



Biodata

- NAME AND FULL ADDRESS** Dr. DATTATRAYA N. GAONKAR, Asst. Professor
Department of Electrical and Electronics Engineering
National Institute of Technology Karnataka Surathkal,
Mangalore-575025, Karnataka, INDIA
Email id: dngaonkar@gmail.com,
Mobile No.09482249764
- ACADEMIC BACKGROUND:** **Ph. D.**, Indian Institute of Technology (IIT) Roorkee, 2008
M-Tech (Power and Energy Systems), National Institute of
Technology Karnataka (NITK) Surathkal, 2003.
B. E. (Electrical and Electronics Engineering), B. V. B.
College of Engineering and Technology, Hubli, Karnataka,
1998.
Diploma (Electrical Engineering) Govt. Polytechnic,
Karawar, Karnataka, 1994
- ADMINISTRATIVE ASSIGNMENTS
(AT THE INSTITUTE LEVEL)** Resident Engineer, NITK Surathkal (1/9/2015 onwards)
Nodal Officer for the Implementation of Grid Connected
Roof-Top Solar Plant, NITK Surathkal
Warden (Mega Tower-1), Hostels, NITK Surathkal
(1/7/2014 onwards)
Faculty In-Charge for Electrical Works
(2011-2014)
- MEMBERSHIP OF
PROFESSIONAL SOCIETIES** Senior Member IEEE (USA)
Member Institute of Engineers (IE) India
Life Member System Society of India (SSI)
Life Member Indian Society for Technical Education
- RESEARCH INTERESTS** Power System Operation and Control, Renewable power
Generation Systems, Power Electronics and Drives.

RESEARCH PROJECTS:

| Sl. No. | Title of project | Sponsoring Agency | Amount of grant | Period & Status | Investigators |
|---------|--|---|---------------------|--|--|
| 1 | Investigation on the Operation & Control of Multiple Distributed Generation resources in a Microgrid (Phase-I) | Ministry of Power , Govt. of India through Central Power Research Institute Bangalore(CPRI) | Phase I 25 lakh | May 2011 to March 2013 Completed | Dr. D. N. Gaonkar (PI) Prof. Udaykumar R. Y.(co-PI) |
| 2 | Investigation on the Operation & Control of Multiple Distributed Generation resources in a Microgrid(Phase-II) | Ministry of Power , Govt. of India through Central Power Research Institute Bangalore(CPRI) | Phase II 25 lakh | July 2016 to March 2018 Ongoing | Dr. D. N. Gaonkar (PI) Dr. D. Jena (co-PI) |

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| 3 | FPGA Based Development of Different MPPT Algorithms for a standalone Photovoltaic system using Artificial Intelligence | Ministry of Power , Govt. of India through Central Power Research Institute Bangalore(CPRI) | 25.07 Lakhs | May 2014 to May 2016 On going | Dr. D. Jena(PI) Dr. D. N. Gaonkar (co-PI) |
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PHD Guidance: Awarded -5 and Ongoing-5

| Sl. No | Name of the student | Thesis/proposal Title and Details of Co-supervisor(s)(If any) | Completed/ongoing |
|--------|-----------------------------|--|------------------------|
| 1 | Mr. B. K. Singh | Modeling And Analysis of Distributed Generation Systems. Co-supervisor: Dr. R. S. Aithal, Dept. E&E, MIT Manipal | Degree Awarded in 2011 |
| 2 | Mr. R. Shivarudraswamy | Voltage regulation of power distributed generation system with interconnected distributed generators. | Degree Awarded in 2013 |
| 3 | Mr. Sanjeev Nayak | Grid Integrated operation of hybrid fuel Cell and microturbine based distributed generation System. | Degree Awarded in 2015 |
| 4 | Ms. Jayalakshmi N. S. | Modeling and performance analysis of microgrid with wind and Photovoltaic based distributed generation systems. | Degree Awarded in 2015 |
| 5 | Mr. Santosha Kumar A. | Modeling and performance analysis of microgrid with fuel cell and wind based distributed generation systems. | Degree Awarded in 2016 |
| 6 | Mr. Chethan Raj D | Operation and Control of a AC and DC Microgrid with Distributed generation systems. | ongoing |
| 7 | Mr. Ragavendra P | Voltage Regulation In Smart Grids With Distributed Generation Systems. | ongoing |
| 8 | Mr. M Santosh Kumar Goud | Islanding operation of DG systems | ongoing |
| 9 | Mr. Vikas Kumar Jhunjnawala | Operation and control of microgrid | ongoing |
| 10 | Ms. Swati Tangi | Smart grid | ongoing |

