

## **Prof. Gaddam Mallesham**

**Professor** in the Department of Electrical Engineering, University College of Engineering, Osmania University, with 22 years of experience in **Teaching, R&D, and Industrial Exposure.**

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**1. NAME : Dr. GADDAM MALLESHAM**

**2. DESIGNATION : Professor**

**3. INSTITUTION/ OFFICE ADDRESS:**

Department of Electrical Engineering  
University College of Engineering (A)  
Osmania University, Hyderabad-500 007  
Telangana, India

**Email ID:** drgm@osmania.ac.in

**Phone:** +91 9502133334 (M), (040) 27098628(O)

**4. DATE OF BIRTH & PLACE:** 20<sup>th</sup> August, 1977 (47 Years)

Bollepally (Village), Bhongir (Mandal),  
Yadadri-Bhuvanagiri (District), Telangana.

**5. FAMILY DETAILS:**

**a. Father's Name:** Late Sri. Gaddam Yellaiah

**b. Mother's Name:** Late Smt. Gaddam Mutthamma

**c. Spouse:** Prof. Rajani, Head, Dept of ECE & Director, UIIC, JNTUH,  
Hyderabad

**d. Children:** 1. Mr. Dheeraj (B. Tech, 2<sup>nd</sup> year – Mechanical, NIT- Surat)

2. Mr. Suraj (Completed Intermediate in Hyd in Hyd.)



**6. EDUCATIONAL QUALIFICATIONS:**

<b>Course</b>	<b>University</b>	<b>Institute</b>	<b>Year of passing</b>	<b>Specialization</b>
<b>1. Postdoctoral Fellowship</b>	<b>Yale University, USA</b>	Yale University, Connecticut, USA	2016	Control of a Microgrid Using Adaptive Control
<b>2. Ph.D.</b>	Indian Institute of Delhi, New Delhi	Indian Institute of Delhi, New Delhi	2014	Electrical Engineering Frequency Control of a Smart microgrid
<b>3. M.Tech.</b>	Indian Institute of Delhi, New Delhi	Indian Institute of Delhi, New Delhi	2002	Control Engineering & Automation
<b>4. B. E.</b>	Osmania University	University College of Engineering, OU	2000	Electrical Engineering
<b>5. Intermediate</b>	Board of Intermediate Education, A.P.	Ideal Junior College, Dilsukhnagar, Hyderabad	1995	Mathematics, Physics and Chemistry
<b>6. SSC</b>	Board of Secondary Education, A.P.	A.P. Residential School, Sarvail, Nalgonda	1993	---

**7. WORK EXPERIENCE:**

<b>Organization</b>	<b>Designation</b>	<b>Period</b>	
		<b>From</b>	<b>To</b>
University College of Engineering, Osmania University, Hyderabad	Professor	07.01.2018	Till date
University College of Engineering, Osmania University, Hyderabad	Associate Professor	07.01.2015	07.01.2018
University College of Engineering, Osmania University, Hyderabad	Assistant Professor	07.01.2002	11.01.2015

## **8. TEACHING AND CONTRIBUTION TO ACADEMIA:**

### **a. Awards/Honors/Fellowships received**

1. **Vice-Chancellor Award-2022**, 2023 for Research Excellence and Patents
2. **Best Teacher Award - 2020**, by the Government of Telangana
3. **Engineer of the Year Award -2019**, by Institution of Engineers, Telangana State
4. **Postdoctoral Fellow** at Yale University, USA, 2015
5. **POSOCO Power System Award- 2013**, For best Ph.D. thesis award in Electrical Engineering (National)
6. **Raman fellow** by University Grants Commission (UGC)
7. **INSA Best Young Scientist Presentation Award**, 2012

### **b. Teaching Distinction**

1. Dean, Development & UGC Affairs, Osmania University
2. Director (i/c), University Electrical Division, OU
3. Chairperson, Board of Studies (BoS), OU
4. President, Telangana All Universities Teachers Association (TAUTA), Telangana
5. Vice – President, Osmania University Teachers Association (OUTA), Osmania University (2022- Till date)
6. Head, Department of Electrical Engineering, UCE, OU
7. Vice-Chair, General Secretary, PES/IAS/PEL Joint Chapter/ IEEE Hyderabad Section/ India,
8. General Secretary, Alumni Association, Student Adviser, University College of Engineering, Osmania University.
9. Convener and Coordinator for many International, National, and State level Conferences, Workshops, Seminars

### **c. Teaching/research/exchange programme abroad**

1. widely traveled and visited many foreign countries like **USA, Canada, Greece, Finland, Sweden, Tunisia, South Africa, Estonia**, etc., for academic pursuits

## **9. RESEARCH, INNOVATION AND CONSULTANCIES:**

### **a. Research Guidance**

1. Completed 2 PhD, 2 Submitted Pursuing 4 PhD students, and 20 Masters students under his guidance.

### **b. Research / Consultancy projects**

2. GHMC -Traffic Signals- Technical Support as PMU (2.6904 Crores - Consultancy project)
3. Quality Inspection of the CC Cameras (5 Lakhs approx.)

