

Detail Biodata

1. Personal Details:

Name: Dr. Sanjay Shamrao Damhare

Present Address:

Official:

Professor of Electrical Engineering
College of Engineering
Shivajinagar, Pune – 411005

Residential:

B1-301, Misty Moors Apartment
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Summary:

Dr. Sanjay Damhare received the B.E. degree in electrical engineering from the Visvesvaraya National Institute of Technology (formerly VRCE), Nagpur, India, in 1989, the M. Tech. degree in electrical engineering from the Indian Institute of Technology, Bombay, India, in 1998, and the Ph. D. degree in electrical engineering also from the Indian Institute of Technology–Bombay, Mumbai, in 2009, in the field of transmission system protection. Currently, he is Professor of Electrical Engineering at the College of Engineering, Pune, India. His research interests include Smart Grid, power system protection, numerical relays, applications of power electronics to power system (HVDC and FACTS), power system computation and transient and micro-grid. He has published around 70 peer reviewed research papers in International Journals and Conferences, worked as a consultant on various industrial/Govt. projects and conducted training courses for industries like Crompton Greaves, L&T, Reliance. He has attended International Summer University in Germany in May 2012 and attended several renowned IEEE conferences including IEEE PES General Meetings. He has served as judge for poster competition at IEEE PES General Meetings. He has delivered around 80 expert talks at various reputed institutes including NIT's, IIT's, NUS Singapore, NEU USA, etc. He has actively contributed in IEEE working groups. He is a regular reviewer of IEEE transactions, IET journals, Elsevier journals, and IEEE conferences. He was recognized as an outstanding reviewer for his contributions to reviewing for IJEPES, Elsevier. He is Principal Investigator of Center of Excellence in “Smart Renewable Energy System” at COEP, Pune. He contributed as Head of Electrical Department at COEP from July 12 to Jan 16 and Jan 19 to till date. During his HoD tenure, all the departmental programs were accredited for 5 years with outstanding score and department grabbed first place in AICTE-CII award. He has served in various capacities on many state and central government committees like DST, NBA, AICTE, DTE, NIT's, IIT's, CSIR. He is an active member of COEP-Alumni association since 2013. He is working as a TEQIP mentor for three reputed colleges. He was invited by Royal University of Bhutan to set up a new program of Power Engineering. He has been invited to chair the sessions of many conferences held in India and abroad. He was the convener 7th Int. Conf. on Power System 2017 and co-convener of 8th Nat. Power Electronics Conference 2017 held at COE Pune. He has worked on organizing and technical committee of more than 20 international conferences. He has developed two unique laboratories a college of engineering Pune which have gained attention from various reputed institutes. His publications have received wide recognition with citations crossing the 800 mark, highest in COEP. He is the member of various professional bodies like IEEE, IET, IE, IETE etc. He has guided more than 60 master thesis. Under his guidance 3 student completed Ph. D, 01 submitted their thesis are on the verge of submission and 4 are ongoing Ph.D.

2. Publications/ Research Work:

IEEE Transactions/International Journal:

1. Unde, S., **Dambhare, S.** Current differential protection of double-circuit transmission lines in modal domain. *Electr Eng* 102, 2401–2411 (2020)
2. T. Hinge, M. Sontakke, and **S. Dambhare**, “Synchrophasor Based Novel Fault Location Algorithm for Three- Terminal Transmission Line”, *Helix*, vol. 10, no. 02, pp. 09-14, Apr. 2020.
3. Milind Bagewadi, Prathamesh Jagtap, Chinmay Chobe, and **Sanjay Dambhare**, "Buck-Boost Derived Interleaved Hybrid Converter for Residential Nanogrid Applications", Accepted, *IET Power Electronics*.
4. S. V. Unde, P. Gawande and **S. Dambhare**, "New Algorithm for Protection of Double Circuit Transmission Lines Using Modal Currents," in *IEEE Transactions on Power Delivery*, vol. 34, no. 5, pp. 1967-1977, Oct. 2019.
5. Prashant Gawande, **Sanjay Dambhare**, “A new Predictive Analytic aided Response-Based System Integrity Protection Scheme”, *IET Generation, Transmission & Distribution – Special issue on Emerging Trends in System Integrity Protection Schemes (SIPS) for Improving the Performance of Smart Grid*, Jan 2019.
6. Trupti Hinge, **Sanjay Dambhare**, “Synchronized/Unsynchronized Measurements Based Novel Fault Location Algorithm for Transmission Line”, *IET Generation, Transmission & Distribution*, Oct. 2017.
7. Trupti Hinge, **Sanjay Dambhare**, “Secure Phase Comparison Schemes for Transmission-Line Protection Using Synchrophasors”, *IEEE Transaction on Power Delivery*, vol. 30, no. 4, pp. 2045-2054, Aug. 2015.
8. Rajaram Tukaram Ugale ; Bhalchandra Nemichand Chaudhari ; Srinivas Baka ; **Sanjay Shamrao Dambhare** ; Ashutosh Pramanik ,” Induced pole rotor structure for line start permanent magnet synchronous motors”, *IET Electric Power Applications*, Volume 8, Issue 4, April 2014, p. 131 – 140
9. Prakash Suryawanshi, **Sanjay Dambhare**, Ashutosh Pramanik, “Detection of Electromechanical Wave Propagation Using Synchronized Phasor Measurements”, *International Journal of Emerging Electric Power Systems*. Volume 15, Issue 1, Pages 69–75, January 2014
10. Singh, Arvind R., and **Sanjay S. Dambhare**. "Adaptive distance protection of transmission line in presence of SVC." *International Journal of Electrical Power & Energy Systems* 53 (2013): 78-84.
11. **Dambhare S.**, Soman S., Chandorkar M., “Current Differential Protection of Transmission Line Using Moving Window Averaging Technique”, *IEEE Transaction on Power Delivery*, Volume 25, Issue 2, Apr. 2010 Page(s):610 – 620.
12. **Dambhare S.**, Soman S., Chandorkar M., “Adaptive Current Differential Protection Schemes for Transmission Line Protection”, *IEEE Transaction on Power Delivery*, Volume 24, Issue 4, Oct. 2009 Page(s):1832 – 1841.
13. Dua D., **Dambhare S.**, Gajbhiye R., Soman S., “An Optimal Multistage Scheduling of PMU Placement: An ILP Approach”, *IEEE Transaction on Power Delivery*, Volume 23, Issue 4, Oct. 2008, Page(s):1812 – 1820.
14. Gajbhiye R., Naik D., **Dambhare S.**, Soman S. A., “An Expert System Approach for Multi-year Short Term Transmission System Expansion Planning: An Indian Experience”, *IEEE Transaction on Power System*, Volume 23, Issue 1, Feb. 2008 Page(s):226 – 237.

International Conferences:

1. P.M. Naik, S.S. Dambhare and P.D. Pantawane, “Machine Vision-based Fruit Detection: Introducing YOLO v7-Fruit Algorithm for Automated Harvesting Systems” 3rd International Conference on “Mathematical Modelling and Simulation in Physical Sciences” (MMSPS-2023), 23-24 June 2023.

2. R. Kulkarni, **S Dambhare**, D. Talange and S. Kakade "Simulation Study of Solar Photovoltaic-Thermal System" IEEE Guwahati Subsection Conference, 23–25, June, 2023
3. V Kadu, **S Dambhare**, A Ujjir and V Yadav, "Development of Standalone Diagnostic Extract Tool for Authoring AUTOSAR DEXT information" SAE Technical Paper, FORVIA - HELLA, COEP Technological University, April 04, 2023, pp 1-7.
4. S. Mundhe, M. Bagewadi and **S. Dambhare**, "Impedance Source Inverter for Water Pumping Application" IEEE International Power and Renewable Energy Conference (IPRECON), Dec. 15-18, 2022, pp 1-5.
5. C. Chaudhari, M. Bagewadi and **S. Dambhare**, "A Novel Dual Active Forward Converter Based Bidirectional Multiport Converter for EV Application" 4th International Conference on Smart Power & Internet Energy System (SPIES), Dec 09-12, 2022, pp 824-829.
6. V. Bhole, M. Bagewadi and **S. Dambhare**, "Multi-Input Multi-Output Hybrid Converter for Remote Islanded Application" International Conference on Electrical, Computer, Communications and Mechatronics Engineering (ICECCME), Nov 16-18, 2022, pp 1-6.
7. A. Rathod, S. Malge, S. Kanse, **S. Dambhare** and S. Patil, "Mathematical Modelling and Controller Design for Single Switch Two Stage Cascade DC-DC Boost Converter" IEEE- 2nd Asian Conference on Innovation in Technology (ASIANCON), Aug 26-28, 2022, pp 1-6.
8. A. Chaware, **S. Dambhare**, V. Pathan, and G. Mistry, "Design and Optimization of Mini-Grid PV System for Developing Country" 9th IEEE International Conference on Power Systems (ICPS), Dec 16-18, 2021, pp 1-6.
9. S. Raskar, P. Gawande and **S. Dambhare**, "Wide-Area Measurement Assisted Algorithm for Secure Backup Protection during Stressed Conditions " International Conference on Power Systems (ICPS) - 2021, IIT Kharagpur, India, Dec. 16 - Dec. 18, 2021, pp. 1-6.
10. S. Raskar, P. Gawande and **S. Dambhare**, "Wide-Area Measurement Assisted Fault Location Algorithm for Smart Grid," 2021 IEEE International Conference on Environment and Electrical Engineering and 2021 IEEE Industrial and Commercial Power Systems Europe (EEEIC / I&CPS Europe), Sept. 07-09, 2021, pp. 1-6
11. H. Ahire, P. Agrawal, S. Bannaliker, A. Kasrale, P. Gawande and **S. Dambhare**, "Modelling and Simulation of Single Ended Fault Location Algorithm for the Distributed Transmission Lines," 2021 International Conference on Electrical, Computer, Communications and Mechatronics Engineering (ICECCME), 2021, pp. 1-6
12. Holambe, P. and **Dambhare, S**, "Sensor less Robust Controller for Buck Converter using Modified Fast Terminal Sliding Surface" IEEE Kansas Power and Energy Conference (KPEC), April 2021, pp 1-6.
13. C. Chobe, P. Jagtap, M. Siddiquee, M. Bagewadi and **S. Dambhare**, "A SEPIC Based High Gain Transformer less DC-DC Converter," *2019 International Conference on Power Electronics, Control and Automation (ICPECA)*, New Delhi, India, 2019, pp. 1-6
14. P. Jagtap, C. Chobe, M. Siddiquee, M. Bagewadi and **S. Dambhare**, "Solar Photovoltaics Based Modified Power Quality Conditioner," *2019 IEEE 4th International Future Energy Electronics Conference (IFEEEC)*, Singapore, Singapore, 2019, pp. 1-6
15. Prashant Gawande and **Sanjay Dambhare**, "Pilot Scheme for System Integrity Protection during Stressed Conditions" 2019 IEEE 8th International Conference on Power Systems (ICPS), Jaipur, India, 2019, pp. 1-6.
16. Harshvardhan Kamble, Trupti Hinge and **Sanjay Dambhare**, "Improved Integrated Impedance Scheme for Series Compensated Transmission Line" 2019 IEEE 8th International Conference on Power Systems (ICPS), Jaipur, India, 2019, pp. 1-6.