M-TECH (BY RESEARCH):

| S. No | Name of the student | Thesis Title/proposal Title and Details of Co-supervisor(s)(If any) | Completed/ongoing |
|-------|---------------------|---|------------------------|
| 1 | Ms. Geethi Krishnan | Intentional islanding of distributed generation systems | Degree Awarded in 2014 |

M-TECH (POWER AND ENERGY SYSTEMS): Completed: 18

RESEARCH INTERACTION VISITS:

1. Visited **Energy Management and Microgrid Laboratory** at National University of Singapore (NUS), Singapore for research interaction from 02 to 9th March, 2015.
2. Visited **Energy Reliability & Security (ERISE) Laboratory** at Michigan State University (MSU) U.S.A. for research interaction from September 29 to October 10, 2014.
3. Visited, the **Center for Future Energy Systems (CFES)** at Rensselaer Polytechnic

- Institute (RPI), Troy New York for research interaction from December 5th to 16, 2011
4. Visiting scholar at the **University of Saskatchewan Canada** in the Department of Electrical and Computer Engineering from November 14, 2008 to December 10, 2008.

RECOGNITIONS AND AWARDS

1. Member of the task force committee on distribution and distributed generation, Under National Perspective Plan (NPP) of Ministry of Power Government of India.
2. Best Paper for the oral presentation on "Long Term Dynamic Model of Microturbine Generation System in Grid/Isolated Mode" At 4th World Conference on Applied Sciences, Engineering and Technology (WCSET-2015) at Graduate School of Science and Technology, Kumamoto University, Japan during 24-26 October 2015. (Authors: Sanjeev Nayak and D. N. Gaonkar)
3. POSOCO power System Award for the year 2015 for the M-Tech Thesis "Intentional islanding operation of distributed generation systems (student Ms. Geethi Krishnan (M-Tech (by research) Guide: Dr. D. N. Gaonkar)
4. Regular reviewer of research papers in IEEE Transactions, IET Journals, Journal of power components and systems (Taylor and Francis USA) and many other International journals, books and conferences.
5. Executive committee Member of IEEE PES Bangalore section for the year 2014 and 2015
6. Chaired the Technical session in International Conference on Power and Advanced Control Engineering (ICPACE) organized by B.N. M Institute of Technology Bangalore and IEEE Bangalore section on 12 - 14 Aug, 2015.
7. Chaired the Technical session in International Conference on Emerging Trends in Engineering(ICETE-2016) organized by department of electronics and communication Engineering, NMAM Institute of Technology, NITTE, Mangalore on 12-13 May,2016.
8. Chaired the Technical session in 2013 IEEE Conf. on Clean Energy and Technology, 18-20th, November 2013, Langkawi , Malaysia.
9. Chaired the Technical session in International Conference on Advances in Energy Conversion Technologies, MIT Manipal, India, 23-25th January, 2014
10. Chaired technical session in, 1ST International Conference on Advances in Energy Conversion Technologies, MIT Manipal, India, 7 – 10 January, 2010.
11. Member of the Board of Studies (BOS), BVB College of Engineering and Technology Hubballi (from 2012 onwards).

PUBLICATIONS: Book

1. Book Titled "Distributed Generation" , Edited by Dr. D.N. Goankar Publishers: IN-TECH Publication, Kirchengasse 43/3, A-1070 Vienna, Austria
2. Book Chapter Title "Performance of Microturbine Generation System In Grid Connected And Islanding Modes Of Operation" Edited by Dr. D. N.Gaonkar, Publishers: IN-TECH Publication, Kirchengasse 43/3, A-1070 Vienna, Austria (Www.intechweb.org).

International Journals:

1. N. S. Jayalakshmi , D. N. Gaonkar Anandh N and Nimika S, "Design and implementation of single phase inverter based on cuk converter for PV system", International Journal of Renewable Energy Research (IJRER) (Accepted).
2. N. S. Jayalakshmi and D. N. Gaonkar , "A new control method to mitigate power fluctuations for grid integrated PV/wind hybrid power system using ultra capacitors ", International Journal of Emerging Electric Power Systems, Vol. 17, No. 4, pp 451-461, 2016.
3. Geethi Krishnan and Dattatraya N. Gaonkar, "An adaptive reactive power perturbation based hybrid islanding detection method for distributed generation systems" International Journal of Power and Energy Systems, Vol . 36 , No. 1, 2016.

