

Dr. Archana G. Thosar

Associate Professor and Head of Electrical Engineering Department,
Government College of Engineering, Aurangabad, Maharashtra

Additional Responsibilities:

- 1) QEEE, Coordinator
- 2) TEQIP II Coordinator
- 3) BOS Chairperson



Date of Birth: 22 September 1971

Email: archanagthosar@gmail.com, aprevankar@gmail.com.

Education Details:

Examination	Year of Passing	Board/University	Institute	Percentage /CGPA
Ph.D(Electrical)	18 July 2009	IIT Kharagpur	IIT Kharagpur	
ME Electrical (Control System)	1997	Shivaji University	Walchand College of Engineering, Sangli	76%
BE Electrical	1992	Shivaji University	Walchand College of Engineering, Sangli	67.93%
Advance Diploma in Computer System	1999	Maharashtra State Board	Board of Technical Education	76%

Work Experience:

1. Design Engineer, Jaguar Technoconsults, Miraj, 1992-1994.
2. Lecturer, Department of Electrical Engineering, Walchand College of Engineering, Sangli, 1994-1995.
3. Lecturer, Department of Electrical Engineering, Govt. Polytechnic, Amravati 1996-2000.
4. Assistant Prof. and Head, Department of Electrical Engineering, Govt. College of Engineering, Amravati 2000-2005.
5. Assistant Prof. and Head, Department of Electrical Engineering, Govt. College of Engineering, Aurangabad 2005-June 2011.
6. Principal, Matsyodari's College of Engineering and Technology, Jalna, (MS) June 2011-March 2013.
7. Associate Prof. and Head, Department of Electrical Engineering, Govt. College of Engineering, Aurangabad April 2013 – till date.

Awards /Achievements:

- National Merit scholarship 1986.
- Applied DACUM facilitator by MHRD.
- Selected by National Productivity Council India and Asian Productivity Organization, Tokyo, Japan to represent India on "Evaluation of Training Effectiveness"

Conference and Journal papers published for Ph.D.

1. A. G. Thosar, A. Van Wermeskerken, S.K. Mandal, A. Patra, S. Mukhopadhyay, R.C. Arora, S. Bhattacharyya, P.K. Das, "Energy Optimizing Control of A Variable Air Volume Air Conditioning System", *International Conference of Energy, Automation, Information Technology*, Indian Institute of Technology, Kharagpur, December, 2001.
2. A. G. Thosar, A. Patra and S. Bhattacharyya, "Development of an energy optimizing control strategy for multicell variable air volume air conditioning systems", *Australasian Universities Power Engineering Conference, AUPEC Melbourne*, Australia, 2002, pp. 1-6.
3. Thosar, A. Patra and S. Bhattacharyya, "Energy optimization of VAVAC using genetic algorithm", *IEEE International Conference on Industrial Technology ICIT06*, 2006, pp.1569-1574.
4. Thosar, A. Patra and S. Bhattacharyya, "Nonlinear control of VAVAC system via feedback linearization", *IEEE Industrial Electronics Society Conf. IECON07*, 2007, pp. 845-850.
5. Thosar, A. Patra and S. Bhattacharyya, "Feedback linearization based control of a variable air volume air conditioning system for cooling applications", *ISATransactions*, Vol. 47(3), 2008, pp. 339-349, Impact Factor-1.383.

