

BIO - DATA

Name : Dr. MANJULA MANE
Designation : Professor
Department & College : Department of Electrical Engineering
University College of Engineering
Osmania University, Hyderabad
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EDUCATIONAL QUALIFICATIONS

Examination	Subject	Name of the Board/ University	Year of Passing	Division
Ph.D.	Electrical Engineering	Osmania University	2014	--
Post Graduate	M.E (Power Systems)	Osmania University	2004	I
Under Graduate	B.E (Electrical Engg.)	Osmania University	1995	I

TEACHING EXPERIENCE

- Worked as Associate Lecturer in Government Polytechnic for Women, Nizamabad from December 1996 to August 1997.
- Joined as Lecturer in Department of Electrical Engineering, University College of Engineering, Osmania University on 6th August 1997.
- Presently working as Professor in Department of Electrical Engineering, University College of Engineering, Osmania University.

SUBJECTS TAUGHT

Under Graduate

- Power Systems – I
- Microprocessors and Microcontrollers
- Switchgear and Protection
- Microprocessors and Microcontrollers Lab
- Power Systems Lab

Post Graduate

- Advanced Power System Relaying
- Distribution System Planning and Automation
- Power Quality Engineering
- M.E. Power Systems Lab

Ph.D Title – Voltage Sag Detection and Classification (Under the guidance of Prof. AVRS. Sarma)

PUBLICATIONS

Journals

- [1]. M. Manjula, A V R S Sarma, Sukumar Mishra, “*Empirical Mode Decomposition with Hilbert Transform for Classification of Voltage Sag causes using Probabilistic Neural Network*”, International Journal on Electrical Power and Energy Systems, Vol.44, pp. 597-603, January 2013.
- [2]. M. Manjula, A.V.R.S. Sarma and G.V. Naga Lakshmi “*Wavelet Transform for Classification of Voltage Sag Causes using Probabilistic Neural Network*”, International Journal of Electrical Engineering, ISSN 0974-2158 Volume 4, No.3, pp. 299-309, 2011.
- [3]. M. Manjula, A V R S Sarma, “*Comparison of Empirical Mode Decomposition and Wavelet Based Classification of Power Quality Events*”, ENERGY Procedia, Elsevier, 2011.
- [4]. M. Manjula, A V R S Sarma “*Classification of Voltage Sag Causes using Probabilistic Neural Network and Hilbert – Huang Transform*”, International Journal of Computer Applications (0975 - 8887) Vol.1, No. 20, 2010.

- [5]. Farah Fahem Hussain, M. Manjula “*Power Quality Improvement with Renewable sources for Non- Linear load with PI and Fuzzy Controller*” IJIRSET Journal, Vol- 5, Issue – 5, April 2016.
- [6]. Vijender Reddy S, Manjula M, “*Calculation of Voltages and Power Losses with Multiple DG Units with Change of Load*”, Springer book, Advances in Decision Science, Image Processing, Security and Computer Vision, Learning and Analytics in Intelligent System, 2019, Vol.4, pp. 335-344.
- [7]. B. Sravanthi, K.A.Aravind, V. Kamaraju, Manjula M, “*Condition assessment of composite insulators removed from service*”, Springer book, Advances in Decision Science, Image Processing, Security and Computer Vision, Learning and Analytics in Intelligent System, 2019, Vol.4, pp. 398-405.

International Conferences

- [1]. Vijender Reddy S, Manjula M, “*The Optimal Size of Multiple DG Units in Distribution Network with Change of Load*” IEEE-2019 Global Conference for Advancement in Technology (GCAT), pp.1-6, Bangalore, India, Oct 18-20,2019.
- [2]. Vijender Reddy S, Manjula M, “*Optimal Planning of Multiple Distributed Generation Units in Distribution Network using Ant Colony Search Algorithm*”, International Conference Innovative on Technologies in Engineering, (ICITE-2018),11th-13th April, 2018.
- [3]. A Sangeetha Yamini, Manjula Mane “*Mitigation of Harmonics in an AC Microgrid with Passive and Active Filters*” 3rd International Conference on Electrical, Electronics, Engineering Trends, Communication, Optimization and Sciences, May 2016.
- [4]. M. Manjula, A V R S Sarma, “*Assessment of Power Quality Events by Empirical Mode Decomposition based Neural Network*”, Proceedings of the World Congress on Engineering 2012, Vol. II WCE 2012, July 4 - 6, 2012, London, U.K.
- [5]. M. Manjula, Sukumar Mishra, A V R S Sarma, “*Empirical Mode Decomposition based Probabilistic Neural Network for faults classification*”, International Conference on Power and Energy systems IIT Chennai, December 22-24, 2011.