4. GHMC for 6 years: Rs. 5L (Consultancy project)
5. Hybrid Solar System-Ecoglaze-Rs.26,01,733/-
6. UGC Raman Fellowship (Research) Rs. 28,00,000 /-

**c. Patents**

1. UV-C Wand Sanitizer
2. UV-C Tube Light Sanitizer
3. UV-C Box Sanitizer

**d. Member on Editorial Boards of refereed research journals**

1. IEEE Systems Journal
2. IET Renewable Power Generation
3. Journal of Engineering Science and Technology (JESTEC) - Paper Reviewer
4. APAS- Paper Reviewer
5. International Journal of Electric Power & Energy Systems
6. IECON18- Paper Reviewer
7. The International Journal of Current Advanced Research (IJCAR)- Paper Reviewer
8. EGY-D-19-00208 – Paper Reviewer
9. EPEC19- Paper Reviewer  
And in International and National Conference Proceedings.

**e. Research papers published in Journals**

**WEBSITE LINK: <https://scholar.google.co.in/Gaddam Malleham>**

1. G. Muralikrishna, **G. Malleham**, Abhishek Jain, Praveen Tiwari, An Experimental Study of Odometer as a Navigation-aid for Land Vehicle Application, Defence Science Journal, Vol. 74, No. 5, September 2024, pp. 743-754, DOI: 10.14429/dsj.74.19689.
2. Gurram Muralikrishna, **G. Malleham**, M. Kannan, Performance Investigation of SINS/Odometer/NHC using Sequential Integrated Measurements, International Journal of INTELLIGENT SYSTEMS AND APPLICATIONS IN ENGINEERING, IJISAE, 2024, 12(4), 3774–3790.
3. Ch. Sreenu, **G. Malleham**, T. Chandra Shekar, Surender Reddy Salkuti, Pairing voltage-source converters with PI tuning controller based on PSO for grid-connected wind-solar cogeneration, Franklin Open, Volume 8, 2024, 100138, ISSN 2773-1863, <https://doi.org/10.1016/j.fraope.2024.100138>.
4. Bomma Shwetha, G. Suresh Babu, **G. Malleham**, Intelligent Solar PV Grid Connected and Standalone UPQC for EV Charging Station

- Load, Results in Control and Optimization, Volume 15, 2024, 100420, ISSN 2666-7207,
5. Bodapatla Sampath Kumar, Pannala Mallikarjuna Sarma, **G. Mallesham**. Robust H-infinity and  $\mu$ -synthesis controllers to mitigate sub-synchronous control interaction in DFIG wind farms considering time delay. *Electr Eng* **106**, 6019–6034 (2024). <https://doi.org/10.1007/s00202-024-02353-4>
  6. B Chandra Rahee, J Namratha Manohar, **Mallesham, G.** A Hybrid Energy System Based Ev Charging Station with Advanced Controller for Grid Power Quality Regulation *Journal of Electrical Systems*; Paris Vol. 20, Iss. 4s, (2024): 2397-2407.
  7. Balasubramanyam Banothu, Mallala, Balasubbareddy, **Mallesham G.** A fuzzy integrated non-linear backstepping control of a grid connected PMSG wind farm. *Journal of Electrical Systems*; Paris Vol. 20, Iss. 3, (2024): 1983-1991.
  8. Kuchkulla, Navya, **Mallesham Gaddam**, and V. Narasimhulu. "Concert Exploration of DFIG Grid-integrated MMC using Artificial Intelligence." *Engineering, Technology & Applied Science Research* 13.4 (2023): 11466-11471.
  9. Bodapatla Sampath Kumar, Pannala Mallikarjuna Sarma, **G. Mallesham**. "A Robust UDE-Based 2DOF Controller for Mitigating Sub-Synchronous Control Interaction in Wind Power Plants" *Electric Power Components and Systems*, Tailer & Francis, 2023.
  10. M Serabanda, B Suresh Kumar, **G Mallesham**. "Performance improvement of UQC with sliding mode fractional order proportional integral control with enhancement of harmonics mitigation" *Journal of Bulletin of Electrical Engineering and Informatics (BEEI)*, ISSN: 2089-3191, e-ISSN: 2302-9285, 2023.
  11. K Navya, **G Mallesham**, V Narsimhulu. "Concert Exploration of DFIG Grid-integrated MMC using Artificial Intelligence" *Engineering, Technology & Applied Science Research (ETASR)*, Volume.13, 2023.
  12. N Deepa, K Krishnaveni, **G. Mallesham** "A Review of Novel Techniques for Switched Reluctance Machine to Reduce Torque Ripple" *International Journal of Management Information Technology and Engineering (BEST: IJMITE)*, Pages 27-42, 2023.
  13. N Deepa, K Krishnaveni, **G Mallesham**. "Multi-objective Optimisation techniques for the reduction of Torque Ripples in Switched Reluctance motor Using TSF-DITC" *journal of Semiconductor Optoelectronics*, 2023.