4. Santhosha Kumar Ayyappa and Dattatraya Narayan Gaonkar, "Performance analysis of a variable-speed wind and fuel cell-based hybrid distributed generation system in grid-connected mode of operation", *Electric Power Components And Systems*, Vol. 44, No. 2, pp 142- 151, 2016.
5. N. S. Jayalakshmi, D. N. Gaonkar and P. B. Nempu, "Power control of PV/fuel cell/super capacitor hybrid system for stand-alone applications", *International Journal of Renewable Energy Research (IJRER)*, Vol. 6, No. 2, pp 672-679, 2016.
6. Raghavendra P. and D. N. Gaonkar, "Online voltage estimation and control for smart distribution networks", *Journal of Modern Power Systems and Clean Energy*, Vol. 4, No. 1, pp 40-46, January 2016.
7. V. V. Ramana, D. Jena and D. N. Gaonkar, "An accurate modeling of different types of photovoltaic modules using experimental data", *International Journal of Renewable Energy Research (IJRER)* Vol. 6, No. 3, pp 970-974, 2016.
8. N. S. S. Ramakrishna, D. N. Gaonkar and G. S. Bharathi, "Modeling and controlling of an coordinated power control grid connected hybrid system with wind, pv and fuel cell sources", *International Journal of Earth Sciences and Engineering*, Vol. 9, No. 3, pp. 215-220, June, 2016.
9. N. S. Jayalakshmi and D. N. Gaonkar, "Operation of Grid Integrated Wind/PV Hybrid System with Grid Perturbations", *International Journal of Renewable Energy Research (IJRER)*, Vol. 5, No. 4, pp 1106-1111, 2015.
10. Jayalakshmi N. S. and D. N. Gaonkar, "An integrated Control Approach and Power Management of Stand-alone Hybrid Wind/PV/Battery Power Generation System with Maximum Power Extraction Capability", *Journal of Distributed Generation & Alternative Energy Journal*, Vol. 30, No. 4, pp 15-36, 2015.
11. Jayalakshmi N. S. and D. N. Gaonkar, "Modeling and Performance Analysis of Grid Integrated Hybrid Wind and PV Based DG System with MPPT Controllers" *International Journal of Distributed Energy Resources and Smart Grids*, Vol. 10, No. 2, pp 115-131, 2014.
12. N. S. Jayalakshmi, D. N. Gaonkar, A. Balan, P. Patil and S. A. Raza, "Dynamic Modeling and Performance Study of a Stand-alone Photovoltaic System with Battery Supplying Dynamic Load", *International Journal of Renewable Energy Research(IJRER)*, Vol.4 No. 3, pp 635-640, 2014.
13. N. S. Jayalakshmi and D. N. Gaonkar, "Maximum Power Point Tracking for Grid Integrated Variable Speed Wind based DG System with Dynamic Load", *International Journal of Renewable Energy Research (IJRER)*, Vol.4 No.2, pp 464-470, 2014.
14. N.S. Jayalakshmi and D. N. Gaonkar, "Dynamic Modeling and Performance Study of DC Microgrid in Grid Connected and Isolated Mode of Operation with Maximum Power Extraction Capability", *International Journal of Distributed Energy Resources and Smart Grids*, Vol. 10, No. 4, pp 281-299, 2014.
15. Sanjeev K Nayak and D N Gaonkar, "Performance study of Distributed Generation System in Grid Connected and Isolated Modes", *Journal of Distributed Generation and Alternative Energy*, Vol. 29, No.1, pp. 61-80, 2014.
16. Jayalakshmi N. S. and D. N. Gaonkar, "Modeling and control strategy for grid integrated distributed generation systems with maximum power extraction capability", *International Journal of Engineering, Science and Technology*, Vol. 6, No. 2, pp. 101-110, 2014.
17. Sanjeev K. Nayak and Dattatraya N Gaonkar, "Modeling and performance analysis of microturbine generation system in grid connected/islanding operation", *International Journal of Renewable Energy Research(IJRER)*, Vol. 2, No. 4, pp 750-757, 2012.
18. Sanjeev K. Nayak and D. N. Gaonkar, "Modeling and performance analysis of microturbine generation system in grid connected and islanding modes of operation", *International Journal of Distributed Energy Resource*, Vol. 8, No, 4, pp.265-283, 2012.