- [6]. M. Manjula, A V R S Sarma, Sukumar Mishra, “*Detection and classification of Voltage sag causes based on Empirical Mode Decomposition*”, International Conference INDICON-2011, BITS, Pilani, Hyderabad, December 16-18, 2011.
- [7]. M. Manjula, A V R S Sarma, Sukumar Mishra, “*Faults Classification for Voltage Sag Causes based on Empirical Mode Decomposition with Hilbert Transform*”, International Conference on Control, Communication and Power Engg., Pune, November 7-8, 2011, Springer Publications.
- [8]. Vijender Reddy S, Manjula M, Optimal Planning of Multiple Distributed Generation Units in Distribution Network using Ant Colony Search Algorithm, International Conference Innovative on Technologies in Engineering (ICITE-2018)- 11th-13th April, 2018.
- [9]. Vijender Reddy S, Manjula M, “The Optimal Size of Multiple DG Units in Distribution Network with Change of Load” IEEE-2019 Global Conference for Advancement in Technology (GCAT), Bangalore, India, Oct 18-20,2019, pp.1-6.
- [10]. Vijender Reddy S, Manjula M, “Calculation of Voltages and Power Losses with Multiple DG Units with Change of Load”, Springer book, Advances in Decision Science, Image Processing, Security and Computer Vision, Learning and Analytics in Intelligent System,2019, Vol.4, pp. 335-344.
- [11]. T Dinesh, M Manjula “ A fractional order tilt integral controller based load frequency control with dispersed generation and electric vehicle” International Conference Recent Trends in Electrical, Electronics, Communications, and Instrumentation (ICRTEECI 2021) 27th-28th December, 2021,Hyderabad.
- [12]. M. Manjula, C. Srisailam “Optimal Fractional Order Controller for Liquid Level System” Gradiva Review Journal ISSN NO : 0363-8057 ,2023

National Conferences

- [1]. S. Asha Kiranmai, M. Manjula, A V R S Sarma, “*Mitigation of Various Power Quality Problems using Unified Series Shunt Compensator in PSCAD/EMTDC.*” 16th National Power System Conference, 15th-17th December 2010.

- [2]. M. Manjula, A.V.R.S. Sarma and Sarada Devi “*Detection of Power Quality Disturbances based on Empirical Mode Decomposition with Hilbert Transform*” National Conference on Power System Planning, Operation and Optimization (PSPOO), J. N. T. U, Kakinada, 2011. (*Awarded Best Paper in Power Systems Session*).
- [3]. M. Manjula, C. Srisailam, “Fractional order controller based performance enhancement of Electrical Vehicle system” Proceedings of the National Conference on **204** Future Electricity Systems: Challenges and Current Trends (NCEFES2021)

CITATIONS

- *Manjula M., Mishra S., Sarma A.V.R.S. “Empirical mode decomposition with Hilbert transform for classification of voltage sag causes using probabilistic neural network” (2013) International Journal of Electrical Power and Energy Systems, 44 (1) , pp. 597-603.*
- [1]. Khokhar, S., Mohd Zin, A.A.B., Mokhtar, A.S.B., Pesaran, M. “A comprehensive overview on signal processing and artificial intelligence techniques applications in classification of power quality disturbances” *Renewable and Sustainable Energy* , 2015
- [2]. Xiao, X., Cui, C., Wang, Y., Liu, Y. “Comparability and relevance of voltage sag classifying features and classification methods based on mahalanobis distance” *Proceedings of the Chinese Society of Electrical Engineering*, 2015
- [3]. Zhao, Y., Zhao, C., Ye, H., Yu, F. “Method to reduce identification feature of different voltage sag disturbance source based on principal component analysis” *Power System Protection and Control*, 2015
- [4]. Wang, N., Wang, S., Jia, Q. “The method to reduce identification feature of different voltage sag disturbance source based on principal component analysis”, *IEEE Transportation Electrification Conference and Expo, ITEC Asia-Pacific 2014 - Conference Proceedings* , 2014.
- [5]. Wang, J., Yang, L., Gao, L., Miao, Q. “Current progress on weak signal detection”, *QR2MSE 2013 - Proceedings of 2013 International Conference on Quality, Reliability, Risk, Maintenance, and Safety Engineering*, 2013.

- [6]. Lai, M.-C., Yeh, C.-C., Shieh, L.-F. "A hybrid model by empirical mode decomposition and support vector regression for tourist arrivals forecasting", Journal of Testing and Evaluation, 2013.

REVIEW OF PAPERS:

1. "Power Quality Disturbance Classification via Short Time Modified Hilbert Transform" for the IEEE Transactions on Industrial Electronics, 2015.
2. "An Algorithm Based on Travelling Waves For Transmission Line Protection in a TCSC Environment" International Journal of Electrical Power and Energy Systems, 2013.
3. "Analysis of Power System Faults Using Hilbert-Huang and Wavelet Transform" International Journal of Electrical Power and Energy Systems, 2013.