17. Prashant Gawande, Trupti Hinge, **Sanjay Dambhare**, “Enhancing Distance Relay Security during system stressed conditions: Apparent power approach” Power Engineering Society General Meeting (PESGM 2017), Chicago, USA, July 17
18. Milind Bagewadi, **Sanjay Dambhare**, “Buck-Boost topology based Hybrid converter for Standalone Nanogrid Applications”, IEEE International Conference on DC Microgrids (ICDCM), Nuremberg, Germany, 27-29 June, 2017.
19. Milind Bagewadi, **Sanjay Dambhare**, “A Novel Hybrid Converter derived from buck-boost converter for Standalone Nanogrid Applications”, European Power Electronics Conference (EPEC), Warsaw, Poland, September 2017.
20. Nikhil Chaudhari, Trupti Hinge, **Sanjay Dambhare**, “Dynamic Security Analysis For Voltage Security Using Decision Trees”, TENCON IEEE, Singapore from 22-25 November, 2016.
21. Pallavi Bedekar, Prashant Gawande, **Sanjay Dambhare**, Vidyulata Joshi, “An Algorithm to Secure the Zone 3 Operation of Distance Relay”, TENCON IEEE, Singapore from 22-25 November, 2016.
22. Milind Bagewadi, **Sanjay Dambhare**, “A Single Switch Two Stage Elementary Converter based Topology For Hybrid Standalone Microgrid Applications”, TENCON IEEE, Singapore from 22-25 November, 2016.
23. Indrajeet Bhavar, Snehal Unde, **Sanjay Dambhare**, “Adaptive distance relaying scheme with fault resistance compensation”, TENCON IEEE, Singapore from 22-25 November, 2016.
24. Nikhil Chaudhari, Trupti Hinge, **Sanjay Dambhare**, “Blocking of Distance Relays Zone3 under Load Encroachment Conditions Using Decision Tree Technique”, 7th POWER INDIA International Conference, November 25-27, 2016 IEEE, Govt. Engineering College Bikaner, Rajasthan, India.
25. P Bharti, A Dehankar, S Raut, S Unde, **S S Dambhare**, “Comparative analysis of fault resistance compensation methods for mutually coupled parallel transmission lines”, 7th POWER INDIA International Conference, November 25-27, 2016 IEEE, Govt. Engineering College Bikaner, Rajasthan, India.
26. V Phadke, S Pathradkar, A Rajput, S Unde, **S Dambhare**, “Distance protection of lines connected to doubly fed induction generator based wind farms”, 7th POWER INDIA International Conference, November 25-27, 2016 IEEE, Govt. Engineering College Bikaner, Rajasthan, India.
27. Trupti Hinge, **Sanjay Dambhare**, “Novel Fault Location Algorithm for Transmission Line using Synchronized Measurements”, IEEE Power and Energy Society Transmission & Distribution Conference & Exposition, May 2-5, 2016.
28. Prashant Gawande, **Sanjay Dambhare**, “A Novel Algorithm to Detect Symmetrical Faults during Power Swing for a Double Circuit Multi-Terminal Transmission Line”, IEEE Power and Energy Society Transmission & Distribution Conference & Exposition, May 2-5, 2016.
29. S. Unde and **S. Dambhare**, “PMU based Fault Location of Double Circuit Transmission Line in Modal Domain” Power Engineering Society General Meeting (PESGM 2016), Boston, MA, USA
30. Prashant Gawande, **Sanjay Dambhare**, “A Novel Unblocking Function for Distance Relay to Detect Symmetrical Faults during Power Swing” Power Engineering Society General Meeting (PESGM 2016), Boston, MA, USA
31. Trupti Hinge, **Sanjay Dambhare**, “New Ground Fault location Algorithm for Transmission Line using Synchrophasors”, The 13th IET International Conference on Developments in power system Protection during 7 - 10 March 2016 at Edinburgh, Scotland, United Kingdom.
32. Prashant Gawande, **Sanjay Dambhare**, “Enhancing Security of distance relays during power swing unblocking function for double circuit transmission lines: A differential power approach”, The 13th IET International Conference on Developments in power system Protection during 7 - 10 March 2016 at Edinburgh, Scotland, United Kingdom.

33. Snehal Unde, **Sanjay Dambhare**, “Double Circuit Transmission Line Parameter Estimation Using PMU”, 6th IEEE International Conference on Power Systems, (ICPS 2016) 4-6 March 2016 at Indian Institute of Technology Delhi, New Delhi, India.
34. Prashant Gawande, Pallavi Bedekar, Milind Bagewadi, **Sanjay Dambhare**, “An Adaptive Distance Relay Protection Scheme for Enhanced Protection Security”, 6th IEEE International Conference on Power Systems, (ICPS 2016) 4-6 March 2016 at Indian Institute of Technology Delhi, New Delhi, India.
35. Trupti Hinge, **Sanjay Dambhare**, “Accurate Phase Comparison Scheme with Synchronised Measurements”, IEEE Power and Energy Society General Meeting at Denver, Colorado at USA, 26 July 15 to 30 July 15.
36. Anamika Yadav, Bhupendra Kumar, **Sanjay S. Dambhare**, “Fault Detection & Location on a Transmission line Using GPS Synchronized Phasor Measurement”, National Conference on Power System Protection at CPRI on dated 27-28 Feb 2015
37. Trupti Hinge, **Sanjay Dambhare**, “Secure Backup Protection of Transmission line using WAMS”, International Conference on Power Electronics, Drives and Energy Systems (PEDES), 2014 IEEE, 16th-19th Dec 2014, IIT Bombay, Maharashtra, India
38. Prashant Gawande, **Sanjay Dambhare**, “Protection and Fault Identification in Presence of Power Swing Blocking/Unblocking Function”, Power and Energy Society General Meeting, July 2013, IEEE
39. Prachi S. Pawar, **Sanjay S. Dambhare**, “Measurement-Based Impedance Estimation of Compensated Large power systems”, 5th International Conference on Computer Applications in Electrical Engineering - Recent Advances-2013
40. Prakash R. Suryawanshi, **Dr. S. S. Dambhare**, Dr. A. Pramanik, “Detection of Wave Propagation Delays using Synchronized Phasor Measurements”, CERA 13, 5th International Conference on Computer Applications in Electrical Engineering - Recent Advances-2013
41. Samarpita Bakshi, Snehal V. Unde, **Sanjay S. Dambhare**, “Induction Motor Control for Hybrid Electric Vehicle Application using Hardware in Loop (HIL) Simulation”, CERA 13, 5th International Conference on Computer Applications in Electrical Engineering - Recent Advances-2013
42. Azhar Ahmed, Singh A. R. and **Dambhare S. S.**, “New Modified First Zone Algorithm for Protection of Series-Compensated Transmission Line”, 5th IEEE International POWER INDIA conference, Delhi, India, Dec. 19-22, 2012
43. Vinaya Ambekar, **Sanjay Dambhare**, “Out of Step detection using synchronized swing impedance and resistance measurement”, IET Conference on Developments in Power System Protection (DPSP 2012), UK, Apr 12.
44. Atul Dahane, **Sanjay Dambhare**, “A novel algorithm for differential protection of untransposed transmission line using synchronized measurements”, IET Conference on Developments in Power System Protection (DPSP 2012), UK, Apr 12.
45. Snehal Unde, **Dambhare S.**, “Current Differential Protection Scheme for Multi-terminal Transmission Lines considering Line Charging Current”, Power and Energy Society General Meeting, July 2012 IEEE, Page(s):1
46. Singh, Arvind R., Arif Ahmed, and **Sanjay Dambhare**, “Robust distance protection of mid-point shunt compensated transmission line.” Fifth Power India Conference, IEEE 2012.
47. Vinaya Ambekar, **Sanjay Dambhare**, “Comparative Evaluation of Power Swing Detection Schemes for Distance Relays”, IEEE International Conference on Innovative Smart Grid Technologies, ISGT-EUROPE 2011, Manchester, UK, Dec. 2011