19. Sanjeev K Nayak & D N Gaonkar, "Performance of fuzzy logic based microturbine generation system in connected to the grid and islanding mode of operation" , International Journal of Fuzzy Logic Systems, Vol.2, No.3, pp.41-50, 2012.
20. R. Shivarudraswamy and D. N. Gaonkar , "Coordinated voltage regulation of distribution network with distributed generators and multiple voltage control devices" , Electric Power Systems and Components, Vol.40, No. 9, pp 1072-1088, 2012.
21. R. Shivarudraswamy and D. N. Gaonkar , "Coordinated voltage control with reactive power of the distributed generators using genetic algorithm", International Journal of Scientific & Engineering Research. Vol.6 No. 3, pp.1-7, 2012.
22. R. Shivarudraswamy and D. N. Gaonkar, " Voltage control in the distribution system using reactive power participation factor of distributed generators" , International journal of Distributed Energy Resources, Vol. 7 ,No. 3 ,pp 217-228, 2011.
23. R. Shivarudraswamy and D. N. Gaonkar, "Coordinated voltage control using multiple regulators in distribution system with distributed generators" , International journal of World Academy of Science, Engineering and Technology, no.74, pp.574-578, 2011.
24. B.K. Singh, D. N. Gaonkar, R. S. Aithal and Govinda Sharma, "Modeling and performance analysis of solid oxide fuel cell based distributed generation system", International Energy Journal Vol. 12, No.2, pp 123-134, 2011.
25. D. N. Gaonkar and G. N. Pillai, "Operation and Control of Multiple Distributed Generation Systems in the Microgrid" , International Journal of Energy Technology and Policy, Vol. 7, No. 4, pp. 325 - 341, 2011.
26. D. N. Gaonkar , "Investigation on the electromagnetic transients of distributed generation systems in the microgrid", Electric Power Systems and Components, Vol. 38, No. 13, pp 1486-1497, 2010.
27. B.K. Singh, D. N. Gaonkar and R. S. Aithal, "Development of Solid oxide Fuel Cell Model", International Journal of Applied Engineering Research, Vol. 4, No.8, , pp. 1543-1556 , 2009.
28. D. N. Gaonkar G. N. Pillai and R. N. Patel, "Seamless Transfer of Microturbine Generation System Operation Between Grid Connected And Islanding Modes" , Electric Power Systems and Components. Vol. 37, No.2 , pp.174-188, December 2008.
29. D. N. Gaonkar G. N. Pillai and R. N. Patel, "Dynamic performance of microturbine generation system connected to grid", Electric Power Systems and Components. Vol. 36, No. 10, pp. 1031-1047, 2008.
30. D. N. Gaonkar and R. N. Patel, "Grid interconnection of microturbine generation system", International Journal of Energy Technology and Policy, Vol. 5, No.5 pp. 619 – 632, 2007.
31. D. N. Gaonkar, R. N. Patel and G. N. Pillai, "The steady state voltage rise and its control in distribution system with distributed generation" , International Energy Journal Vol. 8, No.3, pp 223-234, September 2007.

IEEE/IEE/Other International Conferences:

1. Santhosha Kumar A and D. N. Gaonkar, "Performance of wind system with battery-UC in grid connected mode", 7th IEEE Power India International Conference (PIICON), Bikaner, Rajasthan, India, 25-27th November, 2016.
2. Raghavendra P. and D. N. Gaonkar, "Online Volt/Var Control in a Smart Grid with Multiple Distributed Generation Systems", 7th IEEE Power India International Conference (PIICON), Bikaner, Rajasthan, India, 25-27th November, 2016.
3. N. S. Jayalakshmi, D. N. Gaonkar, S. Adarsh and S Sunil A, "Control Strategy for Power Management in a PV-Battery Hybrid System with MPPT" , International Conference on Power Electronics, Intelligent Control and Energy Systems, DTU , New Delhi, India, July 2016.
4. Shah Palash Manish Bhai and Dattatraya N. Gaonkar, "Design of binary search ADC using N comparators", IEEE First International Conference on Control, Measurement and Instrumentation (CMI), Kolkata, India, pp. 499-502, 2016.