Journal papers published other than Ph.D

1. G. Kulkarni, A. Thosar, A. Bhide, "Review On Human Health and ElectromagneticWaves", *International Journal of Emerging Technologies and Applications In Engineering, Technology and Sciences (IJ - ETA - ETS)*, Vol 3, Issue 1, January - June, 2010 Page 640. Impact factor-
2. M. Hapse, A. Thosar and S. Shinde, "Validating Wind Energy Probability at Ahmednagar Wind Farm", *Journal of Energy and Power Engineering*, Volume 5, Number 2, February 2011 (Serial Number 39), Impact Factor-1.07
3. A. G. Tupe, A.G. Thosar "Accurate power loss measurement of induction motor using thermal equation", *Journal of Electronic and Electrical Engineering*, Vol 2, issue 2, 2011, pp. 42-46, Impact Factor-0.411.
4. R.P. Suradkar, A.G. Thosar, "Enhancing the performance of DC motor speed control using Fuzzy Logic", *International Journal of Engineering Research and Technology*, vol-1 issue-8 (8 Oct 2012), ISSN: 2278-0181, Impact Factor-1.852.
5. S. Feran, A.G. Thosar, "Estimating Agricultural Demand Side Management (AGDSM) Potential", *International Journal of Engineering Research and Technology*, vol-1 issue-6 (August-2012), ISSN: 2278-0181, Impact Factor-1.852.
6. Mr. Chavan Mayur D, Mr. Swami P.S, Dr. Thosar A.G, Mr. Gharase Rajendra B., "Fault Detection of Induction Motor Using Fuzzy Logic", *International Journal of Engineering Research & Technology (IJERT)*, ISSN: 2278-0181, Vol. 2 Issue 12, December – 2013, pp 2672-2679, Impact Factor-1.76.
7. P. S. Revankar, W. Z. Gandhare, A. G. Thosar, "Maximum Power Point Tracking & Efficiency Enhancements for PV Systems", *International Journal of Computer Application*, Vol.1, No. 27, pp.113-116, Impact Factor-0.821.
8. P. L. Ratnani, A. G. Thosar, "Mathematical Modelling of an 3 phase induction motor using MATLAB/Simulunk" *International Journal of Modern Engineering Research*, Vol. 4, Issue 6, June 2014, ISSN:2249-6645 Impact factor-2.972

9. Arpit Bhugul, A. G. Thosar, "Simulation of Direct torque control of induction motor using space vector modulation methodology", *International Journal of Modern Engineering Research*, Vol. 4, Issue 5, May 2014, 2249-6645 Impact Factor-2.972
10. Dushing Priyanka, A. G. Thosar, "Study of design of superconducting magnetic energy storage coil for power system application" *International Journal ERT*, Vol. 3, Issue 03, March 2014 ISSN:2278-0181 Impact factor-1.76
11. Arpit Bhugul, A. G. Thosar, "Performance analysis of solar-wind hybrid wind process system to supply power to data system",
12. Shivraj Dudhe, Dr. A. G. Thosar, "Mathematical Modelling and simulation of three phase BLDC motor using Matlab/Simulink", *International Journal of Advances in Engineering and Technology*, Nov 2014, ISSN: 22311963 Impact Factor-1.56
13. Punit Ratnani, Dr. A. G. Thosar, "Design, Modelling and simulation of five level Multilevel inverter using Matlab/Simulink" *International Journal of Electrical Engineering*, Impact Factor-1.4059
14. Ram Hazare, Dr. A. G. Thosar, " Modelling And Simulation Of Three Phase Permanent Magnet Dc Motor Using MATLAB" *International Journal of Electrical Engineerin*, Impact factor-1.4059
15. Parimal Borse, Samruddhi Shaha, Dr. A. G. Thosar, "Modeling and Simulation of STATCOM", *International Journal Engineering Research and Technology*, Dec 2014, ISSN: 2278-0181 Impact factor-1.76
16. Shraddha S. Khonde, S. S. Dhamse, Dr. A. G. Thosar, "Power Quality Enhancement of Standard IEEE 14 Bus system using Unified power flow controller", *International Journal of Engineering Science and Innovative Technology*, ISSN:2319-5967, Vol.3, issue 5, Sept 2014 Impact factor- 1.913
17. Shraddha S. Khonde, Dr. A. G. Thosar, "A review on FACTS Technology", *International Journal of Engineering Research and Technology*, ISSN: 2278-0181, Vol. 3, issue 10, Oct 2014 Impact Factor- 1.76
18. Punit Ratnani, Samruddhi Shaha, Dr. A. G. Thosar, "Simulation of Five- Level Inverter with Sinusoidal PWM Carrier Technique Using MATLAB/Simulink", *Internal Journal of Energy and Environment*, Sept 2014, ISSN: 0974-2150. Impact Factor-1.4059
19. Prajakta Shankar Shinde, Dr. A. G. Thosar, Punit Lalji Ratnani, "Design of Permanent Magnet Synchronous Motor", *International Journal Science and Engineering Research*, Volume 6, Issue 1, January 2015 Impact Factor-3.2
20. V. Aundhekar, Dr, A. G. Thosar, Samruddhi Shaha, "Statistical Load Modeling of Residential Load: A Case Study", *International Journal Science and Engineering Research*, Volume 6, Issue 2, February 2015 Impact Factor-3.2
21. Samruddhi Shaha, Dr. A. G. Thosar, Shri. Vivek Moroney, "Modified Shifted Current Method For Extracting The Resistive Leakage Current Of Metal Oxide Surge Arrester", *International Journal Science and Engineering Research*, Volume 6, Issue 5, May 2015 Impact Factor-3.2
22. Priti N. Bawankule, Dr. A. G. Thosar, P.S. Swami, "Estimation of current Transformer life with an effect of Environmental Variable", *International Journal of Advanced Research in Electrical Electronics and Instrumentation Engineering*, Volume 4, Issue 5, May2015 Impact factor-1.686