48. Vinaya Ambekar, **Sanjay Dambhare**, "Power swing detection using synchronized frequency and Angle Measurement", Centenary conference in Electrical Engineering, Indian Institute of Science, Bangalore, India, Dec. 2011.
49. Snehal Unde, **Sanjay Dambhare**, "A Novel Current Differential Protection Scheme for Multi-terminal transmission Lines", Centenary conference in Electrical Engineering, Indian Institute of Science, Bangalore, India, Dec. 2011.
50. Snehal Unde, **Sanjay Dambhare**, "GPS Synchronised Current Differential Protection of Mutually Coupled Line", International Conference on Power and Energy Systems ICPS2011, Chennai, India, Dec. 2011.
51. Singh A. R., Azhar Ahmed and **Dambhare S. S.**, "Reliable Distance Protection scheme for Midpoint Shunt-Compensated Transmission line using Synchronized Measurements", 5th International conference on Quality, Reliability and Information Technology, Kathmandu, Nepal, Dec. 2011
52. **Dambhare S.**, Soman S., Chandorkar M., "Current Differential Protection of Transmission Line Using Moving Window Averaging Technique", Power and Energy Society General Meeting, 2010 IEEE, Page(s):1
53. **Dambhare**, Soman S., Chandorkar M., "Adaptive Current Differential Protection Schemes for Transmission Line Protection", Power and Energy Society General Meeting, 2010 IEEE, Page(s):1
54. **Dambhare S.**, Karthik M., Deshpande A., "A New Technique for Current differential protection of Transformer", 2010 Large Engineering System Conference on Power Engineering, (LESCOPE- 2010), Halifax, Canada, Aug. 23-25, 2010.
55. **Sanjay Dambhare**, S. A. Soman, M. C. Chandorkar, "A GPS Synchronized Current Differential Protection of Transmission Lines", 16th International Conference on Power System Computation, (PSCC-2008), Glasgow, Scotland, July 14-18, 2008.
56. **Sanjay Dambhare**, S. A. Soman, M. C. Chandorkar, "Optimal Zero Injection Considerations in PMU Placement: An ILP Approach", 16th International Conference on Power System Computation, (PSCC-2008), Glasgow, Scotland, July 14-18, 2008.
57. **Sanjay Dambhare**, S. A. Soman, M. C. Chandorkar, "Novel Sensitive Current Differential Protection of Transmission Lines", IEEE International Conference, POWERCON 2008 & 2008 IEEE Power India Conference, New Delhi, India, October 12-15, 2008.
58. **Sanjay Dambhare**, Nandkishor Kinhekar, S. A. Soman, M. C. Chandorkar, "ATP-EMTP Analysis of Series Compensated Lines", International Conference on Power System Protection 2007 (ICPSP-2007), CPRI, Bangalore, India, February 20-21, 2007.
59. M. Umamaheshwara Rao, **Sanjay Dambhare**, Gopal Gajjar "Steady State and Transient Performance of Numerical Algorithms for Distance Relays", 15th International Power System Protection Conference 2006 (IPSPC- 2006), Bled, Slovenia, September 2006.
60. B. N. Chaudhury, S. S. Wekhande, **Sanjay Dambhare**, S.S. Dhamse, "New Energy Efficient Drive for Two Phase Induction Motor With Minimum Switching Losses", IEEE International Conference on Industrial Technology, IEEE-ICIT, Goa(India), Jan. 19-22, 2000.
61. B. N. Chaudhury, S. S. Wekhande, **Sanjay Dambhare**, S. S. Dhamse, "A Low-Cost High Performance Sinusoidal Pulse Width Modulated Inverter", IEEE International Conference on Power Electronics Drives and System, IEEE-PEDS, Hong Kong, May, 1999.

National Conferences:

- 1.
2. Rutuja Power, Pranshant Gawande and **Sanjay Dambhare**, “Development of Online Coherency Detection Algorithm” 22nd National Power System Conference (NPSC), 17 – 19 December 2022 at IIT-Delhi.
3. Gargi Mahajan, Prashant Gawande, **Sanjay Dambhare** and Anant Mahajan, “Algorithm for Development of Early Warning Signal for Transient Stability” 22nd National Power System Conference (NPSC), 17 – 19 December 2022 at IIT-Delhi.
4. P. Holambe, S. Dambhare and M. Bagewadi “Sliding Mode Controller for Inverting Buck Boost Derived Hybrid Converter with Simultaneous DC and AC output” National Power Electronics Conference (NPEC), 15-17 December 2021 at IIT Bhubaneswar.
5. Pratik Dhopte, Snehal Unde, Prashant Gawande, **Sanjay Dambhare**, “A New Protection Scheme for Three-Terminal Mutually Coupled Transmission Line”, 20th National Power Systems Conference (NPSC 2018), 14 - 16 December 2018 at NIT Tiruchirappalli.
6. Trupti P. Hinge, **Sanjay S. Dambhare**, ”A Novel Approach for Calibration of Instrument Transformers using Synchrophasors” Ninetieth National Power Systems Conference NPSC-2016, 19 - 21 December 2016 at IIT Bhubaneswar.
7. Prashant Gawande, **Sanjay S. Dambhare**, ”Secure Third Zone Operation of Distance Relay using Impedance Prediction Approach” Ninetieth National Power Systems Conference NPSC-2016, 19 - 21 December 2016 at IIT Bhubaneswar.
8. Snehal Unde, **Sanjay Dambhare**, “Differential Protection of Mutually Coupled Lines in Modal Domain Using Synchronized Measurements”, Ninetieth National Power Systems Conference NPSC-2016, 19 - 21 December 2016 at IIT Bhubaneswar.

Guided/Co-authored UG student’s paper: 07

Ph.D. Dissertation:

Ph. D., Indian Institute of Technology- Bombay, Mumbai, Jan 2009, Thesis Title- Algorithms to Improve Sensitivity of Current Differential Protection Schemes for Transmission Line Protection.

M. Tech. Dissertation:

Unified Power Flow Control of Transmission Line (Design, Modeling and Simulation of UPFC using PSCAD/EMTDC)

Technical Project Report:

“Technical Studies to Assess State Level Additional Transmission System Requirements in Western Region of India (132 kV and above, 10th & 11th Plan Period) Volume I and Volume II”, Submitted to PFC Ltd., Govt. of India, New Delhi, Principal Investigator: Prof. S. A. Soman, IIT- Bombay, March 2006.

Ph. D. Progress Report:

Adaptive Distance Protection of Series Compensated Lines

Ph. D. Progress Report:

Generation Rescheduling Based Method to Reduce the Intensity of Power Swing: A Distance Relaying Perspective

3. Technical Areas of Current Interest:

Smart grid, power system protection (numerical protection, WAM, PMU), power system planning, power electronics applications in power system (HVDC and FACTS), power system analysis, power system computation, power electronics and drives, micro grid.

4. Educational Qualifications:

1. Ph. D., Indian Institute of Technology- Bombay, Mumbai, Jan 2009, Thesis Title- Algorithms to Improve Sensitivity of Current Differential Protection Schemes for Transmission Line Protection.
2. M. Tech. (Electrical Engineering with Power Electronics and Power System as specialization) from Indian Institute of Technology-Bombay, Mumbai in January 1998 (CPI 8.16 to 10 point scale). Dissertation topic- Unified Power Flow Control of a Transmission Line.
3. GATE (Graduate Aptitude Test in Engineering) Score – 92.75 Percentile.
4. B.E. (Electronics and Power Engineering) from Visvesvaraya National Institute of Technology (formerly Visvesvaraya Regional College of Engineering) Nagpur, in June 1989 (in First Class with 66.64%, in top 10 %).
5. Diploma (Electrical Engineering) from Government Polytechnic Nagpur, in June 1986 (in Distinction with 75.91%, second position).
6. Diploma (Information Technology-three month duration) of C-DAC Pune, ACTS Pune and ADCC Research and Computing Centre, Nagpur, in Nov. 1998 (Grade- A).
7. SSC from Prakash High School, Malegaon, Dist. Nagpur, in May 1983 (in Disn., 81.57%).
8. Confirmatory Test of Computer Training for Govt. Employees, conducted by Board of Technical Examination, Maharashtra State, Mumbai, in Oct. 2002.
9. Post Graduate Diploma in Industrial Management (first year only), from Nagpur University, in March 1990.

5. Experience:

1. 1st July 2012 to 31 Jan 2016 & 1st Jan 2019 to till date, worked as Head of Electrical Engineering Department, at College of Engineering, Pune
2. From 8th March 2011 to till date, working as Professor in Electrical Engineering, at College of Engineering, Pune. (Institute selection)
3. 1st Jan 2006 to 7th March 2011, worked as Associate Professor in Electrical Engineering, at College of Engineering, Pune. (Institute selection)
4. 1st August 2003 to 31st December 2005, worked as Lecturer (Selection Grade) in Electrical Engineering, at College of Engineering, Pune.
5. ** 27th July 2004 to 11th July 2008 worked as Ph.D. Research Scholar at PowerAnser Lab, Department of Electrical Engineering, Indian Institute of Technology, Bombay, Mumbai, under the guidance of Prof. S.A. Soman and Prof. M.C. Chandorkar. This was under QIP scheme of Govt. of India and on deputation from College of Engineering, Pune.
6. 13th November 1998 to 31st July 2003, worked as Lecturer (Sr. Scale/Selection Grade) in Electrical Engineering, at Govt. College of Engineering, Amravati. (MPSC selection)
7. 20th October 1992 to 12th November 1998, worked as Lecturer/ Sr. Lecturer in Electrical Engineering, at Govt. Polytechnic, Nagpur. (MPSC selection)
8. 1st August 1989 to 31st August 1992, worked as Lecturer in Electrical Engineering, at K.D.K. College of Engineering, Nagpur. (UGC selection)

9. 30th Sept.1992 to 20th October 1992, worked as Junior Engineer (Gen. Trainee) in Maharashtra State Electricity Board at Chandrapur Super Thermal Power Station, Chandrapur.