5. Chethan Raj D. and D. N. Gaonkar, "Frequency and Voltage Droop Control of Parallel Inverters in Microgrid", 2nd International Conference on Control Instrumentation , Energy & Communication (CIEC), University of Kolkata, India, pp. 407-411, 28-30 Jan, 2016.
6. P. Raghavendra and D. N. Gaonkar, "Voltage estimation in smart distribution networks with multiple DG systems", 12th Annual IEEE India Conference (INDICON), pp.1-6, New Delhi, India, 2015.
7. N. S Jayalakshmi, D. N. Gaonkar, V. Kumar and R. P. Karthik , "Battery-ultracapacitor storage devices to mitigate power fluctuations for grid connected PV system " , 12th Annual IEEE India Conference (INDICON), New Delhi, pp. 1-6 , 2015.
8. D. N. Gaonkar, N. S. Jayalakshmi and P. Raghvendra, "Performance study of roof top wind solar microgrid system in isolated mode of operation", IEEE Power Electronics, Drives and Energy Systems (PEDES), IIT Bombay, India, 16-19th December, 2014.
9. Sanjeev K. Nayak and D N Gaonkar, "Power Management of hybrid fuel cell and microturbine based distributed generation in grid connected mode of operation" , IEEE International Conference On Renewable Energy Research And Applications (ICRERA-2014), Milwaukee, USA. 2014.
10. D. Chethan Raj and D.N. Gaonkar "Coordination control of microgrid", 9th Int. Conference on Industrial and Information Systems (ICIIS), Gwalior, India 2014.
11. S. K. Nayak and D. N. Gaonkar, "Performance of microturbine generation system in grid perturbation condition", IEEE Innovative Smart Grid Technologies - Asia (ISGT Asia), pp. 1 - 6, Bangalore, India, 2013.
12. S. K. Nayak and D. N. Gaonkar, "Fuel cell based hybrid distributed generation systems, "a review" 8th IEEE International Conference on Industrial and Information Systems (ICIIS), Srilanka, pp. 525 - 530, 2013.
13. Geethi Krishnan and D.N. Gaonkar, " Performance Evaluation of a New Hybrid Islanding Detection Method for a Wind Based DG", IEEE Conf. on Clean Energy and Technology (CEAT), pp. 411-415, Langkawi , Malaysia, 18-20th November 2013.
14. Geethi Krishnan and D. N. Gaonkar, " Control of Grid Connected and Islanding Operations of Distributed Generation Systems with Seamless Transfer Between Modes" , IEEE Multi-Conference on Systems and control (MSC), pp. 509-514, Hyderabad, India. 28th-30th August, 2013.
15. Sanjeev K. Nayak and D. N. Gaonkar " Modelling and Performance Analysis of Fuel Cell and Microturbine Based Hybrid Distributed Generation System "A Review", IEEE International Conference ICPEC , pp. 760-766, Dindigul, Tamil Nadu, India, 2013.
16. R. Shivarudraswamy and D. N. Gaonkar," Coordinated voltage control in 3 phase unbalanced distribution system with multiple regulators using genetic algorithm", In Proc of 2nd International Conference on Advances in Energy Engineering, Bangkok, Thailand, 27-28 December, 2011. (Published in Energy Procedia, Elsevier, Vol. 14 pp.1199-1206, 2012).
17. Sanjeev K Nayak and D. N. Gaonkar, " Fuzzy Logic Controlled Microturbine Generation System for Distributed Generation", In Proc of 2nd International Conference on Advances in Energy Engineering, Bangkok, Thailand, , 27-28 December, 2011.(Published in Energy Procedia, Elsevier, pp.1199-1206, Vol. 14, 2012).
18. Sanjeev K Nayak and D. N. Gaonkar, "Thermal and Electrical Model of Fuel Cell in Connected to grid/isolated Mode", 5th IEEE Power India Conference(PICONF), Murthal, Haryana, India, 19-22 December, 2012.
19. A. Santhosha Kumar and D. N. Gaonkar, "Performance Analysis of Variable Speed Wind Energy Conversion System in Grid Connected Mode" , 5th IEEE Power India Conference (PICONF), Murthal, Haryana, India, 19-22 December, 2012.
20. N. S. Jayalakshmi and D. N. Gaonkar, "Dynamic Modeling and Performance Analysis of Grid Connected PMSG based Variable Speed Wind Turbines With Simple Power Conditioning System", IEEE International Conference on Power Electronics, Drives and Energy Systems (PEDES) CPRI, Bangalore, India, 16-19, December, 2012.

