August2022, page no 231-236,ISSN: 2455-3778. (**UGC Publication**)
7. Published paper on “Adaptive back propagated Based Control Strategy for Power Quality Improvement of PV Interfaced Distribution System” ANU Journal of Engineering & Technology ISSN: 0976-3414, Vol2, Issue!,Jun2022. (**UGC Publication**)
8. Published paper on “Unbiased Circular leakage centred Adaptive filtering control of PQ Improvement of wind-solar PV energy conversion system using PSO” ANU Journal of Engineering & Technology ISSN: 0976-3414, Vol2, Issue!,Jun2022. (**UGC Publication**)
9. Published paper on “Power Quality improvement in rural areas by using effective tariff systems” ANU Journal of Engineering & Technology ISSN: 0976-3414, Vol2, Issue!,Jun2022. (**UGC Publication**)

10. Published paper on “Optimal Tuning of FOPI Controllers for DFIG Based Wind Energy Conversion Systems” in Journal of Advance Research in Dynamical & Control Systems, vol.11, issues5,2019, June12, 2019 (**Scopus indexed**).^[L]_[SEP]
11. Published paper on “Optimal Tuning of FOPI Controllers for DFIG Based Wind Energy Conversion Systems” in Journal of Advance Research in Dynamical & Control Systems, vol.11, issues5,2019 M.Vasavi Uma Maheswari, Dr. P.V.Ramana Rao, Dr. S.V.Jayaram Kumar Accepted: Jun 12, 2019 (**Scopus indexed**).^[L]_[SEP]
12. Published paper on “Comparative Study of PI and Fuzzy Controllers to Control Power of DFIG wind Connected system” ,JETIR July 2018, Volume 5, Issue 7, ISSN NO:2349 –5162,2018. (**UGC Publication**)
13. Published paper on “Constant Power Generation by Grid Connected PV systems using Different Power Control Techniques” ,JETIR July 2018, Volume 5, Issue 7, ISSN NO:2249-7455, 2018. (**UGC Publication**)
14. Published paper on “ Grid voltage synchronization for Distribution Generation Systems under grid fault conditions with Multi-Level Statcom”, International Journal of Management, Technology and Engineering 2018, Volume %, Issue 7, ISSN NO: 2249-7455. (**UGC Publication**)
15. Published paper on “Hybrid Renewable Plant with Voltage sag compensation”, International Journal of Management, Technology and Engineering 2018, Volume %, Issue 7, ISSN NO: 2249-7455. (**UGC Publication**)
16. Published paper on “ Active and Reactive powers control of DFIG place with wind energy system by using hybrid controller” International Journal of Engineering& Technology, 7(4,5) 2018, pageno:662-664 (**Scopus Indexed**).
17. Published paper on “ Maximum Power Point Tracking (MPPT) for wind energy systems using cuckoo search”, Journal of Advance Research in Dynamical & Control Systems, Vol.10, Issue 4, page no: 440-445,2018,(**Scopus Indexed**).
18. Published paper on “A novel fault-detection methodology of proposed reduced switch MLI fed induction motor drive using discrete wavelet transforms” in International Transactions on Electrical Energy Systems on 16th Feb 2021. (**Science Citation Indexed**)
19. Published paper on “Minimization of total harmonic distortion and enhancing voltage level for hybrid multilevel converter with different sources” in Advanced control for Applications: Engineering and Industrial systems on 25th October 2020. (Wiley publishers)

20. Published paper on “A Novel Multilevel Inverter with Reduced Number of Switches using Simplified PWM Technique” in Journal of The Institution of Engineers (India): Series B, Volume-101 Number-3, June 2020, Pages : 203–216, ISSN:2250-2106. (**Scopus Indexed**)
21. Published paper on “Analysis if MPPT controller by using Perturb and Observe method in Windfarm” in IJIRT, Volume 6,Issue3,ISSN: 2349-6002, August 2019. (**UGC Publication**)

Conferences:

1. Presented paper on “Tracking Maximum Power Point of a Grid- connected DFIG wind Turbine systems Using AI and Evolutionary controllers” Proceedings of symposium on power electronics and Renewable Energy systems control – Lecture notes in Electrical Engineering (LNEE, Vol 616) (**Springer**)
2. Presented paper on “„Modified Perturb and Observation Technique with Neural Network based control of DFIG.” International Conference on Emerging Trends in Power Systems and Power Electronic Drives” at Guntur, Acharya Nagarjuna University. During 13th & 14th March 2020.
3. Presented paper on “ Analysis of MPPT Controller by using P&O method in wind farm” International Conference on Emerging Trends in Power Systems and Power Electronic Drives” at Guntur, Acharya Nagarjuna University. During 13th & 14th March 2020.
4. Presented paper on “ Multi axis Solar Tracker Robot (MASTR) using Micro Processor” in in at ANU on 13th& 14th March 2020. International Conference on Emerging Trends in Power Systems and Power Electronic Drives” at Guntur, Acharya Nagarjuna University.
5. Presented paper on “Voltage Control in Hybrid Renewable energy systems using energy storage system” at International Conference on Emerging Trends in Power Systems and Power Electronic Drives” at Guntur, Acharya Nagarjuna University. During 13th & 14th March 2020.
6. Presented paper on “Improving transmission security using fuzzy logic controller based IPFC” at International Conference on Emerging Trends in Power Systems and Power Electronic Drives” at Guntur, Acharya Nagarjuna University. During 13th & 14th March 2020.
7. Presented Paper on “Active and Reactive Power Control of DFIG Wind Power System By using Heuristic Controllers”.i-PACT 2019 2nd IEEE international conference of Innovations in Power and Advanced Computing Technologies, organized by School of Electrical Engineering, Vellore Institute of Technology, Vellore-632014,22nd-23rd March 2019.

Workshops and FDPs attended:

1. Participated in one week short term training program on “ Design, Implementation and Control of Electrical Systems using MATLAB” during 3rd-7th January 2023 at Bapatla Engineering college.
2. Participated one week short term training program “ Soft Computing Techniques in electrical systems” from 14th march to 19th march 2022 at Bapatla Engineering College, Bapatla.
3. Participated in one month Master class on “Machine Learning” at PS_APSSDC_MLPARTI_6029 from 30th june to 28th july2022.
4. Participated in two day workshop on “Integration of Renewable Energy Sources &Emerging Challenges” at ANU on 21st &22nd February, 2019 at ANU..
5. Participated in short term training programme through ICT mode on Automated Manufacturing Systems” from 1st july to 5th july. 2019 at National Institute of Technical Teachers Training and Research, Kolkata.
6. Participated in short term training programme on “ Energy management of Smart Grids and Micro grids with IOT” from 29th july to 3rd august, 2019 at R.V.R&J.C college of Engineering and Technology.
7. Participated in one day seminar on “ Practical Electrocardiography” on October 22nd, 2018 at ANU.
8. Participated a short training programme through ICT mode on “Outcome based Education and Accreditation” organized by NIT Kolkata, from 24th September to 28th September 2018.
9. Participated in five day faculty development program on “ Power Quality issues in Electrical Systems Connected to Smart Grid” from 17th-21st December, 2018, Bapatla Engineering College.
10. Participated in three days national level faculty development program on “ Application of Matlab/Simulink to electrical systems” from 7th dec to 9th dec, 2017.
11. Participated a training programme on off-grid solar photovoltaic energy systems 1st to 9th february2016.
12. Participated in Two day National Seminar on “March to Make in India through Engineering Advancements (MMIEA)” organized by R.V.R. & J.C. College of Engineering (A), Guntur during 29-30 September, 2016.
13. Participated in Two day National Seminar on “Recent trends in power systems (RTPS)” organized by Vasireddy Venkatadri Institute of Technology, Guntur during August 25-26, 2016.
14. Participated National Workshop on “Big Data Analytics” at University College of Engineering & Technology, Acharya Nagarjuna University, Guntur on 9th – 10th December 2014
15. Participated in Two day work shop on “Recent Advances In Power Systems” at University College of Engineering & Technology, Acharya Nagarjuna University, Guntur, during 12th -13th November 2014.

16. Participated the complimentary Training/ Orientation on “MATLAB, SIMULINK & RELATED TOOL BOXES FOR ENGINEERING EDUCATION” at Acharya Nagarjuna University, Guntur on 26th April, 2014.
17. Participated the complimentary Training/ Orientation on “MATLAB, SIMULINK & RELATED TOOL BOXES FOR ENGINEERING EDUCATION” at at VIJAYAWADA, on 5th February 2014.
18. Participated in International conference on “NAVIGATIONAL SYSTEMS & SIGNAL PROCESSING APPLICATIONS(NSSP-2013”) at ANU, Guntur, From 13th to 14th December,2013