14. Siva Kumar, C., **Mallesham, G.** "Implementation of a New Hybrid Boost Converter for High Gain Enhancement of SOFC System". In: Pandit, M., Gaur, M.K., Rana, P.S., Tiwari, A. (eds) Artificial Intelligence and Sustainable Computing. Algorithms for Intelligent Systems. Springer, 2022, Singapore. [https://doi.org/10.1007/978-981-19-1653-3\\_49](https://doi.org/10.1007/978-981-19-1653-3_49)
15. Siva Kumar, C. H., and **G. Mallesham.** "A New Hybrid Boost Converter with Cuckoo Search MPPT for High Gain Enhancement of PEMFC." In Communication and Intelligent Systems: Proceedings of ICCIS 2021, pp. 295-308. Singapore: Springer Nature Singapore, 2022.
16. M. V. R. Rao and **G. Mallesham,** "An Expert System for Design of Output Parameters for BLDC Motor", IJMDES, vol. 1, no. 2, pp. 18–23, Feb. 2022.
17. CH. Siva Kumar, **G. Mallesham,** "A new hybrid boost converter with P & O MPPT for high gain enhancement of solar PV system", Materials Today: Proceedings, Volume 57, Part 5, 2022, Pages 2262-2269, ISSN 2214-7853, 2022.
18. Naresh Kumari and **G. Mallesham** "An Efficient Technique-Based Distributed Energy Management for Hybrid MG System: A Hybrid RFCFA Technique", Journal of Control, Journal of Control, Automation and Electrical Systems, ISSN 2195-3880 Systems, DOI 10.1007 /s40313 -019 -00554-y, 2020.
19. **G. Mallesham** and CH. Siva Kumar, "Power Quality Improvement of Weak Hybrid PEMFC and SCIG Grid Using UPQC", ICETE-2019, Scopus Journal, UCEOU, 2019.
20. **G. Mallesham** and CH. Siva Kumar, "A Comprehensive Review on Control Strategies of Series and Shunt Active Filter Based Custom Power Device: UPQC to Improve Power Quality", IJRECE-2018, vol.6(2), pp.1744 - 1750, June, 2018
21. **G. Mallesham** and CH. Siva Kumar, "Enhancement of Power Quality using UPQC for An Environ- mentally Clean and Efficient Hybrid PEMFC and PMSG Based Wind Energy System Connected to Weak Grid", IJRECE-2018, vol.6(2), pp.1754 - 1760, June, 2018.
22. **G. Mallesham** and CH. Siva Kumar, "Enhancement of power quality using UPQC for a hybrid SOFC and PMSG based wind energy system connected to weak grid, International Journal of Helix. Vol 8(3): pp. 3313-3320, Jan.,2018.

23. **G. Mallesham** and D. Krishna, "Optimal Frequency Control of a Microgrid," International Journal of Helix Vol. 8(2), pp.3079-3086, Feb, 2018.
24. **G. Mallesham**, B. Priyadarshini, G. Balaji and D. Krishna, "Tuning of Microgrid Controllers using Cuckoo Search Algorithm," International Journal of Helix Vol. 8(3): pp.3330-3335, April, 2018.
25. Naresh Kumari and Nitin Malik and A. N. Jha and **G. Mallesham** "Design of PI Controller for Automatic Generation Control of Multi Area Interconnected Power System using Bacterial Foraging Optimization", journal=ArXiv, volume=abs/1701.08081, ISSN: 0975-4024, pp.2779-2786 Dec 2016-Jan 2017.
26. S. Mishra, **G. Mallesham** and P. C. Sekhar, Biogeography Based Optimal State Feedback Controller for Frequency Regulation of a Smart Microgrid, IEEE Trans. on Smart Grid, vol.4, no.1, pp. 628-637, March 2013.
27. S. Mishra, **G. Mallesham** and A.N. Jha, "Design of Controller and Communication for frequency regulation of a Smart Microgrid, IET Renew. Power Gener., vol. 6, no. 4, pp. 248258, July 2012.
28. **G. Mallesham**, S. Mishra, A. N. Jha, "Automatic Generation Control of Microgrid using Artificial Intelligence techniques, Proc. of 2012 IEEE Power & Energy Society General Meeting, San Diego, USA, July 2012.
29. **G. Mallesham**, K.B. Venkata Ramana, "Improvement in Dynamic Response of Electrical Machines with PID & Fuzzy Logic Based Controllers, World Congress on Engineering and Computer Science 2007, WCECS 2007, San Francisco, USA, 24<sup>th</sup> - 26<sup>th</sup> October 2007.
30. **G. Mallesham**, A.N. Jha, "A fine short-term load forecasting using neural networks and fuzzy neural networks, WSEAS-Transactions on Information science and Applications, Issue 10, Volume 2, p 1589-1594, Corfu Island, Greece, 2005.
31. **G. Mallesham**, A.N. Jha, "Artificial Intelligence techniques and application in electrical power systems, Proceedings of the 5<sup>th</sup> Int. Conf. on Power Systems and Electromagnetic Compatibility, p 224-229, Corfu, Greece, 2005.
32. **Gaddam Mallesham**, AN Jha "A Fine Load Forecasting Using Neural Networks and Fuzzy Neural Networks" WSEAS Transactions on Information Science and applications Volume 2 issue 10 pages 1589-1594, 2005.