6. Consultancy/Sponsored/Academic Project (Ongoing/Completed/Guided/):

1. Principal Investigator: Center of Excellence in “Smart Renewable Energy System” to be established at COEP, Pune.
2. Consultancy Project, ‘Verification of Electrical Instruments and Installation Design” Jan 2015, Gharapure Engg. & Constructions, Pune
3. Consultancy Project, ‘Third Party Technical Audit of Electrical works of PMC’, 2014
4. Consultancy Project, ‘Third party Technical audit of electrification works in AMC, July 2013
5. Consultancy project, “Electromagnetic switching transient overvoltage study for Qatar Petroleum”, FICHTNER Consulting Engineers (I) Pvt. Ltd. Navi Mumbai, Feb. 2009.
6. Consultancy project, “Transformer fire protection system”, CTR Mfg Ind Ltd., Pune, Sept. 2009.
7. Consultancy project, “Design of resistance for 500 kV impulse generator”, I-Design, Engineering Solutions Ltd., Pune, Oct. 2009.
8. Consultancy project, “Inspection of LVAC and HVAC installation”, BOSH Chassis System, Pune, Oct. 2009.
9. Academic/research project, “Synchronized frequency measurement of W-R grid of India”, in collaboration with IIT-B, Mumbai, June 2009.
10. Consultancy project (Govt. of India’s-Power Finance Corporation), “Technical Studies to Assess State Level Additional Transmission System Requirements in Western Region of India (132 kV and above, 10th & 11th Plan Period)”, Principal Investigator: Prof. S. A. Soman, IIT-Bombay, and March 2006.
11. Academic project, “Low Cost Automatic Control of Green House Using Micro-controller”, sponsored by Department of Botany, Amravati University, Amravati, May 2003.
12. DST project entitled, “Energy Efficient Machines”, Principal Investigator: Prof. B.N. Chaudhary, at College of Engineering, Pune, and May 2004.
13. Sponsored Research Project AICTE RPS 2014, “WAM based Distance Protection Scheme” of 13 lakhs.
14. Consultancy Project, “Development of Test Bench and Evaluation of Solar System”, 2015, Mahindra and Mahindra Mumbai
15. 3rd Party Technical Audit, Chief Officer Dahanu, Municipal Council Dahanu, 02/02/2017 to 28/02/2017.
16. 3rd Party Technical Audit of Electrification work LED streetlight, Chief Officer Talegaon Dabhade Municipal Council Talegaon Dabhade, 25/03/2018 Four Days.
17. 3rd Party Technical Audit Street Light, Lonawala Municipality Council, 01/08/2017 Two Days.
18. 3rd Party Technical Audit of Electrification work LED streetlight, Ms. Sumi Electrical Services, Pune Daund, Municipal Council Daund, 09/01/2018.
19. 3rd Party Technical Audit of Electrification work LED streetlight, Chief Officer Talegaon Dabhade Municipal Council Talegaon Dabhade, 28/02/2018.
20. 3rd Party Technical Audit of Electrification work LED streetlight, Shanti Electricals, 30/03/2018.
21. Design and drawing vetting of 2MW power solar PV plant, Saurshakti Solar Pvt.Ltd. Pune, 12/07/2018 to 16/07/2018.
22. 3rd Party Technical Audit of Electrification work LED streetlight, Chief Officer Talegaon Dabhade Municipal Council Talegaon Dabhade, 10/09/2018.
23. Setting the test setup for UPS Battery system witnessing the testing at factory, Electro Power LTD. 230, S.N. Roy Road, Kolkata 700038, 23/10/2018

24. Setting the test setup for UPS Battery system witnessing the testing at factory, Eram Magnaflux Systems Pvt.Ltd. Pirangut, Pune, 23/10/2018.
25. Technical Auditing of D.G.Set, Chief Officer Alandi Municipal Council Alandi. 07/01/2019.
26. 3rd Party Technical Audit of Electrification work LED streetlight, Chief Officer Shrigonda Municipal Council Shrigonda Dist: A, Nagar, 04/08/2019.
27. Implementation of high impact street light by installing energy efficiency dimmable (LED street lights along with SCADA system), Pune Municipal Corporation, 20/12/2018- Dec 2019.
28. Mukhyadhikari Lonavala Nagar Parishad, Tal: Maval , Dist:pune 3208 24/11/2020
29. Talegav Dabhade Nagar Parishad, Dist:pune CW-2954 27/07/2020
30. Talegav Dabhade Nagar Parishad, Dist:pune CW-2964
31. Talegav Dabhade Nagar Parishad, Dist:pune CW-3053 28/08/2020
32. Co,Shirdi Nagar Panchayat Shirdi Tal: Rahata, Dist:Ahmadnagar 5/2/2021
33. Industry Sponsored PG and UG Project completed: 10.
34. Summer Inter guided: 5 National and 2 International students.

7. Invited as Reviewer:

1. International Journals of Elsevier
2. International Journal of Engineering, Science and Technology (IJEST)
3. International Journal of Power and Energy Conversion (IJPEC)
4. The IET Generation, Transmission and Distribution
5. IEEE Power Energy Society General Meeting.
6. IEEE International Symposium on Circuits and Systems-ISCAS
7. IEEE PES Transmission and Distribution Conference and Exposition
8. IEEE Transactions on Power Delivery
9. IEEE Transactions on Power Systems
10. IEEE Access

8. Courses/ Workshops & Trainings conducted/Organized (Worked as Coordinator And faculty):

1. Conducted 5 days Faculty Development Program on “Advanced Power System Protection” from 1st December to 5th December 2020.
2. Conducted 5 days Faculty Development Program on “Renewable Energy Integration and Energy Storage” under ATAL academy, 21 sept-25 Sept 2020.
3. Two days workshop on “Do it yourself Embedded Systems” on dated 11-12 Dec 2014 at COE Pune.
4. Two days workshop on “Solar and Smart Energy System- Roboversity” on dated 27th – 28th Sept 2014 at Electrical Dept.
5. Workshop on “Indo-German Winter Academy” at COEP, from 24th-30th November 2013 under Center of Excellence in Signal and Image processing and Center of Excellence in Smart and Renewable Energy Systems.
6. Smart Grid Bootcamp organized by India Smart Grid Forum in association with Electrical dept, COE, Pune on dated 20th Sept 2014.
7. One Day workshop on “Introduction to Advanced Electronics and DSP boards” organized at CoE, Pune on 5th December 2013 sponsored by Texas Instruments.

8. Workshop on “Power System Analysis software- DigSILENT Power Factory” under Center of Excellence for Smart and Renewable Energy Systems organized at Department of Electrical Engineering, CoE Pune from 22nd -24th July 2014.
9. CEP on “Numerical Protection, WAMs and Smart Grid” at L & T Switchgear Design and Development Center, Powai, Mumbai, Sept. 16-17, 2010(two days).
10. CEP on “Numerical Protection” at Global R & D center, Crompton Greaves, Mumbai, July. 8-10, 2010 (three days).
11. Workshop on,” Low Power Embedded System Design using MSP430 ’, organized at College of Engineering, Pune, May. 19-20, 2010 (two days).
12. Workshop on,” Circuit Simulation’, organized at College of Engineering, Pune, May. 16-17, 2009 (two days).
13. Workshop on,” Simulation Software's for Electrical Engineering’, sponsored by Trident Tech. Lab, Pune and organized at College of Engineering, Pune, Sept. 19, 20 and 21 2003 (three days).
14. Workshop on,” Electronics Workbench- A Simulation Package”, at Govt. College of Engineering, Amravati, Nov. 30 2002 (one day).
15. Staff Development Cell Training Program on,” Electrical Safety and Energy Conservation”, at Govt. Polytechnic, Nagpur, June 8- 12 1998 (one week).
16. Organized International University at COEP in association with Ostfalia University of applied sciences Germany April 2014
17. Worked as organizing committee member of five International/National Conferences: ICTIEE 2015 Pune, ICIIC 2015 Pune, S.P. College of Engg., Mumbai
18. Organized National Conference on Power Electronics (NPEC 2017- as Co-convener) on 18th -20th Dec 2017 and International Conference on Power System (ICPS 2017 - as Convener) on 21st -23rd Dec 2017 at College Of Engineering Pune, India.

9. Invited Lectures / Worked as Resource Person:

1. Invited for Expert Lectures in Government College of Engineering Karad, in May- 2020.
2. Invited for Expert Lectures in PVG COET, Pune in May- 2020.
3. Invited for Expert lecture on “Advanced Protection Schemes for Transmission Lines” 25th November 2016 at National University of Singapore.
4. Invited for Expert lecture on “Smart Grid Issues and challenges” 14th March 2016 at K. D. K. College of Engg. ,Nagpur
5. Expert lecture on “Smart Grid, 27 Feb 2016 C. V. Raman College of Engg., Bhuvaneshwar.
6. National workshop at Central Power Research Institute (CPRI), Bangalore,”Wide Area Measurement Protection and Control” Sept 2015.
7. DRDO Pune,” FACTS” Sept 2015.
8. North Eastern University Boston USA July 2015.
9. Emerging Trends in Electrical Engineering, Amrutvahini C.O.E, Sangamner, 27 Feb 2015
10. Sensing and Measurement techniques in smart transmission grid, Dnyanganga C.O.E & Research-Pune on 7 Jan 2015
11. Talk on TEQUIP related activities happening at C.O.E.P, JJMCE Jaysingpure on Sept 2014
12. Orientation Lecture for “Avishkar Orientation Lecture-2014” on “Project Guidelines” at Vidya Pratishthan’s College of Engineering, Baramati on dated 19th Sept. 2014.