21. Geethi Krishnan and D.N. Gaonkar, " Intentional islanding of distributed generation system with a load shedding algorithm", IEEE International Conference on Power Electronics, Drives and Energy Systems (PEDES) CPRI, Bangalore, India, 16-19, December, 2012.
22. Sanjeev K Nayak and D N Gaonkar "Modeling and performance analysis of microturbine generation system in grid connected/islanding mode of operation", IEEE International Conference on Power Electronics, Drives and Energy Systems (PEDES) CPRI, Bangalore, India, 16-19, December, 2012.
23. Jayalakshmi N.S. and D. N. Gaonkar, "Dynamic modeling and control of grid integrated wind generation system using pmsg with mppt algorithm", IEEE-PES Fifteenth International Middle East Power Systems Conference (MEPCON'12) Alexandria, Egypt, 23-25 December, 2012.
24. A. Santhosha Kumar and D. N. Gaonkar , " Modeling and simulation study of fuel cell and wind energy based hybrid distributed generation system", Proc. IEEE-PES Fifteenth International Middle East Power Systems Conference (MEPCON'12) Alexandria, Egypt, 23-25 December, 2012.
25. Jayalakshmi N.S. and D.N. Gaonkar, "Dynamic modeling and analysis of an isolated self excited induction generator driven by a wind turbine," IEEE PES international conference on power signals control and computations (EPSICON-2012), Thrissur, Kerala, India, 3-6th January, 2012.
26. Jayalakshmi N.S. and D.N. Gaonkar," Performance study of isolated hybrid power system with multiple generation and energy storage units", IEEE international conference on power and energy systems (ICPS-2011), IIT Chennai, India Dec 23-24, 2011.
27. Sanjeev Nayak and D. N. Gaonkar , "Combined model of fuel cell and microturbine based distributed generation system", IEEE PES conference on Innovative Smart Grid Technologies-Middle East (ISGT Middle East), Jeddah, Saudi-Arabia, 17-20 December 2011.
28. Santhosha Kumar A and D. N. Gaonkar," Performance study of Grid connected fuel cell based distributed generation system with ultra capacitor" IEEE PES conference on Innovative Smart Grid Technologies-Middle East (ISGT Middle East), Jeddah, Saudi-Arabia, 17-20 December, 2011.
29. D. N. Gaonkar and Sanjeev Nayak, "Modeling and Performance Analysis of Microturbine Based Distributed Generation System, "A review", In Proc IEEE conference on Energy Tech, Case Western University, Cleveland, USA, 25th to 26th May 2011.
30. D. N. Gaonkar and G. N. Pillai , "Fuzzy Logic Based Coordinated Voltage Regulation Method For Distribution System With Multiple Synchronous Generators", In Proc IEEE Joint International Conference On Power Electronics, Drives And Energy Systems(PEDES) Power India, New Delhi India, 20-23rd December,2010.
31. Birendra Kumar Singh,D. N. Gaonkar and R. S. Aithal, "Solid oxide Fuel Cell based distributed generation : A Comprehensive Review" , 1ST International Conference on Advances in Energy Conversion Technologies, MIT Manipal, India, Jan 7 - 10, 2010.
32. R. shivarudra Swamy and D.N. Gaonkar , "Steady state voltage control using distributed generation allocation in radial network" , 1st International Conference on Advances in Energy Conversion Technologies, MIT Manipal, India, Jan 7 - 10, 2010.
33. D. N. Gaonkar and R. N. Patel and G. N. Pillai, "Dynamic model of microturbine generation system for grid connected/islanding operation" , in Proc. IEEE International Conference on Industrial Technology (ICIT), Mumbai, India, 15-17th December, 2006.
34. D. N. Gaonkar and R. N. Patel, "Modeling and simulation of microturbine based distributed generation system," in Proc. IEEE Power India Conference, New Delhi, India, 10-12 April, 2006. (cited in more than 80 papers and reports internationally as per Google scholar)
35. D. N. Gaonkar, P. C. Rao and R. N. Patel, "Hybrid method for voltage regulation of distribution system with maximum utilization of connected distributed generation source," in Proc. IEEE Power India Conference, New Delhi, India, April 2006.