#### **f. Research papers published in Conferences**

1. S. K. Bodapatla, **G. Mallesham** and P. M. Sarma, "The Effects of FOPID Controller Parameters on Subsynchronous Control Interaction Type of Stability Issue in DFIG Wind Power Systems," *2023 International Conference on Power Energy, Environment & Intelligent Control (PEEIC)*, Greater Noida, India, 2023, pp. 253-260, doi: 10.1109/PEEIC59336.2023.10450889.
2. C. S. Kumar and **G. Mallesham**, "A New Dual-Adaptive Inertia Strategy Controller Based UPQC to Improve the Power Quality of Hybrid Renewable Energy System Connected to Grid," *2023 9th IEEE India International Conference on Power Electronics (IICPE)*, SONIPAT, India, 2023, pp. 1-6, doi: 10.1109/IICPE60303.2023.10474827.
3. S Mamatha, **G Mallesham** Hybrid AC/DC Microgrid Control and Management of Power Using Bidirectional AC/DC Converter by Autonomous Control Mode Recent Developments in Electrical and Electronics Engineering: Select Proceedings of ICRDEEE 2022 LNEE, volume 979 277-289,2023.
4. G. Murali Krishna, **G. Mallesham**, M. Kannan Autonomous Integrity Monitoring of INS/GPS Integrated Navigation System under Multipath Environment 6th International Conference on Electronics, Communication and Aerospace Technology [ICECA 2022]. ISBN: 978-1-6654-8270-7 53-60 2022.
5. S. Mamatha **G. Mallesham** Hybrid AC/DC microgrid control and management of power using Bidirectional AC/DC Converter by Autonomous Control Mode ICRDEEE International Conference 2022
6. Srinu Bhukya, Anil Bharadwaj, N V Phannedra Babu, **G Mallesham**, Suman Maiti Control of Asymmetrical Multilevel STATCOM with Hybrid Energy System National Power Electronics Conference (NPEC) IEEE 1-6 2021.
7. CH. Siva Kumar **G. Mallesham** Implementation of a New Hybrid Boosting Converter for High Gain Enhancement of SOFC System 3rd International Conference on Sustainable and Innovative Solutions for Current Challenges in Engineering & Technology (ICSISCET 2021).
8. CH. Siva Kumar **G. Mallesham** A New Hybrid Boost Converter with Cuckoo Search MPPT for High Gain Enhancement of Solar PV System International Conference on Computing, Communication, and Sensor Networks 2021



9. **G. Mallesham** and CH. Siva Kumar, "Power Quality Improvement of a Decentralized Hybrid Sustainable Energy System", ICCCEEE-2020, Pulla Reddy Engineering College (A) Kurnool, 2020.
10. CH Siva Kumar, **G Mallesham** Implementation of ANN-Based UPQC to Improve Power Quality of Hybrid Green Energy System, Energy Systems, Drives and Automation: Proceedings of ESDA 2019 pages 13-23, Springer Singapore, 2020
11. **G. Mallesham** and CH. Siva Kumar Performance of three-phase AI controller-based UPQC to enhance power quality of hybrid RES Energy Systems, Drives, and Automation (ESDA)- 2019.
12. **G. Mallesham** CH. Siva Kumar Performance analysis of ANN-based UPQC: to improve power quality of hybrid green energy system connected to weak grid Computing, Communication and Sensor Network (CCSN)- 2019.
13. **G. Mallesham** CH. Siva Kumar Enhancement of Power Quality using UPQC for Hybrid SOFC and SCIG based Wind energy system connected to weak grid International Conference on Electrical, Communication, Electronics, Instrumentation and Computing (ICECEIC)- 2019.
14. CH. Siva Kumar, **G. Mallesham** "Comparative Analysis of a New Three-Phase Diode Clamped Seven Level and Eleven Level Multilevel Inverter based PMSG with IGBTs and GTOs Connected to Grid" International Conference on Electrical, Communication, Electronics, Instrumentation and Computing (ICECEIC)-2019.
15. G. Srikanth M. Sudhakar **G. Mallesham** Neuro-Fuzzy Inference TCSC Based Multi Machine System Stability Enhancement of DFIG Offshore Wind Farm IEEE International Conference on Innovative Technologies in Engineering 2018(ICITE- 2018).
16. **G. Mallesham** CH. Siva Kumar Multi-Objective Micro Genetic Algorithm Based Planning and Sizing of Distributed Generation with Different Load Models IEEE International Conference on Innovative Technologies in Engineering 2018(ICITE- 2018)
17. **G. Mallesham** and CH. Siva Kumar, "Enhancement of power quality using UPQC for a hybrid SOFC and PMSG based wind energy system connected to the weak grid," International Conference on Recent Innovations in Electrical and Electronic Engineering-2017 (ICRIEEE-2017), HELIX. Vol 8(3): pp. 3313-20, 2018 Jan 1.
18. **G. Mallesham** and CH. Siva Kumar, "Multi objective Micro genetic Algorithm Based Planning and Sizing of Distributed Generation with Different Load Models, "IEEE International Conference on