23. Anamika Kumari, Dr. A. G. Thosar, S. S. Mopari, "A Review on determination of excitation capacitance of 3 phase self-excited induction generator", *International Journal of Modern Engineering Research*, Volume 5, Issue 5, May2015, pp 13-21, ISSN: 2249-6645, Impact factor- 2.972
24. Amit Kumar, Dr. A. G. Thosar, "Study of transient behavior of capacitor voltage transformer" *International Journal of Advanced Research in Electrical Electronics and Instrumentation Engineering*, Volume 4, Issue 5, May2015, Impact factor-1.686
25. Anamika Kumari, "Determination of Excitation capacitance of 3 phase self-excited induction generator", *International Journal of Advanced Research in Electrical Electronics and Instrumentation Engineering*, Volume 4, Issue 5, May2015 Impact factor-1.686
26. Suneeta Dapke, Dr. A. G. Thosar, Samruddhi Shaha, "Design of amorphous core distribution transformer and comparison with CRGo core distribution transformer" *International Journal of Modern Engineering Research*, Volume 5, Issue 5, May2015, ISSN: 2249-6645, Impact factor- 2.972
27. Manali Kshirsagar, Dr. A.G.Thosar, " HVDC light: Transmission technology simulation study & application to Indian grid" *International Journal of Scientific & Engineering Research*, Volume 6, Issue 7, July-2015

Conference papers published other than Ph.D

1. A. G. Thosar, P. Mawale, "Reliability of wind energy" at *Patiala National Conference*, 2001.
2. P.S. Revankar, A. G. Thosar, A. S. Patil, Z. J. Pudlowski, "A novel way to boost quality in engineering education" *UIC* 2003.
3. S. Gokhale, A. Thosar, "Transient analysis using Fuzzy logic", *National Power Conference*, 2003.
4. A. Thosar, G. Gadage, "Digital Simulation of HVDC", *National Conference at Wardha*, 2003.
5. A. Thosar, P. Revankar, W. Gandhare, P. Nikam "Wind power and the environment: an overview", *COGEN*, 2006.
6. A. Thosar, M. Akefuddin, "Active network realization for distribution networks" at *Symposium on Distribution*, Oct. 2008.
7. P.D. Kulkarni, A.G. Thosar, M.G. Unde, "Double Rotor Wind Generator", *AISPC*, January 2009.
8. A.A. Barhate, A.V. Mohod, A.G. Thosar, "Improving the Energy Efficiency In Power Distribution Networks Through Loss Reduction", *National Conference On Emerging Trends In Power and Energy Systems*, February 2009.
9. L.S. Patil, A.G. Thosar, "Application of D - STATCOM To Mitigate Voltage Sag Due To DOL Starting of Three Phase Induction Motor", *Proceedings of International Conference On Control, Automation, Communication and Energy Conservation*, Tamil Nadu, June, 2009.
10. A.G. Thosar, Ms. V. U. Bhosale, "Discrete Wavelet Transform Based Internal Fault Analysis in Transformer Winding", *Proceedings of National Conference on Modern Trends in Electrical Engineering*, July, 2009.