ADMINISTRATIVE POSTS HELD in OSMANIA UNIVERSITY:

1. Worked as Chairperson, Board of Studies (Autonomous), University College of Engineering, Osmania University from 2004 – 2006.
2. Worked as Chairperson, Board of Studies (Autonomous), University College of Engineering, Osmania University from 2008 – 2010.
3. Worked as Chairperson, Board of Studies (University), College of Engineering, Osmania University from 2011 – 2013.
4. Worked as Head of the Department of Electrical Engineering, University College of Engineering, Osmania University from 2013 – 2015
5. Worked as Chairperson, Board of Studies (University) College of Engineering, Osmania University from April 2015 – July 2017.
6. Worked as Assistant Chief Warden, Girls Hostel, Osmania University from July 2016 – October 2017.
7. Worked as Director of Evaluation, Examination Cell, College of Engineering (A), Osmania University from July 2017 – June 2019.
8. Presently Director, Enterprise Resource Planning Cell, College of Engineering (A), Osmania University from January 2023.

WORKSHOPS ATTENDED

1. Attended “Summer Faculty Research Fellow Programme” at IIT, Delhi from 18th May to 2nd July 2009.
2. Attended Two day workshop on Power system Security at Department of Electrical Engg, University College of Engg. On 14th and 15th September 2009.
3. Attended workshop on “Power Quality and Custom Power Devices” at RV College of Engineering, Bangalore during 3-7 June 2013.
4. Attended FDP on “Entrepreneurship” sponsored by NSTEDB, DST New Delhi at EDC, Osmania University from 30-12-2013 to 10-01-2014.
5. Participated in “Awareness and Empowerment of Women-2014” under TEQIP-II at University College of Engineering, Osmania University on 10th March 2014.
6. Participated in “Women for Excellence-2016” at University College of Engineering, Osmania University on 9th March 2016.
7. Attended two day workshop on “Teaching Learning and Assessment Methodologies” under TEQIP-II at University College of Engineering, Osmania University on 13th - 14th December 2016.
8. Attended one day workshop on “Awareness Workshop on Outcome Based Education and Accreditation” under TEQIP-II at University College of Engineering, Osmania University on 18th December 2016.
9. Attended workshop on “ETAP Power System Analysis” at Chennai from 8th – 12th August 2016.
10. Attended online Short Term Training Program on “MATLAB based Teaching-Learning in Mathematics, Science and Engineering”, STTP organized by the Department of Electronics Engineering, Ramrao Adik Institute of Technology, Nerul, Navi Mumbai in collaboration with DesignTech Systems Pvt. Ltd., Mumbai during 18th to 22nd May 2020.
11. Attended Online Typhoon HIL 5 days Power System & Protection Training Program, Hardware in the Loop Simulation platform from 20 to 24 July 2020.

12. Attended Online Faculty Development Program on “Emerging Techniques in Smart Power System: Challenges and Solutions” conducted by the Department of Electrical Engineering, NIT Warangal from 24 to 28 August 2020.

WORKSHOPS ORGANIZED

1. Coordinator for two day workshop on “EDSA- Software Applications to Power Systems” conducted by Department of Electrical Engg, University College of Engg. on 5 and 6th December 2008.
2. Coordinator for two day workshop on “AI Techniques” conducted by Department of Electrical Engg, University College of Engg. on 28th - 29th Sep, 2009.
3. Chairperson (as Head) for organizing Second Diamond Jubilee Endowment Lecture conducted by Department of Electrical Engineering, UCE, OU on 26th Dec, 2013.
4. Chairperson (as Head) for organizing Techsonance -2013 and Techsonance-2014 , Students National Level Technical Symposium conducted by Department of Electrical Engineering, UCE, OU.
5. Chairperson (as Head) for organizing one week Faculty Development Programme on "Advances in Power Electronics and Drives” (under TEQIP –II)during 12th – 17th May, 2014.
6. Chairperson (as Head) for organizing One week Faculty Development Program on "Distributed Generation and Power quality Issues” conducted by Department of Electrical Engineering, UCE, OU (under TEQIP –II) during 30th June – 5th July, 2014.
7. Coordinator for Two-Day Workshop on “Power Quality –Harmonic Analysis for Power Systems” (*Under TEQIP-II*) conducted by Department of Electrical Engg, University College of Engg. , OU on 19th - 20th September, 2016.
8. Coordinator for One Day Workshop on “Women For Excellence” WE 2017 (Be Bold For Change) on Conducted by College of Engineering, UCE, OU on 8th March, 2017.