36. D. N. Gaonkar and R. N. Patel, "A new chaos based model of an arc furnace for power quality studies", in proc. of the International Conference on Computer Applications in Electrical Engineering Recent Advances (CERA 05), IIT-Roorkee, India, pp. 21-25, Sept. 2005.
37. R. N. Patel, N. Ravi and D. N. Gaonkar, "Utility solutions to power quality problems", in Proc. IEE International Conference on Energy, Information Technology and Power Sector, PEITSICON-'05, Kolkata, India, pp. 541-546, Jan. 2005.
38. K. P. Vittal, D. N. Gaonkar and D. B. Fakruddin, "Development Of Wavelet Transform Based Numeric Relay For Differential Protection Of Power Transformer", in proc. IEEE TENCON 2003. Conference on Convergent Technologies for Asia-Pacific Region Vol. 4, pp.1580 – 1584, Oct. 2003.
39. D. N. Gaonkar, L. Shenoy and V. V. Thomas, "Use of wavelet transform and neural network for differentiating transient phenomenon in power transformer," in Proc. of International Conferences on Emerging Technologies (ICET-2003),KIIT, Bhubaneswar, Orissa, India 19-21 December 2003.

National Conferences

40. Birendra Kumar Singh, D.N.Gaonkar and R. S. Aithal,' "Isolated mode operation of solid oxide fuel cell based distributed generation system with fuzzy logic controller", In Proc 34th National System Conference (NSC-2010),NITK Surathkal, Karnataka, India, December 10th -12th ,2010.
41. R. Shivarudra Swamy and D.N. Gaonkar, " Coordinated voltage control in distributed system with distributed generators", In Proc 34th National System Conference (NSC-2010),NITK Surathkal, Karnataka, India, December 10th -12th ,2010.
42. Sanjeev K Nayak And D. N. Gaonkar , "Fuzzy logic controlled microturbine for distributed generation systems application' In Proc 34th National System Conference (NSC-2010),NITK Surathkal, Karnataka, India, December 10th -12th ,2010.
43. D. N. Gaonkar, R. N. Patel and G. N. Pillai, "New islanding detection and re-closure technique for converter interfaced distributed generation systems" in Proc. 14 National Power System Conference(NPSC-006), IIT Roorkee, India, 27-29, December 2006.
44. D. N. Gaonkar and K. P. Vittal, "MATLAB based package for transient behavioral study of power transformer," in Proc. National Conference on Recent Trends in Power Management Jamia Milia Islamia, New Delhi, 16-17, August 2003.
45. Rajarathinamala. P and D. N. Gaonkar, "Control strategy of converters in distributed generation systems: review" 7th National Conference on Advances in Energy Conversion Technologies (AECT- 2015), MIT, Manipal, Karnataka ,India, January 23 – 24, 2015.
46. Sikha V.S and D. N. Gaonkar "Droop control strategies in microgrid -a review", 7th National Conference on Advances in Energy Conversion Technologies (AECT- 2015), MIT, Manipal, Karnataka ,India, January 23 – 24, 2015.
47. Nandhakumar .M and D. N. Gaonkar "Development of system identification tool-application", 7th National Conference on Advances in Energy Conversion Technologies (AECT- 2015), MIT, Manipal, Karnataka ,India, January 23 – 24, 2015.

INVITED/EXPERT LECTURES:

| Sl. No | Title of Lecture | Date, Place And Program |
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| 1 | Technical writing skills Research projects and proposals | One day work shop organized by Ramaiah University of Applied Sciences (RUAS) Bangalore, India on 20 th October 2016. |
| 2 | Wind Based Power Generation Systems: Technology And Issues | Short-term course on "Offshore Renewable Energy (Wave, Wind And Tidal Energy)" Organized by Department of Applied mechanics NITK Surathkal under Global Initiative of Academic Networks (GIAN) program of MHRD India on 7th - 11th November, 2016. |