11. A. G. Thosar, P. D. Kulkarni “Double rotor machines”, *Advance in instrumentation, signal processing & communication*, 2009.
12. L.S. Patil, K.D. Patil, Ms. A.G. Thosar, “Identification of PQ Disturbances Based OnChange in Audible Noise of Three Phase Induction Motor”, *Third InternationalConference on Power System*, Kharagpur, December 2009.
13. L.S. Patil, K.D. Patil, Ms. Archana Thosar, “Wavelet Based Motor Current SignatureAnalysis For Stator Fault Detection In Three Phase Induction Motor”, December 2009.
14. L. S. Patil, K. D. Patil, A. G. Thosar, “The role of Computer modeling and simulation in Power Electronics Education”, *Second International conference on Emerging trends in Engineering and technology*, ICET pp. 416-419, Dec 2009
15. K.A. Joshi, A.G. Thosar, W.Z. Gandhare, “Energy Efficient Technologies in SolarWater Pumping”, *National Conference On Smart Energy – Generation, Promotion andConservation – 2010*, Punjab, Page 67 – 71, January 2010.
16. P.R. Kulkarni, A.G. Thosar, W.Z. Gandhare, “Energy Saving Opportunities ThroughDigital Printing”, *National Conference On Smart Energy – Generation, Promotion andConservation – 2010*, Punjab, Page 85 – 88, January, 2010.
17. P.S. Revankar, A.G. Thosar, W.Z. Gandhare, “Maximum Power Point Tracking ForPV Systems Using MATLAB/SIMULINK”, *ICMLC 2010: The 2nd InternationalConference On Machine Learning and Computing*, Bangalore, Page 8, February 2010.
18. K.V. Bhadane, A.G. Thosar, N.R. Bhasme, “Harmonic Analysis of Domestic Inverterand its Mitigation”, *International Conference on Emerging Trends in Engineering, ICETE2010*, pp. 9-15.
19. A. G. Thosar, L. V. Nehate, “Reactive power control using STATCOM”, *National Conference on Electronics Technology NCET 2010*.
20. A. Thosar, M. Hapse, “Wind energy validation using wind potential”, *National Conference on Renewable energy 2010* at Tezpur, 23-25 March 2010, pp.145
21. A.G. Thosar, S. M. Shembekar, “Design and analysis of three phase inductionmotor”, *National Conference*, 30 March 2010.
22. A. G. Thosar, Hapse, “Validating wind energy probability” at Ahmednagar wind farm, *ICFPEE 2010* accepted.
23. A. Thosar, G. Karanjgaonkar, “Condition based monitoring in distribution system” *Symposium on Distribution : 2010 Dec*
24. M. Patil, A. Thosar, “Maximum power point tracking control schemes for wind generator systems”, *National Conference on Challenges to Indian Power scenario by 2020*, Feb 24-25, 2011
25. R. Pawar, A. Thosar, “Comparison of SVC and STATCOM for transient stability study of two machines”, *International Conference on Energy, Optimization and Control*, 28-30 Dec 2010 at Govt. College of Engineering, Aurangabad, pp. 103-108
26. S. Kulkarni, A. Thosar, “Fault tolerant control of induction motor- a review”, *International Conference on Energy, Optimization and Control*, 28-30 Dec 2010 at Govt. College of Engineering, Aurangabad, pp. 103-108
27. S. Markad, A. Thosar, “Upgradation of conventional grid to smart grid”, *International Conference on Energy, Optimization and Control*, 28-30 Dec 2010 at Govt. College of Engineering, Aurangabad, pp. 103-108
28. S. Chopade, A. Thosar, “Optimum design of hysteresis motor using Alnico-6 alloy rings”, *National Conference on Challenges to Indian Power scenario by 2020*, Feb 24-25, 2011