- Innovative Technologies in Engineering 2018(ICITE-2018), OU.
19. **G. Mallesham** and CH. Siva Kumar, "Enhancement of power quality using UPQC for hybrid PEMFC and DFIG based wind energy system connected to the weak grid," International Conference on Technological Advancements in Power and Energy (TAP Energy) 2017 Dec 21 (pp. 1-6). IEEE.
  20. S. Mishra, A.N. Jha, **G. Mallesham**, Ziegler-Nichols based controller parameters tuning for load frequency control in a microgrid, IEEE International Conference on Energy, Automation, and Signals (ICEAS-2011), (28th 30th December 2011).
  21. **G. Mallesham**, S. Mishra, A.N. Jha, Tuning of Parameters in Microgrid Using Biogeography Based Optimization (BBO)", Southern African Universities Power Engineering Conference (SAUPEC 2011), University of Cape Town, South Africa, 13 to 15 July 2011. The year 2010
  22. S.S. Murthy, S. Mishra, **G. Mallesham**, P. Chandra Shekar, Voltage and Frequency Control of Wind Diesel Hybrid System with Variable Speed Wind Turbine, Proc. Of IEEE International Conference on Power Electronics, Drives and Energy Systems for Industrial Growth, India, December 2010.
  23. **G. Mallesham**, S. Mishra, and A. N. Jha," Optimization of Control Parameters in AGC of Microgrid using Gradient Descent Method," in 16th National Power Systems Conf. (NPSC-2010), Hyderabad, 2010, pp. 37-42 the Year 2009
  24. **G. Mallesham**, S. Mishra, and A. N. Jha," Maiden Application of Ziegler- Nichols Method to AGC of Distributed Generation System Proc. Of Int. Conf. Power Systems Conf. and Exposition, Seattle, March 2009, pp. 1-7 the Year 2008
  25. **G. Mallesham**, Vineela, Suraj Load Frequency Control Using Artificial Intelligence Method, 2nd National Conference on Advances in Energy Conversation Technologies (AECT-2008), IEEE PES, Bangalore Chapter, 18th 19th April 2008.
  26. **G. Mallesham**, B. Mangu, A. Suresh, Dinesh Reddy Non-Linear Dynamic Systems and Chaos- A Case Study in Electrical Engineering, 2nd National Conference on Advances in Energy Conversation Technologies, AECT-2008, MIT Manipal, Manipal, 18th 19th April 2008. The year 2007
  27. **G. Mallesham**, K.B. Venkata Ramana, Speed Control of DC Motor Using Fuzzy Logic Based Set-Point Weight Turing of PID Controllers, at International Conference on Electrical Engg. Design and Technology, Hamamet, Tunisia, 5-6 November 2007.
  28. A. Rajani, **G. Mallesham**, Flight Vehicle Stabilization Using Fuzzy

Logic Controller, National Systems Conference, Manipal, 14 -15, December 2007. The year 2006

29. **G. Mallesham**, A. Rajani, Automatic Generation Control Using Fuzzy Logic, Proceedings of the Eighth IASTED International Conference on Control and Applications (CA 2006), pp:188-194, Montreal, Canada, May 24 26, 2006.
30. **G. Mallesham**, A. Rajani, Automatic Tuning of PID Controller Using Fuzzy Logic, 8th International Conference on Development and Application Systems, (DAS 2006), pp: 122-127, Suceava, Romania May 25 27, 2006.
31. **G. Mallesham**, Anand Keerti, Inrush Current Control of a DC-DC Converter using MOSFET at IEEE International Conference on Power Electronics, Drives and Energy Systems for Industrial Growth 2006 (PEDES-2006) to held in December 2006.
32. **G. Mallesham**, A.N. Jha, A short term load forecasting using Fuzzy Logic presented in International Conference on Digital Aided Modelling and Simulation (An evolutionary approach) held at Coimbatore Institute of Technology, Coimbatore in Jan 2003. The year 2002
33. **G. Mallesham**, A.N. Jha, Short term load forecasting using Artificial neural networks, National Conference on Sensors and Instrumentation, 5-6th January 2002 at Hyderabad.