13. Orientation Lecture for “Avishkar Orientation Lecture-2014” on “Project Guidelines” at Modern College of Engineering on dated 17th Sept. 2014.
14. Orientation Lecture for “Avishkar-2014” on “Project Guidelines” at AISSMS Institute of Information Technology on dated 16th Sept. 2014.
15. A seminar on “Power System and Energy Management Impact on Military Infrastructure Development” at College of Military Engineering on dated 17-18 July 2014
16. Expert lecture on the topic “Smart Grid : Wide area measurement Based Control, Protection and Automation” on December 18, 2013 in the National Level Workshop “Emerging Technologies in Smart Grid” at K. K. Wagh Institute of Engg Education and Research, Nashik from December 17, 2013 to December 19, 2013.
17. Expert lecture on “Smart Grid Issues and challenges” under sponsorship of TEQUIP-II from 16th- 20th December 2013 at Dr. Babasaheb Ambedkar Technological University, Lonere Raigad (MS) India.
18. Expert lecture on “Power electronics in Smart Grids, HVDC and FACTS and Grid Integration” on 17th Dec 2013 as a part of the workshop titled “Advanced Power Electronics Applications [APEA-13]” 17th- 21st Dec 2013 at RVCE, Bangalore-59.
19. Resource person for one day workshop on “Innovation”, funded by BCUD, University of Pune at Padmashri Dr. Vithalrao Vikhe Patil College of Engg, Ahmednagar on dated 13th December 2013.
20. Resource Person for AICTE sponsored Two Days Workshop on “Emerging Trends and Applications of Solar Systems- Solar Energy and Smart Grid”, at YCCE, Nagpur on dated 6th Dec 2013.
21. Resource Person for AICTE sponsored National level seminar on “Artificial Intelligence and its Application in Transmission line Protection”, at G. H. Raisonni Institute of Engg and Technology Pune on dated 19th Nov 2013.
22. Resource person for National Level Workshop on “Smart Grid Technologies” in association with University of Pune at PES’s Modern college of Engineering, Pune on dated 23rd-24th September 2013.
23. Resource person for “A state Level Two Days Workshop on PSCAD”, at S. B. Patil College of Engineering, Indapur, Dist: Pune on dated 21st-22nd September 2013.
24. Resource person for Two days workshop on “Smart Grid Issues and Challenges”, at Dr. Babasaheb Ambedkar Technological University, Lonere Raigad (MS) India on dated 16th- 17th August 2013.
25. Resource person for A six week customized course on Communication systems: Inverters, Resonant Pulse Converters, Cyclo-converters, AC voltage controllers in power systems at DIAT, Girinagar, Pune on dated 5th November 2013 to 14th December 2013.
26. “WAMs for Smart Grid: protection, control and automation”, in National Workshop on “Emerging Technologies in Smart Grid”, organized by K. K. Wagh Institute of Engineering Education and Research, Nashik, 15 Nov. 2011.
27. “Wide Area Measurement System”, at SSGM College of Engineering, Shegaon, 26 Feb. 2011.
28. “Smart Power Transmission system”, in National Workshop on “Emerging Technologies in Smart Grid”, organized by K. K. Wagh Institute of Engineering Education and Research, Nashik, 5 Dec. 2010.
29. “Advanced power transmission system”, at Government Polytechnic, Nagpur, 8 Sept. 2010.
30. “Inverters and their applications”, in CEP course on "Advances in power electronics", organized by DRDO, Dighi, Pune, 10 Aug. 2010.
31. “Transmission system protection”, in MHRD short term training programme, organized by S. V. National Institute of Technology, Surat, 23 Dec. 2009.
32. “ATP-EMTP Applications for Research in Transmission System Protection”, and “Introduction to Alternative Transients Program (ATP)” in MHRD short term training programme, organized by Visvesvaraya National Institute of Technology, Nagpur, 13 Nov. 2009.

33. “High Voltage DC Transmission (HVDC) and Flexible AC Transmission System (FACTS) Technology”, in ISTE short term training programme organized by Govt. College of Engineering, Karad, Dec. 2003.
34. Resource person for the training programme on,” Computer Awareness for Ministerial Staff”, sponsored by Directorate of Technical Education (SPIU under WBAP), Mumbai, organized at Govt Polytechnic, Nagpur, June 3-15, 1996.
35. Resource person for the workshop on,” Development of Learning Materials”, sponsored by Directorate of Technical Education (SPIU under WBAP), Mumbai, organized at Govt Polytechnic, Nagpur, Jan 29, 30 and 31, 1996.
36. Resource person for the training programme on, “Computer Awareness Programme”, sponsored by Directorate of Technical Education (SPIU under WBAP), Mumbai, organized at Govt Polytechnic, Nagpur, Oct 9-21, 1995(for two weeks).

** And the list is long, Total Lectures Delivered is around 40.

10. Membership of Professional Bodies:

1. IEEE - Member, No: 90864461
2. Institutions of Engineers-India(IE), M120844-0-Life Member
3. Institution of Electronics and Telecom. Engineers-India(IETE), M155635- Life Member
4. Indian Society of Technical Education-India(ISTE),LM37990- Life Member
5. The Institution of Engineering and Technology (IET)-Member No. 1100315580

11. Awards/ Prices/ Rank/Appreciation:

1. Was selected as faculty at IIT Gandhinagar in July 2010.
2. Selected as a Professor of Electrical Engg., Govt. Engg. College by MPSC Jan 2016.
3. Recognised as Who's Who in the World by Marquis Who's Who-2011.
4. Recipient of Broad Outlook Learner Teacher (BOLT) Award (in the State of Maharashtra for 1st place in Mumbai District), instituted by Air India to recognize excellence outside the field of academics for teachers, toward responsible and active citizenship, April 2007.
5. Recipient of Rashtriya Gaurav Award of India International Friendship Society, New Delhi for Excellence and achievements in the chosen field, Jan.2005.
6. Secured Second position in Gladiator-E-Summit 2005 competition at Indian Institute of Technology- Bombay, Mumbai, Sept. 16-20, 2005.
7. Second Rank in Diploma (Electrical Engineering) – Nagpur Regional level (& 6th in Mah. State)
8. Recipient of Kai. Vithuji Patil Dange Award for outstanding student and best performance in SSC Exam.
9. First Rank in SSC Exam. at Tahasil (Taluka) level (and also from 1st to 10th Std. in school)
10. Received Certificate of Appreciation from Principal, Govt. College of Engineering, Pune.
11. Received Certificate of Appreciation from Principal, Govt. Polytechnic, Nagpur.
12. Received Certificate of Appreciation from Director, College of Engg., Pune
13. Received Certificate of Appreciation from Chairman MPSC Mumbai.

12. Scholarship:

1. National Merit Scholarship : During B.E. (for three years)
2. National Merit Scholarship : During Diploma in Electrical Engineering (for three years)
3. Secondary School Scholarship (Department of Education, Govt. of Maharashtra State)
: During 7th to 10th Standard (for four years)
4. QIP and GATE Scholarship during Ph.D. and M.Tech at IIT Bombay.

13. Courses Studied at IIT-B, Mumbai:

During Ph.D.: 1) Digital Protection 2) Applications of Power Electronics to Power System
3) Electrical Machines Analysis, 4) Power System Dynamics and Control 5) Microprocessor
Applications in Power Electronics, 6) A First Course in Optimization, 7) Applied Linear Algebra
8) Communication and Presentation Skills, 9) Course Seminar: Grounding & Ground Fault Protection of Midsize,
Medium Voltage Generator.

During M. Tech.:

1) Electrical Machine Analysis 2) Solid State Power Controlled Drives 3) Special Topics in Power Systems
Analysis 4) Switchgear Principles 5) Information Systems 6) Power Systems Economics
7) HVDC Transmission 8) Artificial Neural Network 9) Course Seminar: Optimal Capacitor Placement in Power
System 10) Mini Project: Fast Decoupled Load Flow Method (Software Development)

14. Computer Skills:

Operating Systems: Windows, UNIX, Linux, DOS

Packages/Softwares/Languages: DigSilent, PSCAD/EMTDC, ATP/EMTP, MATLAB, ETAP, PSPICE,
SEQUEL, AUTOCAD, Mipower, Scilab, Tomlab, Labview, SKM power tool, PSIM, Power
World Simulator, Multi-Sim, Motor-Pro, Relay Co-ordination Software, Short Circuit Studies
Software, Load Flow Studies Software, Transient Stability Programme, FORTRAN, C++,

DSP: TMS320 F240

HIL: Dspace 1202, OpelaRT 4510

15. Conferences/ Conventions/ Courses/ Workshops & Trainings Attended:

International Summer University:

1. International Summer University (ISU) at Ostfalia University of Applied Sciences Braunschweig,
Wolfenbittel, Germany, May 7 to 19, 2012.

Conferences/ Conventions/ Symposium:

1. NPSC, IIT BHUBANESWAR, DEC.2016
2. TENCON, DEC.2016, Singapore
3. ICDM, JUNE 2017, Germany
4. PESGM, July 2017, Chicago
5. NPSC, DEC.2018, NIIRI
6. ICPS, at IIT Delhi, 4-6 March 2016
7. IEEE PES GM, 2015 at Denver USA
8. NPEC 2015 IIT Bombay
9. PEDES 2014 IIT Bombay
10. IEEE PES GM, 2013 Vancouver Canada
11. CERA 2013 at IIT Roorkee
12. Instrumentation and Control Conference 2015 at COE, Pune
13. ICTIEE at COE, Pune
9. Centenary Conference, held at IISc Bangalore, December, 2012.
10. ICPS Conference, held at IIT Madras, December, 2012.
11. National seminar on "Microgrid in Indian power system", held at Institute of Engineers, India, Pune

local center, Pune, June. 6-7, 2011.

12. National Power System Conference 2008(NPSC-2008), held at Indian Institute of Technology-Bombay, Mumbai, Dec. 16-17, 2008.
13. International Conference on Power System Protection 2007(ICPSP-2007), organized by Central Power Research Institute, Bangalore, February 20-21, 2007.
14. National Power Electronics Conference 2003 (NPEC-2003), held at Indian Institute of Technology-Bombay, Mumbai, Oct. 16-17, 2003.
15. PANIIT Global IIT Alumni Conference, held at BKC, Mumbai, December 23-25, 2006.
16. 76th Annual Session and Symposium on “Science and Technology in the Service of Society”, of National Academy of Science-India, held at Indian Institute of Technology-Bombay, Mumbai, Oct. 5-8, 2006.
17. National Seminar on “Globalization and National Integrity”, organized by India International Friendship Society, New Delhi, at Cricket Club of India, Mumbai, Jan.2005.
18. XXV Annual Convention of Indian Society of Technical Education, India held at Visvesvaraya National Institute of Technology (formerly Visvesvaraya Regional College of Engineering) Nagpur, Dec. 29-31, 1995.