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| 3 | Operation and control of Microgrid: Issues and challenges | One week Workshop on Microgrids classification, implementation and recent trends, Organized by BMS College of Engineering, Bangalore, India from 7 th - 10th December 2015. |
| 4 | Intentional Islanding Operation of Distributed Generation Systems | Technical talk organized by Department of Electrical & Computer Engineering National University of Singapore and Power Engineering Chapter - IEEE Singapore Section on Friday, 6 th March, 2015. |
| 5 | MICROGRIDS Configuration, operation and control | 8th National Conference on 'Advances in Energy Conversion Technologies (AECT 2016)' organized by Department of E&E, MIT-, Manipal from 28- to 30th January, 2016. |
| 6 | Smart Grid technology for smart city | Invited lecture organized by NMPT Mangalore, Karnataka on the eve of Engineers Day Celebration on 15th September 2015. |
| 7 | Integrated operation of DG systems in a smart grid: Issues and challenges | Invited Lecture in the Short Term Course On "Advances in Power Electronics and Drives(APED-2015)" Organized by Department of Electrical and Electronics Engineering ,UBDT College of Engineering Davangere, Karnataka, Funded by the VTU and Vision Group on Science and Technology(VGST) Govt. of Karnataka Bangalore from June 5th-8th, 2015. |
| 8 | Smart Grid and distributed generation | Invited lecture organized by K.V.G. College of Engineering Sullia, Sullia, Karnataka on 11th April 2015. |
| 9 | MICROGRIDS: Configuration, operation and control | Invited Lecture In The TEQIP (II) Funded Short Term Course On "Distributed Generation and Power Quality (DGPQ2014)" Organized by Department of Electrical and Electronics Engineering ,NIE Mysore, from June 9-13 , 2014. |
| 10 | Grid Integrated operation of wind based power generation system | Invited Lecture In The TEQIP (II) Funded Short Term Course On "Research on Renewable Energy Resources Through Matlab/Simulink Models, organized by NITTE Meenakshi Institute of Technology Bangalore in association with KREDL and KPTCL Bangalore. |
| 11 | Modeling and Performance study of wind based distributed generation system | Invited Lecture in the NaMPET (Phase-II) Funded workshop on "Power electronics in Distributed generation (PEDG -2014)" Organized by Department of Electrical and Electronics Engineering NITK Surathkal on Feb 7-9, 2014. |
| 12 | Grid Interconnection of Distributed Generation Systems: Issues And Challenges | Invited Lecture In The TEQIP Funded Short Term Course On "Power Control And Energy Management Systems" organized By Department of Electrical Engineering National Institute of Technology (NIT) Warangal, On 9-11th May, 2013. |
| 13 | Grid Interconnected And Islanding Operation of Distributed Energy Resources | Invited Lecture In The National Level Work Shop On "Modeling And Control Of Power Electronic Systems" organized By Department Of Electrical Engineering PES Institute Of Technology, Bangalore On 18-20th March, 2013. |

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| 14 | Grid Integration of Distributed Generation Resource: Issues, Modeling And Analysis | Invited lecture in national level workshop Advances in power system and renewable energy technology organized by Department of E and E, Gogate Institute of Technology, Belgaum Karnataka on 22 and 23 Feb 2013. |
| 15 | Grid integration of renewable energy resource and seamless transfer of their operational modes | Invited lecture in a short term course under the aegis of NaMPET Phase II, organized by Department of Electrical Engineering, College of Engineering Trivandrum(CET) ,Kerala from December 17-19th, 2012 |
| 16 | Sustainable Technologies for future power generations | Invited lecture on the occasion of Earth day organized by Institute of Engineers, Mangalore Local Chapter on 24 th April 2012. |
| 17 | (i)Grid interconnection of distributed generation sources (ii) Modeling and performance analysis of Microturbine based distributed generation system. | DTE Sponsored short term training program on "Applications of power electronics in power systems" organized by Rajiv Gandhi Institute of Technology, Govt college of Engineering Kottayam, Kerala on 04 th Jan 2010. |
| 18 | Fuzzy Logic Controller and Hybrid Methods | Fuzzy Logic, Genetic Algorithm With Wavelet Transformation In Civil Engineering' During 27 th June – 1 st July, 2011. |
| 19 | Design of Fuzzy Logic Controller using MATLAB | MHRD Sponsored short term training program on "Artificial Intelligence Application" organized by Department of Applied Mechanics, National Institute of Technology Karnataka Surtahkal. |
| 20 | (i) Introduction to Simpower systems tool box of the MATLAB (ii) Development of Matlab model for power system components | MHRD Sponsored short term training program on "Computational Analysis Using Matlab" organized by Department of Electrical Engineering National Institute of Technology Karnataka Surtahkal From 27 th July to 3 rd August, 2009. |
| 21 | Grid interconnection of distributed generation systems | AICTE/MHRD Sponsored Summer School Dept. of Electrical and electronics Engg. NITK Surathkal, 11 th August-22 th August, 2008. |
| 22 | Microturbine based Distributed generation system | AICTE/MHRD Sponsored Winter School Dept. of Electrical and electronics, Engg. NITK Surathkal, 3 rd May-7 th May, 2009. |