**g. Books/Reports/Chapters/General articles etc.**

1. Krishna Degavath, **Mallesham Gaddam** “Adaptive Control of Smart Microgrid Using AI Techniques” Wind and Solar Energy Applications: Technological Challenges and Advances Taylor & Francis Group, CRC Press 2023.
2. S Mamatha, **G Mallesham** “A Review on Multi objective Control Schemes of Conventional Hybrid DC/AC Microgrid” Wind and Solar Energy Applications: Technological Challenges and Advances Taylor & Francis Group, CRC Press 2023.
3. J. Shankar **G. Mallesham** “Automatic generation control of multi area power systems using BELBIC” 4th Electric Power and Renewable Energy Conference (EPREC-2023) Springer 2023.
4. Ch. Sreenu **G. Mallesham** T. Chandra Shekar Control of Quasi Z- Source Converter in a Microgrid using modified power Ratio P&O MPPT 2nd INTERNATIONAL CONFERENCE ON EMERGING TRENDS IN ENGINEERING (ICETE 2023) Springer 2023.

## **h. Papers presented at seminars / Conferences**

### **i. International**

1. IEEE PES General Meeting (22-26 July, 2012), USA
2. IAENG-World Congress on Engg and Computer Science 2007 (24-26 October,2007), USA
3. 2009 IEEE PES Power Systems Conference and Expo (15-18,2009), USA
4. International Conference on Electrical Engineering Design and Technologies (ICEEDT) (5-6, Nov 2007), Tunisia
5. IASTED International Conference on Control and Applications, Canada

### **ii. National**

1. International Journal of Research in Electronics and Computer Engineering (IJRECE)
2. 3rd International Conference on Innovation Trends in Engineering, Applied Science and Management (ICITEASM-2018)
3. TAP Energy 2017: 2017 IEEE International (Biennial) Conference on Technological Advancements in Power and Energy
4. International Conference on Electrical, Communication, Electronics, Instrumentation and Computing (ICECEIC), 2019.

### **i. Conferences/ Events/ Workshops/ Seminars organized as coordinator**

1. Special program “Program for Scientifically Inspired Leadership” in 2023, 2024, by Harvard College, a Massachusetts, US in Collaboration with BC Welfare Department (2023),Dept of Education (2024), Govt. of Telangana
2. Vice Chancellor’s Research Award :
3. Foundation Day, Osmania Taksh Programme, Osmania University
4. One Day Training Programme on “Lab to Product : Enabling Universities to Technology Transfer Hubs” for Teachers of the University.
5. Interactive Session on Restructuring of Courses
6. One day Seminar on Preparation Strategies for Group-I, Group-II and UPSC exams (Sponsored by TSBS Study Circle)
7. Dream of an Osmanian to Harvard
8. Interactive Session with UPSC services Toppers 2021(Sponsored by TSBS Study Circle)
9. One Day Guest Lecture on “DST & SERB funding opportunities and Preparation Strategies”
10. Coordinator, ICITE 2018 (International)
11. Fifth Diamond Jubilee Endowment Lecture on “From Complexity to Mutual Adaptation,” by Prof. Kumpati S. Narendra, Harold W. Cheel Professorship of Electrical Engineering at Yale University, USA, on 7th December, 2017.

12. Fourth Diamond Jubilee Endowment Lecture on Diamond Jubilee Endowment Lecture on “Distribution Systems with High Photovoltaic (PV) Penetration – Modeling, Analysis and Main Findings,” by Prof. Vijay Vittal, Ira A. Fulton Chair Professor in the School of Electrical, Computer and Energy Engineering at Arizona State University, on 6th October, 2017.
13. Earthing and Earth Fault Protection
14. Three-day workshop on “Solar Photovoltaic Training Program” from 2nd-4th March 2015, Department of Electrical Engineering, University College of Engineering, OU.
15. A two-day workshop on “Artificial Intelligence Techniques in electrical Engineering,” under TEQIP during 20 – 21st February, 2009.
16. Basic Training on Electrical wiring for unemployed youth from 24th - 26th March 2006 under TEQIP.
17. On day workshop on LATEX documentation
18. GATE 2019 Awareness Program
19. MATLAB For Beginners
20. Techsonance, a national level technical symposium 2003,2004, 2005,2008, 2014, 2018, 2019 (7 times)

**j. Resource person in Seminars/ Workshops/ Training Programs**

**i. International**

1. Smart Microgrid’ and control & automation at Owens Design, USA
2. Session Chair, International Conference on Recent Innovations in Electrical and Electronics Engineering
3. Session Chair, International Conference on Recent Innovations in Electrical and Electronics Engineering, JNTU Hyderabad
4. Session Chair, World Congress on Engineering and Computer Science, USA
5. Session Chair, IASTED Inter National Conference on Control and Applications, Canada