One Week Programs:

1. Management capacity Enhancement Program organized by Indian Institute of Management Udaypur April 2015
2. Special series of lectures on, “Solar Cells”, organized by Indian Institute of Technology- Bombay, Mumbai, Jan. 12-22, 2007 (ten days).
3. QIP Short Term course on, “Digital Control”, organized by Indian Institute of Technology-Bombay, Mumbai, June 20-24, 2005.
4. Workshop on,” ICT for Information Management in S & T Institutions”, organized by Indian Institute of Technology- Bombay, Mumbai, May. 16-20, 2005.
5. QIP Early Faculty Induction Program on,” Science and Practice of Teaching”, organized by Indian Institute of Technology- Bombay, Mumbai, March. 14-18, 2005.
6. QIP course on,” Power System Operation and Control”, organized by Indian Institute of Technology-Bombay, Mumbai, Oct. 4-8, 2004.
7. QIP course on, “Automatic Control System Analysis”, organized by Indian Institute of Technology-Bombay, Mumbai, May 8-12, 2000.
8. QIP course on,” Recent Trends in Power Electronics Application”, organized by Indian Institute of Technology-Bombay, Mumbai, May 3-7, 1999.
9. Short course on,” Development of Laboratory Manuals”, organized by Technical Teachers Training Institute, Bhopal, Extension Centre Pune, April 20-24, 1998.
10. Short course on,” Training of Trainers for Induction Program”, organized by Technical Teachers Training Institute, Bhopal, Extension Centre Pune, June 24-28, 1996.
11. Workshop on,” Development of OHP Transparencies”, organized by Technical Teachers Training Institute, Bhopal, Oct. 30-Nov. 3, 1995.
12. Training program on,” Entrepreneurship Development”, sponsored by District Industries Centre, Nagpur and held at Govt. Polytechnic, Nagpur, August 5-9, 1986.

Two Weeks Programs:

1. AICTE-ISTE short term training program on,” Advances in Electrical Machines, Power Electronics and Electrical Drives”, organized by Pune Institute of Engineering and Technology (formerly, Govt. College of Engineering), Pune, Dec. 15-26, 2003.
2. AICTE-ISTE short term training program on,” Automation of Power Distribution Network for a New Millennium”, organized by Visvesvaraya National Institute of Technology (formerly Visvesvaraya Regional College of Engineering) Nagpur, Oct. 9-20, 2000.

Long Duration Programs:

1. Purdue University’s NExT course on “Hybrid Vehicles – Power Electronics and Electrical Drives” Jan 2014-Sept 2014.
2. “Certificate course on Advance Programming (C++ programming)”, conducted by Continuing Education Cell (CEP) and Quality Improvement Programme (QIP), IIT-B, May 27- July 1, 2006 (twelve weeks).
3. “Industrial Training Programme for Engineering Teachers”, jointly organized by Technical Teachers Training Institute, Bhopal, and Directorate of Technical Education (SPIU-WBPTE) Maharashtra State, at Koradi Thermal Power Station, Koradi, April 17- July 7, 1995 (twelve weeks).
4. “Induction Phase-I Training Programme for Engineering Teachers”, organized by Govt. Polytechnic, Mumbai, June 22-July 17, 1998 (four weeks).
5. “In Plant Practical Training” at Tarapur Atomic Power Station, Tarapur, June 2-29, 1988 (four weeks).
6. Pre Ph.D. contact program at by Indian Institute of Technology-Bombay, Mumbai, 2001 (eight weeks).
7. Pre Ph.D. contact program at by Indian Institute of Technology-Bombay, Mumbai, 2004 (eight weeks).

One/ Two/ Three Days Programs:

1. DST-SERC Workshop on ”Smart Energy Delivery System” organized by, Electrical Engineering Department, Indian Institute of Technology, Kanpur, Jan. 15, 2010 (one day).
2. Workshop on ”PSCAD” organized by Naik Power Corporation, Mumbai at Electrical Engineering Department, Indian Institute of Technology- Bombay, Mumbai, Jan. 19-19, 2010 (two days).
3. Workshop on ”Developments in HVDC Transmission”, organized by Electrical Engineering Department, Indian Institute of Technology- Bombay, Mumbai, Dec. 17-18, 2009 (two days).
4. Workshop on ”ETAP Real Time Enterprise Solution”, organized by KLG Systel Ltd. at Hotel Ramada Plaza, Mumbai, Oct 27, 2009 (one day).
5. Workshop on ”Faculty Development Programme ”, organized by Higher Education Forum and K. J. Somaiya Institute of Management Research, Mumbai, August 8, 2009 (one day).
6. Workshop on” Multimedia and Digital Entertainment”, organized by Electrical Engineering Department, Indian Institute of Technology- Bombay, Mumbai, Oct 13-14, 2007 (two days).
7. CEP & QIP Workshop on ”Scilab”, organized by CEP and QIP cell, Indian Institute of Technology- Bombay, Mumbai, March 7-8, 2007 (two days).
8. Workshop on” ETAP Real Time Enterprise Solution”, organized by KLG Systel Ltd. at ITC Hotel Grand Maratha Sheraton, Mumbai, February 26, 2007 (one day).
9. Workshop/Tutorial on ”Computer Relaying and Wide Area Measurements”, organized by, Central Power Research Institute, Bangalore, February 22-23, 2007 (two days).
10. Workshop on ”Supercomputers and High Performance Computing (HPC)”, organized by, Electrical Engineering Department, Indian Institute of Technology- Bombay, Mumbai, Oct 14-15, 2006 (two days).
11. Workshop on ”HVDC Applications with PSCAD”, organized by, Manitoba –HVDC Research Centre Inc. Canada and KLG Systel Ltd. Mumbai, Sept. 26-28, 2005 (three days).

12. CIGRE, Workshop (Four Tutorials) on "Role of HVDC, FACTS and Emerging Technologies in evolving power systems", organized by Committee for CIGRE India, in association with CBIP and PGCIL at Bangalore, Sept 17 and 18, 2005(two days).
13. Symposium on "Nanotechnology", organized by, Indian Institute of Technology-Bombay, Mumbai, Oct. 2 and 3 2004(two days).
14. IEE Workshop on " Fault Diagnosis and Protection of Power Equipments and Systems", organized by IEE Chapter Mumbai, Sept. 24 and 25, 2004 (two days).
15. CIGRE, IEEE and IEE Workshop on "Power Quality Monitoring, Standards and Mitigation Techniques: Practices and Trends", organized by K.K. Wagh College of Engineering, Nashik, April 30 and May 1, 2004 (two days).
16. Continuing Education Program on," Fault Analysis and Relay Coordination", organized by Indian Institute of Technology-Bombay, Mumbai, Oct.18 2003 (one day).
17. Workshop on "Internet Technology", organized by, CSEA, Indian Institute of Technology- Bombay, Mumbai, Oct.11and12 1997 (two days).
18. Workshop on "Preparation of Lab Manuals", organized by, Board of Technical Examination, Maharashtra State, Mumbai, July27 and 28 1998 (two days).
19. Workshop on "Orientation of Subjects Core Group Members for Preparation of Lab Manuals and Teacher's Guide", organized by, Govt. Polytechnic for Distance Learning, Pune, April 3, 4 and 5 1998(three days).
20. Workshop on " Development of OHP Transparencies", organized by, Govt. Polytechnic Nagpur, Jan.29, 30 and 31 1996 (three days).
21. Workshop on "Curriculum Development", organized by, Board of Technical Examination, Maharashtra State, Mumbai, July 11 and 12 1994 (two days).
22. Workshop on "Curriculum Development", organized by, Board of Technical Examination, Maharashtra State, Mumbai, June30, July 1 and 2 1994 (three days).
23. Workshop on "Quality Circle", organized by, Govt. Polytechnic Nagpur, Dec.29 and 30 1993(two days).
24. Workshop on "Learning Resources Developments", organized by, Govt. Polytechnic Nagpur, Dec.10 and 11 1993 (two days).

** As the list is long, Total number of two/three days program attended is around 40.

16. Additional Responsibilities (Administrative/Research) Shared:

1. Head of Electrical Engineering, College of Engineering, Pune since Jan 2019 to till date.
2. Head of Electrical Engineering, College of Engineering, Pune since July 2012 to 31 Jan 2016.
3. Principal Investigator of Center of Excellence- SRES at COEP since 2013.
4. Invited by Royal University Bhutan to establish B.Tech Power Engg. Programm 2014-15.
5. Recognized as Supervisor for Ph.D. program in electrical engineering of S. P. Pune University, Pune (4 Ph.D. supervision ongoing) and Sant Gadgebaba Amravati University, Amravati.
6. Worked in various capacities on AICTE, CSIR and DST, DRDO, CPRI, NBA, DTE, UGC, DSIR and other central and state Govt. Committees, PSC etc.
7. Invited as Session Chair in ICPS-2016 at IIT Delhi, CERA-13 at IIT Roorkee, NPEC-15 at IIT Bombay, Military College of Engg., at Pune, ICTIEE 2015 Pune, ICIIC 2015 Pune and other few conferences.
8. Governing body member of Alumni Association of COEP since 2014.
9. Member of Board of Governence of Gyanba Moze College of Engg., Pune 2015
10. Invited to work as technical advisor by PowerAnser Lab, IIT Bombay incubited company, 2016.

11. Member of Faculty of Engineering and Member of Board of Studies (electrical engineering) of Shivaji University, Kolhapur, Dec 2010.
12. Member of Board of Studies (electrical engineering) of Government College of Engineering, Amravati, Dec 2010.
13. Member of Board of Studies (electronics engineering) of Sardar Patel College of Engg., Mumbai
14. Member of Board of Examination committee College of Engg., Karad.
15. Included in the 2011 Edition of Who's Who in the World, which is published in November 2010 by Marquis Who's Who.
16. Invited to work as Judge for student poster contest at IEEE PES GM 2013 Vancouver, Canada and IEEE PES GM 2015 at Denver Colorado.
17. Invited to participate in IEEE working groups during IEEE General Meetings
18. Invited to work as expert by CPRI Bangalore, National Institute of Virology Pune, Thermax Pune, C-DAC Pune.
19. Developed Lab manual for Power system-I, Power system-II lab, M.Tech Simulation Lab.
20. Designed the curriculum for Smart Grid course and floated the course.
21. Administered INPOWERG (a mail group consisting of power engineering professionals in India) at Indian Institute of Technology-Bombay, Powai, Mumbai, (June 2006-August 2007).
22. Worked as State Level Incharge of Learning Resources Development and Utilisation Cell (for Electrical Engineering) under World Bank Assisted Project(WBAP) on Technical Education at Govt. Polytechnic, Nagpur.
23. Worked as Secretary of Institute Chapter of Indian Society of Technical Education, India at Govt. Polytechnic, Nagpur.
24. Worked as Lecturer in Staff Development Cell at Govt. Polytechnic, Nagpur.
25. Worked as P.G. Academic Coordinator (departmental) at Govt. College of Engineering, Amravati.
26. Worked as Warden of Boys Hostel at Govt. College of Engineering, Amravati.
27. Worked as Institute Electrical Maintenance Incharge at Govt. College of Engineering, Amravati.
28. Worked as Institute Water Supply Maintenance In-Charge at Govt. College of Engineering, Amravati.
29. Worked as PG Admission In-Charge and in Regional UG Admission Committee at Govt. College of Engineering, Amravati.
30. Worked in different capacities (like member of faculty selection committee, CAS committee, Ph.D. Progress review committee, Ph.D. Evaluator, Controller of Exam., Incharge of Valuation Centre, PG Dissertation Examiner, Chairman and Paper Setter(PG & UG), Moderator, Member of UGC Selection Committee, Member of Inspection Committee, Member of Curriculum Revision Committee, Member Lab Manuals & Learning Material Development Committee, Internal Examiner, External Examiner and Valuar) at Gujarat Technological University, RTM University Nagpur, SGB Amravati University, Marathwada University, Shivaji University, Dr. Babasaheb Ambedkar Technological University, Poona University, Mumbai University, YCM open University Nashik, Board of Technical Education, Maharashtra State and Autonomous Institutes.
31. Worked as a member of different cells like Quality Circle, Industry Institute Interaction, Curriculum Development, Autonomy and Examination.
32. Worked as Editor of the "Institution Diary cum Information Brouchure", at Govt. College of Engineering, Amravati.
33. Worked as incharge of various events in Social Gathering at Govt. College of Engineering and Govt. Polytechnic.
34. Worked as Preciding Officer for MLA and MLC Election.