29. M. Hapse, A. Thosar, S. Shinde and S. Markad, "Wind Energy Validation Using Available Wind Potential", *Proc. of International Conference on Advances in Electrical & Electronics 2010*, pp. 165-167.
30. S. Sabanis, A. Thosar, "Design of three phase longitudinal flux linear induction motor using Matlab computer program", *National Conference on Challenges to Indian Power scenario by 2020*, Feb 24-25, 2011
31. A. G. Thosar, Y. Kirange, "Brushless synchronous generator", *National Conference on Recent trends in Technology -2011*, 3-4 Feb 2011, J.T. Mahajan College of Engineering Faizpur.
32. A. G. Thosar, V. Mononey, Shailesh Mahajan, "Nano crystalline material for HV and EHV Current Transformer"
33. Daniel Figuirodo, Dr. A.G. Thosar, "Survey of Inverter topologies for distributed Generation".
34. A.G.Thosar, "Various case studies of Non-Conventional Sources"
35. G. Kulkarni, A. G. Thosar, Anan tBhide, "Human Health and compact Fluorescent Lamps"
36. N.E. Chamate, A. G. Thosar, "A case study of ABT Mechanism"
37. S.S. Wagh, A.G.Thosar, G.R. Shekapure, "A Genetic algorithm based approach to short term Thermal Unit commitment".
38. Gopalsing M. Patil, Mrs. Dr. Archana G. Thosar, Dhanjay Jadhav, "Advance Reactive Power Compensation and Harmonic Mitigation Technique for Industrial Application", *National conference on Advance Power System NCAPA-2011.K, K. W. IEE&R. Nashik.*
39. Archana G. Thosar, "A brief status on fault tolerant control of wind energy system" ICRTET 2014, paper ID 558, from 28th to 30th march 2014
40. Ashwini Patil, Dr. A.G. Thosar, " Steady state and transient stability analysis of wind energy system" 2nd international conference on Control, Instrumentation, Energy & Communication at Culcutta 28 Jan-30 Jan 2016

Trainings Completed:

Sr. No	Title of Training Participated	Duration	Venue
1	Advanced Microprocessor	14 th to 26 th December 1992	Walchand College of Engineering Sangli
2	"C" Programming	26 th October 1994	Walchand College of Engineering Sangli
3	Instructional Methods	7 th to 11 th April 1997	TTT I, Bhopal
4	Induction Phase I Program	19 th May to 13 th June 1997	Govt. Polytechnic, Amravati
5	Application of Relays in Power Transmission	22 nd to 24 th December 1997	Govt. Polytechnic, Nashik
6	Non Conventional Sources Program	1 st to 5 th June 1998	Govt. Polytechnic, Amravati

7	IBM ACE Teachers Training Programme	24 th Aug. to 3 rd Sept.1999	IIT,Kanpur
8	Industrial Training Batch XIX	5 th April to 26 th June 1999	Govt. Polytechnic, Aurangabad
9	Automatic Control system Analysis	8 th to 12 th May 2000	IIT ,Bombay
10	Strategic Planning Group workshop Phase-III	22 nd to 24 th October 2001	Govt. Polytechnic, Nagpur
11	Training for Development of Staff Competencies Profile for SDMs	29 th to 31 st October 2001	Govt. Polytechnic, Nashik
12	Training Programme DACUM For Process Curriculum Development.	13 th to 15 th December 2001	-----
13	Quarterly Meeting of Industry Linkage Officer's & Con. Ed. Managers	28 th to 29 th June 2002	Govt. Polytechnic, Nagpur
14	Seminar on Evaluation of Training Effectiveness	5 th to 9 th August 2002	Nadi, Fiji
15	Training in Applied DACUM	11 th to 13 th November 2002	T.T.T.T. Bhopal
16	Workshop on DACUM	11 th to 20 th June 2003	AGNEL Polytechnic, Verna (Goa)
17	Demand Drive Progrmme On Fashion Designer	23th to 16 th August 2003	-----
18	Workshop on The Development of CBE Modules	17 th to 26 th November 2003	Govt. Polytechnic, Nagpur
19	Applied DACUM Facilitator	5 th December 2003	----
20	Workplace Education (Phase I)	21 st to 24 th January 2004	Govt. Polytechnic, Gandhinagar
21	Quality assessment of Programming through benchmarking/KPI Creation of QA Tools	19 th to 20 th January 2004	Govt. Polytechnic, Gandhinagar
22	Annual Work Plan & Review of Strategic Plan 2003-04		Government College of Engg.Amravati
23	Faculty Development Program on Managerial Skills	20 th to 21 st August 2005	Government College of Engineering