**ii. National**

1. Resource Person to National FDP program, UGC HRDC Osmania University
2. UGC-HRDC, JNTUH is organizing AICTE sponsored Online FDP on “AI Techniques to Electrical Engineering”
3. Keynote Speaker, National conference on Computing Communication and Electrical Engineering
4. As resource person in 2-week FDP at Hyderabad
5. As resource person in AICTE-QIP FDP Program
6. MATLAB For Beginners
7. FDP on research Perspectives on Solar and Wind Energy Systems

8. 38<sup>th</sup> National Systems Conference (NSC) on Real Time Systems: Modeling, Analysis and Control
9. 3 Day Solar PV Certificate Training Program, Ecoglage
10. 3 Day Solar PV Training Program, EED, UCE, OU
11. Two Week MATLAB Program, Thesis123
12. Solar PV and Future Challenges, ACCESS Solar
13. Best Practices in Cable Manufacturing and Maintenance, Khanti Cables
14. MATLAB Programming and Applications in Electrical Engineering, KITE college of professional engineering sciences
15. Communication Skills and Future Challenges in Engineering, KITE Women's College of Engineering Sciences

**k. Books Authored & Published**

1. Control of Microgrids: Introduction, A Manual Book to Yale University Resource Library -G. Mallesham, Kumpati S Narendra

**l. Refresher / Short-Term Courses Attended**

1. Attended the one-week short-term course on “High Voltage Gain Soft Switching Advanced Current Fed Technologies for Microgrid and Electric Transportation,” from 18<sup>th</sup> – 23<sup>rd</sup> December, 2017.
2. Attended a one-week faculty development program on “Advances in Power Electronics and Drives, Sponsored by TEQIP Phase II,” from 12<sup>th</sup> -17<sup>th</sup> May, 2014, by the Department of Electrical Engineering, University College of Engineering, Osmania University.
3. Attended a 6-day short term course on “Advanced Computation Techniques in Electrical Engineering” from 3<sup>rd</sup> – 8<sup>th</sup> July, 2006 conducted by Power Engineering Chapter, IEEE Calcutta section.
4. Attended one-week short term course on “Tracer Studies of the graduates of Engineering Colleges Under TEQIP,” from 06-10 November, 2006, conducted by National Institute of Technical Teachers Training and Research, Chennai.
5. Attended the Refresher Course on “Advanced Control Systems” during 21<sup>st</sup> July – 1<sup>st</sup> August, 2006 and 27<sup>th</sup> November – 8<sup>th</sup> December, 2006 jointly organized by IEEE Computer Society Chapter, Hyderabad and Vasavi college of Engineering (VCE), Hyderabad.
6. Attended training program on “PLCs and SCADA” from 2<sup>nd</sup> January to 7<sup>th</sup> January 2006 conducted by Prolific Systems & Technologies Pvt. Ltd, Hyderabad.

**m. Chairing Technical Sessions at Conferences**

1. 2nd International Conference on Recent Innovations in Engineering & Technology, 21st-22nd December, 2017.
2. International Conference on Recent Innovations in Electrical and Electronics Engineering, (ICRIEEE 2017), Hyderabad, India, Dec 2017.
3. IAENG International Conference on Modeling, Simulation and Control, 24-26th October, 2007.
4. The IASTED International Conference on Control Applications, 24-26th May, 2006, Canada

**10. EXTENSION & SUPPORT ACTIVITIES :**

- a. Membership of Governing/Executive/Advisory body of Professional Society or Industry body or Sector Council

S. No	YEAR	NAME OF THE COMMITTEE	PLACE	Member
1	2016	Nomination of Governing Body and Selection Committee	Adarsha Degree College, Siddipet	Member, Governing Body
2	2016	To Evaluate the cause of Electrical breakdown in NIN, Hyderabad Suggesting Remedial Measures	Hyderabad	Member
3	2018	International Conference on Emerging Trends in Engineering, Science and Technology (ICETEST-18)	Balaji Institute of Technology & Science, Warangal	Member, National Advisory Committee
4	2018	The Building Advisory Committee for ICMR_NIN	ICMR National Institute of Nutrition, Hyderabad	Expert Member
5	2019	Nomination of University Representative on the Governing Body and Selection Committee	Stanley College of Engineering & Technology, Hyderabad	Member on the Selection committee
6	2019	Nomination of Governing Body and Selection Committee	Vinayaka College of IT & Business Management, Medak	Member on the Selection committee
7	2019	Development of Power Conveyers and Realization of Hybrid Power System	DRDO, Central of High Energy System & Sciences, Hyderabad	Project Monitoring & Review Committee
8	2019	Selection Committee Meeting - Asst. Professor	Neil Gogte Institute of Technology, Hyderabad	Subject Expert in BEE
9	2019	International Conference on Computing Communication and Electrical Technologies (ICCET-2019)	G. Narayanamma Institute of Technology and Science (Women), Hyderabad	Organizing Committee Member
10	2019	Nominated by the Vice-Chancellor of Osmania	Methodist College of Engineering	Selection Committee for