- **Completed Ph. D (04): 2021**

1. Milind Bagewadi, “Novel Converter Configurations for Microgrid Applications,” (2021)
2. Prashant Gawande, “Algorithms for System Integrated Protection Schemes in Smart Grid”, 2021
3. Snehal Unde, “Protection of complex transmission network in Smart Grid”, 2021
4. Trupti Hinge, “Dynamic Security Enhancement and Protection using Synchrophasor Technology for SMART GRID”, 2018
5. Rohan Kulkarni “Modelling, development and performance analysis of solar photovoltaic / Thermal systems”, 2022

- **Ongoing Ph. D (04):**

1. Vinodini Bhole, “Optimized Switched Reluctance Motor Drive for Electric Vehicle Applications”
2. Prabhakar Holambe, “Control of Power Converters for Solar PV and Electrical Vehicle application”
3. Shivaji Raskar, “Protection Algorithm for Smart Grid”
4. Dhananjay Warthe, “Modelling and Design of Integrated Drives System to Intermittent operation for Variable speed control of motor, charging of Energy storage dives and Economical application”

17. List of M. Tech. Project Guided:

Ongoing (3):

3. Vaishnavi Dudhe, “Converter for Micro and Smart grid Application”
2. Digvijay Dabade, “Analysis of Generator Stator Earth Fault Incidences”
1. Swati Jaju, “LCR of Dual Active Forward Converter for Optimal Control for multipurpose EV vehicles”

Completed:

73. Vedanti Anil Kadu, “Hella 2”, 2022.
72. Vishnukant Gore, “Dynamic Power flow control in Single Stage Power Converter for Solar PV and Electrical vehicle application”, 2022.
71. Bhushan Phadke, “Control of voltage source converter based (STATCOM/DVR) scheme for power quality improved grid-interactive solar PV–battery system”, 2022.
70. Akash Raghunath More, “Solar PV Integration to E-Rickshaw with Regenerative Braking and Sensorless Control”, 2022.
69. Dipali Maruti Patil, “Hella 3”, 2022.
68. Aditi, “Design of Protection Relay for Sub Synchronous Oscillation (SSO) Conditions using Real Time Simulators”, 2022.
67. Gargi Anant Mahajan, “Algorithm for development of early warning indicator for transient stability using Real Time Simulators”, 2022.
66. Rutuja Rajan Powar, “Development of coherency detection algorithm using Real Time Simulators”, 2022.
65. Chaudhari Chaitanya Madhukar, “Integrated controller with MPPT functionality for Manitoba inverter”, 2022.
64. Mugali Bhagyashri Mallinath, “Matrix Converter Based Multiport Power Electronic Transformer for Hybrid Distribution Systems”, 2022.
63. Mundhe Shantanu Sudhakar, “A MMC-Based Multiport Power Electronic Transformer”, 2022.
62. Rushabh Bhandari, “Control algorithms for Decoupled inputs of MIMO DC-DC converter for solar system”.
61. Pawan Khupase, “ANN based controller with EKF based estimator for sensor less PMSM drive using LUO converter in EV application”.
60. Ashwini Chaware, “Design and optimization of PV system for minigrid in Sub-Saharan Africa”.

59. Kiran Pansare, "Designing a cost efficient standalone minigrid".
58. Dhanashree Vedpathak, "Multiport DC-DC converters".
57. Rushiraj Desai, "Luo converter in EV application and anti-lock braking in EV application, PMSM vector control".
56. Disha Wankhede, "Derive system requirements of engine ECU and model the engine to have a HIL system for the ECU testing".
55. Amey Avind Venikar, "Unified Power Quality Conditioner for PV integration into the distribution system"
54. Hemant Ramdas Katade, "High Gain DC-DC converter for PV applications"
53. Pranav Jaisinghpure, "Single phase onboard Electric Vehicle Charger", 2019
52. Ganesh Theng, "Impact of Electric Vehicles on Power Distribution Networks", 2019
51. Maitreyee Sontakke, "Synchrophasor based fault locator for mutually coupled lines", 2019
50. Gujar Abhilash, "Early Prevention Method for Power System Instability", 2019
49. Harshwardhan Kamble, "Protection of Transmission Line in Presence of FACTS Devices", 2018
48. Narendra Chalwadi, "Algorithms for Secured Distance Relay Operation", 2018
47. Saurav Datta, "Design and Implementation of Hybrid converter for Microgrid/Nanogrid Applications", 2018
46. Sarang Ugwekar, "Adaptive Protection and Control in Power System for Wide Area Blackout Prevention", 2018
45. Yash Bhatt, "Real Time Identification of Dynamic Events in Power System using PMU data", 2018
44. Vipul Patil, "Optimal PMU Placement in Distributed Network", 2017
43. Kunal Patil, "Adaptive Protection and Control in the power system for wide area blackout prevention", 2017
42. Dipali Nakade, "System Integrity Protection Scheme using synchrophasors for smart transmission grid", 2017
41. Indrajeet Bhawar, "Distance Relaying algorithm for first one protection of series compensated double circuit transmission line", 2016
40. Nikhil Chaudhary, "Dynamic Security Assessment of power system using WAMS", 2016
39. Sachin Rane, "Distance Protection of lines connected to induction generator-based Wind Farms", 2016
38. Jaydeep Suryawanshi, "Analysis of Vector Surge and Rate of Change of Frequency relays for Islanding of Distributed Generators", 2016
37. Swapnil Jambhu, "Signal Processing technique for detection, location and classification of fault in power system for smart grid application", 2015
36. Clint Jolly, "SVPWM Controlled standalone three phase PV power system based on TMS 320F 28335", 2015
35. Pavan Pohekar, "DC Microgrid", 2014
34. Harsh Vardhan Raj, "Establishment of Center of Excellence for RTDS/ development of WAM based monitoring and protection system", 2014
33. Mahesh Podtar, "Hardware implementation of Real Time Frequency and phasor estimation for smart grid applications", (Mechatronics) 2014.
32. Nigil George, "Fault resistance compensated distance relaying of mutually coupled line for smart grid", 2014
31. Samruddhi Aware, "Design, simulation and hardware fabrication of step-down DC-DC converter along with control strategies development", 2014
30. Shalini Verma, "Effect of Grid-side Control on Rotor-side control of DFIG based Wind Energy System.", June 13
29. Prakash Suryawanshi, "Analysis of Electromechanical Disturbance propagation in Interconnected Power System", June 13
28. Kashinath Shinde, "Back up Protection of transmission lines using synchrophasor", June 13
27. Ankita Shamkuwar, "Calibration of Instrument transformer errors using Synchrophasors", June 13
26. Manoj Saruk, "EHV transmission line parameter estimation using PMU's", June 13
25. Abhijit Potdar, "Islanding and Power Quality Detection for grid connected power system in presence of fault condition using Wavelet And S- Transform", June 13

24. Prachi pawar," A Measurement-Based Framework for Dynamic Equivalencing of Large Power Systems Using WAMS", June 13
23. Mahesh Mangukiya," Online voltage stability assessment using synchrophasor technology", June 13
22. Samarpita Bakshi," Induction Motor control for Hybrid Electric Vehicle application using Hardware in Loop Simulation", June 13.
21. Atul Dahane, Novel Algorithm for Protection of Untransposed Lines, College of Engineering, Pune, June 12.
20. Roshan Rahate, Novel Numerical Sub-Synchronous Relay, College of Engineering, Pune, June 12
19. Pramath Kant, PowerDex and Comparative Evaluation of Phasor Estimation Algorithm (sponsored by TCS) College of Engineering, Pune, June 12.
18. Prashant Gawande, OOS blocking in presence of faults, College of Engineering, Pune, June 12.
17. Mitesh Satvara, "Anti-Islanding protection of distributed synchronous generator", College of Engineering, Pune, June 12.
16. Azar Ahamad, "Robust distance protection of series compensated transmission line using synchronized measurement", College of Engineering, Pune, June 11.
15. A. Singh, "Robust distance protection of shunt compensated transmission line using synchronized measurement", College of Engineering, Pune, June 11.
14. S. Unde, "Adaptive current differential protection of multi-terminal and mutually coupled transmission line", College of Engineering, Pune, June 11.
13. V. Thakre, "Novel Out-of-Step Protection of transmission line using synchronized measurements", College of Engineering, Pune, June 11.
12. M. Karthik, "A new Technique for Current Differential Protection of Transformer and Bus bar", College of Engineering, Pune, June 10.
11. Bhupendra Kumar, "WAM based Numerical Relaying for Transmission System Protection", College of Engineering, Pune, June 10.
10. H. Machave, "Fault Location in Transmission Line Using Synchronised Measurements", College of Engineering, Pune, June 09.
9. Y. Shivarkar, "Front End Unity Power Rectifier for Balanced Three Phase Input", College of Engineering, Pune, June 09, Ongoing.
8. M. Umamaheswara Rao, "Evaluation of Numerical Algorithms for Distance Relay Performance", PIET's College of Engineering (formerly, Govt. College of Engineering) (sponsored by ABB, Vadodara), Pune, June 06.
7. G. Giri Prasad, "Parameterization and Electromagnetic Analysis of N – Pole Alternator Using Finite Element Method", PIET's College of Engineering (formerly, Govt. College of Engineering), (sponsored by Cranes software, Hydrabad) Pune, June 06.
6. Venkateshwara Rao, "Simulation of UPFC Using PSCAD/EMTDC", PIET's College of Engineering (formerly, Govt. College of Engineering), Pune, June 06.
5. Ranga Rao, "Simulation of STATCOM Using MATLAB SIMULINK", PIET's College of Engineering (formerly, Govt. College of Engineering), Pune, June 06.
4. J. Chaudhary, "Direct Torque Control of Induction Motor", Govt. College of Eng. Amravati, June 02.
3. V. Bhoyar, "Load Management", Govt. College of Engineering Amravati, June 02.
2. R. S. Pote, "Fast Decoupled Load Flow Methods", Govt. College of Engg., Amravati, June 01.
1. S. Dharmadhikari, "Low Speed Induction Motor Drive", Govt. College of Engg. Amravati, June 01.