			Aurangabad (MS)
24	Training Program on Wavelets & Advanced Wavelets	31 st January to 2 nd February 2006	Government College of Engineering Aurangabad (MS)
25	Supervisory Development and Stress Management	1 st April 2006	Government College of Engineering Aurangabad (MS)
26	Implementing outcomes based engineering curricula through networked Participatory Action Research	9 th to 10 th Sept. 2006	Government College of Engineering Aurangabad (MS)
27	Electrical Control Panel Design and PLC Programming	3 rd to 7 th October 2006	Govt. College of Engineering Aurangabad (MS)
28	Miniature Circuit Breaker Manufacturing Process	11 th to 16 th December 2006	Govt. College of Engineering Aurangabad (MS)
29	ETAP 6.0	25 th to 29 th March 2009.	Govt. College of Engg. Aurangabad (MS)
30	LabVIEW Core1 & Core2	21 st to 25 th June 2010	PLGP, Latur
31	Best Practices of Electric Motor Rewinding for Enhanced Energy Efficiency	13 rd July 2010	The Institution of Engineers(India), Hyderabad (AP)
32	National Robotics Contest	2 nd to 5 th March 2011	MAE,Pune
33	Smart Grid Engineering	22 nd May to 4 th June 2011	NIT Calicut, Kerala
34	Energy Conservation Opportunities in Small & Medium Scale Industries	23 rd to 28 th April 2012	Govt.College of Engineering Amravati
35	Android Programming and Publication Development	25 th & 26 th October 2012	MSS'S College of Engineering, Jalna (MS)
36	21 st Century Outcomes Based Engineering Education	3 rd to 5 th June 2013	Engineering Staff college of India, Hyderabad(AP)
37	Real Time Implementation of Power Electronics Technologies	24 th to 28 th June 2013	MNIT, Jaipur
38	Power Quality Issues and	26 th and 27 th	Annasaheb Dange

	Solutions	October 2013	College of Engineering & Tech., Ashta. Dist. Sangli (MS)
39	Quality Enhancement in Engineering Education (QEEE) training workshop	17 th & 18 th December 2013	IIT, Madras(TN)

Additional information:

- A. Worked as Dean of Continuing Education Program (CEP)
- B. Worked as Procurement In-charge in TEQIP I.
- C. Staff Development Manager in CIILP international Project.
- D. Awarded as Applied DACUM Facilitator from MHRD.
- E. Developed 06 competency profiles along with learning resource material for MHRD.
- F. BOS member at Amravati University and Aurangabad University.
- G. In-charge of AICTE portfolio at Govt. College of Engineering, Amravati and Received grant of Rs. 20 Lakhs for PG.
- H. In-charge curriculum cell.
- I. Represented India at Fiji on '**Evaluation of training Effectiveness**'.
- J. Coordinator for 04 short term training programmes sponsored by AICTE
- K. Worked as ISTE staff advisor as well as secretary for ISTE institute Student Chapter
- L. Chairman of Board of Studies in Autonomous institute.
- M. Coordinator for TIFAC- Mission Reach project.
- N. Principal Investigator for TAPTEC and MODROB project.
- O. Worked as expert on research committee for DST.
- P. Delivered invited lectures on Control system, Energy Management, Fuzzy Logic,
 - i. MATLAB, Genetic Algorithm, Optimization Techniques etc.
- Q. Worked as facilitator for NBA
- R. Delivered expert lecture on Outcome Based Education
- S. Developed and introduced Thinking lab and Reading Lab in academic process

Research Areas:

1. Fault tolerant Control
2. Control System
3. Renewable energy
4. Energy Minimizing Control

Training Programmes Organized

1. Microcontrollers and applications
2. Electric Drives
3. Induction training for Engineering Teacher
4. Power Quality
5. PLC

6. MCB Manufacturing Process
7. Industrial Training for Engineering Teacher
8. MATLAB

Conferences Organized:

International Conference on 'Energy, Optimization and Control' scheduled on 28-30 Dec 2010.

No. of ME students guided: 32

No. of Ph.D scholars Guiding :07

Consultancy Projects undertaken:

1. Setting of Electrical Machines laboratory as per IS
2. Street Light design for Municipal Corporation, Aurangabad
3. Third party audit of Paithan Aapegaon pradhikaran

Membership Details:

1. Life member of ISTE
2. Life member of IEI
3. Life member of ISLE
4. Life member of SESI

Dr. Archana G. Thosar