		University as Subject Expert	&Technology, Hyderabad	EEE
11	2019	International Conference on Emerging Trends in Engineering (ICETE)-Emerging Trends in Smart Modeling Systems and Design-Organizing Committee	Osmania University, Hyderabad	Finance Committee Member
12	2019	Advances in Decision Sciences, Image Processing, Security and Computer Vision-International Conference on Emerging Trends in Engineering (ICETE)-Organizing Committee	Osmania University, Hyderabad	Finance Committee Member
13	2019	The 6th WSEAS International Conference on SIMULATION, MODELLING AND OPTMIZATION (SMO '06)-Scientific Committee	Proceeding of the WSEAS Conference	Scientific Committee Member
14	2021	Nomination of Governing Body and Selection Committee	Dr. Narayana Degree College of Commerce and Science, Hyderabad	Member on the Governing Body
15	2022	The Vice-Chancellor has accorded approval for the Appointment	Mahatam Gandhi University. Nalgonda	Chairperson, Board of Studies
16	2022	82nd Convocation of the University	Osmania University, Hyderabad	Constitution of Reception Committee Member
17	2022	Governing Body meeting	Keshav Memorial Institute of Management, Hyderabad	University Nominee
18	2022	Governing Body meeting	Nizam College, Hyderabad	University Nominee
19	2022	Institute of Genetic & Hospital for Genetic Diseases- Constitution of Governing Body-Order	Osmania University, Hyderabad	Member
20	2022	Constitution of Scientific Advisory Committee for Institute of Genetic & Hospital for Genetic Diseases	Osmania University, Hyderabad	Chairman
21	2022	Constitution of Purchase Committee -DPIIT-IPR-Chair	University College of Law Osmania University, Hyderabad	Member
22	2022	Meeting of the Committee- Constituted to Readdress and	Osmania University, Hyderabad	Member



		Resolve the Grievances- Convening-Intimation		
23	2022	Organizing of Program Advisor Committee (PAC) Meeting (Earth & Atmospheric Sciences of SERB DST)	Osmania University, Hyderabad	Chairperson
24	2022	Purchase of Stationery, Computer Stationery including Printer Cartridges-Meeting of the Tender Committee	Osmania University, Hyderabad	Member
25	2022	Nominated as Member of Academic Council of the College	UCE Osmania University, Hyderabad	Member
26	2022	Purchase of Anti-Plagiarism Software (Turnitin)- Reconstitution of Committee	Osmania University, Hyderabad	Member
27	2022	Constitution of Committee to examine the request of Dr. C Jayalakshmi (Retired)	Department of Statistics, University College of Science, Osmania University, Hyderabad	Member
28	2022	UGC-Human Resource Development Center-Common Inaugural Function of Three- Week Industrial Training Program	Osmania University, Hyderabad	Guest of Honor
29	2022	Constitution of Advisor Committee to Review the Progress of DBT-BUILDER Program	Osmania University, Hyderabad	Member
30	2022	Constitution of a Committee to Readdress and Resolve the Grievances	Osmania University, Hyderabad	Member
31	2022	Internal Quality Assurance Cell (I.Q.A.C)-Re-Constitution of Quality Advisory Committee	Osmania University, Hyderabad	Member
32	2022	Inclusion of Certain Administrative Officer in the Expert Committee	Osmania University, Hyderabad	Member
33	2023	15th Board of Management Meeting	Educational Multimedia Research Center Osmania University, Hyderabad	Co-Opted Member
34	2023	Osmania University Cener for International Studies (OUCIS)- Re-Constitution of Advisory Committee	Osmania University, Hyderabad	Member

**b. Any other Exemplary Work/Extraordinary Contribution to the Society/  
Flagship project of Government**

1. Advisory member and active participant of 'Synergy India' foundation in education and career counseling to the young children
2. Advisory member and active participant of 'Help Desk' organization for supporting in career counseling to students
3. Advisory member and active participant of 'Pranavi' foundation for giving awareness programs on 'Save Energy' in schools and colleges
4. Donated for Dr. A. P. J. Abdul Kalam Sirs Statue
5. Donation to CRPF Braveheart's
6. Motivational Program to TS Residential School Children
7. Organized 5 K run, with 'AIDS Awareness program' message, OU
8. Advisory member and active participant of 'NAADAM' foundation for supporting economically poor students
9. Civil services aspirant's awareness program
10. Donations to School Renovation
11. Organizing member of blood donation camp
12. Awareness Program to Engineering Aspiring Students
13. Participation in Haritharam Program (Plantation)
14. Organized 5 K run, with 'Save Energy' message, University College of Engineering

**11. RESEARCH AREAS OF INTEREST :**

- Control, Automation and Optimization
- Renewable Energy, Power System Control, Optimization
- Soft Computing Applications to Design/ Control of a microgrid/ smart grid-based systems and power quality problems



**(Dr. G. Mallesham)**