18. Recent B. Tech. Project Guided:

Ongoing (4):

1. Indreaneel Ingawale, Sidhart Pereira, Shubham Gaonkar and Aniruddh Guranna, "Smart Parking System".

Completed:

- 38 Sanjana Patil, Pritam Waghode, Tanmay Rajhans, Chirag Sarode, "Designing of Battery Management System for Electric Vehicle"
- 37 Harshada Ahire, Shruti Bannalikar, Ankita Kasrale, Prachi Agrawal, "Development of a fault location estimator"
- 36 Sakshi Bhongade, Samiksha Bisen, Kiran Gusinge, "Design and hardware implementation of protective relay for Islanding applications"
- 35 Vaibhavi Kambalwar, Tanmayi sankpal, Nimisha Gajbhiye, Hrutuja Tade, "Development of DSP based distance relay for transmission line protection"
34. Diksha Garde, Mrudula patil, Shital Gangurde, Trupti Shende, "Design and hardware implementation of micro PMU"
33. Chandwani Hitesh Anilkumar, Sakshi Patil, Mayur Shid, Prasann Patil, "Design and hardware implementation AC to DC converter for EV applications"
32. Mahwash Siddiquee, Prathamesh Jagtap, Chinmay Chobe, "Design and development of converters for AC/Dc micro grid applications. (2 projects are given) P1A, P1B",2019
31. Divya Rajat Jain, Snehal Sanjay Bankar, Aditya Singh, "Effect of Electric Vehicle charging station on distribution system",2019
30. Nitish Bharambe, Varun Pant, Ishan Gaikwad, "Hybrid DC-AC-DC converter" 2018
29. Kulkarni Pranav, Patil Swapnil U, Ainapure Pooja, Tiwari Atul, "Microgrid –I: Design, simulation and implementation of MPPT (incremental conductance algorithm) controlled DC-DC Buck- Boost converter extracting power from solar for microgrid applications" 2017
28. Warungase Satyajit, Sahu Parag, Algikar Pooja, Dhaygude Somnath, "Microgrid –II: Design & Implementation of non-isolated, bidirectional DC-DC converter for interfacing and multi-phase charging and discharging of battery systems for microgrid applications." 2017
27. Malwadkar Omkar, Solanki Dhruvil, Mahajan Sachin, Nikam Sanket, "Microgrid –III: Design and Implementation of two level three phase grid tie inverter based on space vector pulse width modulation technique." 2017
26. Ishan Khodke, Pratik Gavhane, Mahesh Sawaratkar, "Three level NPC Inverter"
25. Sumit Waghavade, Shripad Vasmatkar, Tejas Shinde," Novel Home Energy Management System Architecture" 2015
24. Lekhraj Desai, Nilesh Dhoot, Saurabh Hamand," Design of a Power Quality Monitoring System Based on MSP430" 2015
23. Pushkar Chaudhari, Pranit Shete, Navnath Bhor," STATCOM for reactive power compensation on AC bus" 2015
22. Nishant Ravichandran, Aniket Bapat, "P41: Remote home lighting and appliance control system.", June 14.
21. Madhura Potdar, Rutuja Deshpande, Pratiksha Bhamare, "P39: Remote Power Theft Monitoring", June 14.
20. Shreya Deshpande, Vaibhav Gunjal, Sagar Velanjkar, "P49- Application of DTC / FOC for PMSM motors and comparing its effectiveness against induction motor for HEV application. (In this project, we should also attempt to finish earlier work done by previous batch. This includes making motor run as per desired Torque & speed conditions." June 14.
19. Satish Belkhode, Piyusha Kukade, Shashant Bhele, "P50: Cascaded H- Bridge inverter motor drive (5 level as against conventional 2 level) for improving switching losses for HEV application", June 14.

18. Waghmare Sonali Laxman, Kandekar kiran shivaji, Patel Shweta, "P37 - MPPT Solar charge Controller using MSP430.", June 14
17. Rahul Borade, Dhanajay Khairnar, Piyush Kapate, "Hybrid Electric Vehicle – Real Time implementation of DTC for PMSM." June 13.
16. Vikrant More, Akshat Khanna, Akshay Mhalgi, "Hybrid Electric Vehicle – Real Time simulation & Vector control of PMSM." June 13.
15. Mankar Pratiksha Kishor, Solao Jagruti Pramod, "DSP based Out of step protection scheme." June 13.
14. Singhavi Apurva, Patil Ankita Dattatray, "Power line communication for Smart Grid." June 13.
13. Ashwini Bhosale, Sayali Bhajipale, "LED Lantern using Super Capacitor Cell Balancing and Energy Harvesting Technique using MSP 430 DSP", (sponsored by TI, Pune) College of Engineering, Pune, June 12.
12. Niraj Chavan, Suraj Borse, Jayant Patil, "Development of Power window and solenoid driver board for automotive vehicle using MSP 430 and CAN/LIN/RS485 Interface", (sponsored by TI, Pune) College of Engineering, Pune, June 12.
11. Akshay Thakur, Mangesh Indurkar, Tanmay Adke, "MSP 430 embedded Power mirror compatible to CAN/LIN/RS485 networks using DC and stepper motors", (sponsored by TI, Pune) College of Engineering, Pune, June 12.
10. Shilpi Ghosh, Trishala Patne, Nikhil Jadhav, "Design and fabrication of Small Scale Wind Generation System", College of Engineering, Pune, June 11.
9. Vaibhav Gholase, Sudhir Gadekhar, Nikita Gandhi, "Design and fabrication of Thyristor controlled series compensation using MSP 430 DSP", College of Engineering, Pune, (sponsored by TI, Pune) June 11
8. Akanksha Kumar, Vaishali Hunshyal, Sankalp Wankhede, "Design and fabrication of Numerical Relay for Motor Protection using MSP 430 DSP", (sponsored by TI, Pune) College of Engineering, Pune, June 11.
7. Prakash Gadge, Mrunal Kulkarni, Rupesh Bisen, "Design and fabrication of BLDC motor drive for electric vehicle application using MSP 430 DSP", College of Engineering, Pune, (sponsored by TI, Pune) June 11.
6. Nilgir Yogesh, Kote Abhijit, Sherekar Sandip, Vhanmane Tushar, "Design and fabrication of UPFC using SPWM inverter", College of Engineering, Pune, June 10.
5. Jain Vijita, Mithilesh Khadekar, Seth Nikunj, Tibdewal Abhay, "Estimation of Power system phasors using real time synchronized measurements", College of Engineering, (sponsored by IIT Mumbai) Pune, June 09.
4. Kiran Tidke, Saaim Khan, "Web delivery of network applications for Power Anser Lab, IIT Bombay", College of Engineering, Pune, (sponsored by IIT-B), June 08.
3. Sandesh Gandhi, Chetan Tonde, "Real time estimation of power system frequency", College of Engineering, Pune, (sponsored by IIT-B), June 08.
2. Damle and et. al. "Low-Cost Automatic Control of Green House Using 8086 Microcontroller", College of Engineering, Amravati (sponsored by Department of Botany, Amravati University), May 03.
1. ----- "Microprocessor based synchronized traffic signal control for Wardha Road, Nagpur", Govt. Polytechnic, Nagpur, May 1995.

19. Work Experience at IIT Bombay During Ph.D. (PowerAnser Lab):

Worked as Teaching Assistant for Following Courses:

- 1) Digital Protection of Power System (EE 651)
- 2) Power System Lab (EE 326)
- 3) Principles of Electrical Engineering Lab (EE 003)
- 4) Principles of Electrical Engineering (EE 002) (engaged 30 lectures for extra summer batch)

Other Work carried out:

1. Administered INPOWERG (a mail group consisting of power engineering professionals in India) at Indian Institute of Technology-Bombay, Powai, Mumbai, (June 2006-August 2007).
2. Power System Computation and PowerAnser Lab's development and administration work.

20. Extra Curricular Activities:

1. Worked as a General Secretary (for year July 2005-August 2006) of QIP Research Scholars Forum, Indian Institute of Technology-Bombay, Powai, Mumbai.
2. Acquired five certificates at National level, five certificate at State level and six certificate at district/ school level in various examinations and competitions, during the schooling.
3. Every year, I sponsor three prizes to school toppers (from where I passed SSC).
4. Organized career guidance meetings at my native village for SSC students.
5. Involved in few social work activities for rural poor & illiterate people.

21. Hobbies:

1. Motor-cycle Driving (Biking)
2. Listening Indian Music



Dr. Sanjay S. Damhare
COEP Technological University, Pune
5th December 2018