



## Dr. Gaddam Mallesham

Associate Professor, Dept of EE, UCE, OU

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### Education

- **Yale University** New Haven, USA  
*Post Doctoral* 2015 - 2016
- **Indian Institute of Technology (IIT) Delhi** New Delhi, India  
*PhD* 2009 - 2013  
Doctor of philosophy (Ph.D.) in Electrical Engineering from Indian Institute of Technology, Delhi (IIT -Delhi) with the thesis title: " Frequency Control of a Smart Microgrid"- based on Renewable Energy and control strategy.
- **Indian Institute of Technology (IIT) Delhi** New Delhi, India  
*M.Tech* 2000 - 2002  
Master of Technology Degree (M. Tech.) in Control Engineering and Instrumentation from Indian Institute of Technology, Delhi (IIT - Delhi) with thesis title: "Short Term Load Forecasting Using Neuro Fuzzy Systems"- based on Forecasting of Load for the proper power generation.
- **University College of Engineering, Osmania University** Hyderabad, India  
*B.E* 1996 - 2000  
Bachelors Engineering degree (B.E.) in Electrical and Electronics Engineering, University College of Engineering, Osmania University, Hyderabad.
- **Board of Intermediate Education** Hyderabad, India  
*Intermediate* 1993 - 1995  
Intermediate, Board of Intermediate Education, Ideal Junior College, Dilsukh Nagar, Hyderabad, Telangana
- **Board of Secondary Education** Nalgonda, India  
*S.S.C* 1986 - 1993  
SSC, Board of Secondary Education, AP Residential School Sarvail, Nalgonda, Telangana,

### Awards, Grants & Honours

1. POSOCO power system award 2013 (Power System Operation Corporation) under the doctoral category for the outstanding work on "Frequency Control of Smart microgrid and a future necessity of Indian power system".

2. ISCA Young engineer presentation (2013), On " Photovoltaic based Green Sources for Addressing the Energy Needs and Enhancing Energy Security to the Agricultural Sector".
3. Raman Fellowship for Post Doctoral Research for Indian Scholars in United States to be awarded by University Grants Commission (UGC), 2014.
4. Selected Postdoctoral position in the Center for System Science in the Electrical Engineering Department at Yale University, USA, 2014. The research area Design of Adaptive Controllers in Smart Microgrid to avoid black out.

## Positions Held

- General Secretary, Alumni Association, University College of Engineering, Osmania University.
- Student Adviser, University College of Engineering, Osmania University (2003-2008).
- Secretary, Anti-ragging committee, Osmania University (2003-2008).
- Secretary, IEEE PES/IAS Joint Chapter, Andhra Pradesh (2005-2007).
- Assistant Chief Warden, University College of Engineering, Osmania University (2007-2008)
- Faculty Coordinator
  - National Level Student Annual College Cultural Fest ALLGORYTHMS (2003-2006).
  - National level Student Annual Technical Symposium Techsonance (2002-2008).
  - State level Renewable Energy Day, (2004 -2005) by the NEDCAP, Govt. of Andhra Pradesh.
- Organizing Secretary-EAMCET MOCK COUNSELLING (2006-2008).
- Organizing Secretary 5 K RUN, in the state level in 2008.

## List of Research Publications

“Presented 12 international and 8 national papers with two reputed international publications in IEEE Transactions and IET Journals.” **All are related to Power Systems and Energy Control.**

1. 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.  
**Year 2012**
2. 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.
3. **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. Year 2011
4. 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).

5. **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. Year 2010
6. 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.
7. **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 Year 2009
8. **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 Year 2008
9. **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.
10. **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. Year 2007
11. **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 - 26 October 2007.
12. **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.
13. A.Rajani, **G.Mallesham**, Flight Vehicle Stabilization Using Fuzzy Logic Controller, National Systems Conference, Manipal, 14 -15, December 2007. Year 2006
14. **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.
15. **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.
16. **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. Year 2005
17. **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.
18. **G. Mallesham**, A.N.Jha, Artificial Intelligence techniques and application in electrical power systems, Proceedings of the 5th Int. Conf. on Power Systems and Electromagnetic Compatibility, p 224-229, Corfu, Greece, 2005. Year 2003

19. **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. Year 2002
20. **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.

### **Foreign Assignments**

Visited different countries for the exchange of research work: Canada, Greece, USA, Finland, Tunisia, South Africa

### **Extra Curriculum Activities**

#### **PROFESSIONAL MEMBERSHIPS:**

- IEEE Member/ Power and Energy Society
- IET Member

#### **REVIEWER:**

- IEEE Systems Journal, IET Renewable Power Generation, International Journal of Electric Power Energy Systems.
- International National Conference proceedings. Chaired, International Conference Sessions.

#### **GUEST LECTURES AND WORKSHOPS ORGANIZED:**

- Two day training program on MATLAB to researchers Indian Institute of Technology Delhi, New Delhi, India during 22-23rd January 2010.
- One week workshop on MATLAB to beginners at Indian Institute of Technology Delhi, New Delhi, India during 5-12th November, 2010.
- Guest Lectures on MATLAB and its applications in Electrical Engineering (Power systems and Control Engineering) at Sreenidhi Institute of Technology, Ghatkesar.
- Conducted training programs on MATLAB, Fuzzy Logic, Neural Networks etc., in various Engineering colleges (MJIT, MVSR, CBIT, Sri Indu, Bharat, St. Maries, CVSR, CMR etc.,) in Andhra Pradesh, India Guest lecture on Adaptive Control systems at BHEL, Hyderabad.

#### **SPORTS AND GAMES:**

- Represented Andhra Pradesh and participated in National Level-Cross Country Athletics twice at Bangalore and Haridwar.
- Participated in State Level Foot-ball championship twice in Andhra Pradesh.

### **Personnel Details**

Nationality: Indian

**Permanent Address :**

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Department of Electrical Engineering,  
University College of Engineering,  
Osmania University, Hyd -7, Telangana.

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