9. Coordinator for one week refresher course on “*Applications of AI techniques in Electrical Engineering*” (Under TEQIP-III) conducted by Department of Electrical Engg, University College of Engg. , OU in association with the Department of Electrical Engineering, VSSUT, Burla, during 18th to 23rd November 2019.

10. Coordinator for two day workshop “*Challenges for Professional Women: Work-Life Balance*”(Take Command, Be Empowered and Own Your Future) IEEE OUCE Women in Engineering Affinity Group in association with University College of Engineering, Osmania University on 7th and 8th February, 2020.

11. Coordinator for **3k Run**, by the theme ‘*RUN FOR HER*’ organized by IEEE OUCE Women in Engineering Affinity Group in association with University College of Engineering, Osmania University on 8th March, 2020 on the occasion of International Women’s Day.

INVITED LECTURES

1. Delivered lecture on “Automation and Power Quality Issues” on 19th November 2013 at FDP on “Recent Trends in Automation and Control” conducted by CVR College of Engineering, Ibrahimpatam, Hyderabad.

2. Delivered lecture on “Power quality disturbances detection and classification” on 31st January, 2014 conducted by ESCI, Hyderabad on “Recent trends and practical applications of power electronics and power systems (with MATLAB software exposure) from 28th to 31 January 2014.

3. Delivered lecture on “Solar PV Design” at Three Weeks UGC Sponsored Refresher Course on "Emerging Trends in Renewable Energy Sources & Energy Management" from 9th June, 2014 to 28th June, 2014 at Academic Staff College-JNTUH Kukatpally, Hyderabad.

4. Delivered lecture on “Detection of Power Quality Problems” on 2nd July at One week Faculty Development Programme on "Distributed Generation and Power quality Issues” conducted by Department of Electrical Engineering, UCE ,OU under (TEQIP –II) during 30th June – 5th July, 2014.

5. Delivered lecture on “Solar PV Design” on 3rd July at One week Faculty Development Programme on “Distributed Generation and

Power quality Issues” conducted by Department of Electrical Engineering, UCE ,OU under (TEQIP –II) during 30th June – 5th July, 2014.

6. Delivered lecture on “Basics of Electrical Engineering” on 27th October 2014 at Steinbeis Centre for Technology Transfer India, Hyderabad.
7. Delivered lecture on “Electrical Engineering Basics” on 22 June 2015 at Steinbeis Centre for Technology Transfer India, Hyderabad.
8. Delivered lecture on “Power Quality–Harmonic Analysis for Power Systems” at two-Day Workshop on “Power Quality –Harmonic Analysis for Power Systems” (*Under TEQIP-II*) conducted by Department of Electrical Engg, University College of Engg. ,OU on 19th September, 2016
9. Guest lecture on “Power Systems and Power Quality” on 7th April 2017 for Final year EEE students at VBIT, Hyderabad.
10. Delivered lecture on title “Power Quality–Harmonic Analysis” at AICTE sponsored STTP on “Application of AI and IoT to Power systems including Smart Grid” Phase –II, on 17th December, 2020 at Sridevi Engg. College for Women, Hyderabad.

NUMBER OF PH.D RESEARCH SCHOLARS AWARDED: 01

NUMBER OF PH.D RESEARCH SCHOLARS GUIDING : 08

NUMBER OF M.E. PROJECTS GUIDED : 25

AS SELECTION COMMITTEE MEMBER AND SUBJECT EXPERT FOR VARIOUS INTERVIEW SELECTIONS

1. Osmania University Nominee at Stanly College as one of the members for BoS.
2. Selection Committee Member – Degree College, Osmania University, Engineering Colleges, JNTU, Hyderabad.
3. Subject Expert – APPSC, NGRI, ARCI, CBIT, Vasavi, MVSR, CVR, etc.

ACADEMIC WORKS

1. Question Paper setting – Ph.D Eligibility Test, PTPG Entrance Examination, OU, JNTU Hyderabad, RGKUT, MGIT, Vasavi, CBIT, JNTUA, GNITS.

MINOR PROJECT UNDER TEQIP-II

2015-2016	University College of Engineering, Osmania University, Hyderabad	Title: Mitigation of Harmonics for a Non-Linear load (Rs. 1 Lakh grant, seed money for research project)
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CONSULTANCY WORKS

Category	Activity
Academic Year	Consultancy Projects
2013-14	GHMC, Street lighting Lamp Testing (As Head, EED, OU)
2014	APTDC, Third party inspection for Sound and light system show at Warangal fort. (As Head, EED, OU)
2014	HPCL, Ghatkesar (Ground resistance testing) Third party inspection (As Head, EED,OU)

(Dr. M. MANJULA)