

Dr. KHYATI D. MISTRY

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 Department of Electrical Engineering
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Educational Qualifications

Year	Degree/Examination	University/Institution	Specialization
2004	BE	Sardar Patel University Anand, Gujarat	Electrical Engineering
2006	ME	Sardar Patel University Anand, Gujarat	Power System Engineering
2015	Ph.D	S.V. National Institute of Technology, Suart, Gujarat	Electrical Engineering

Academic Experiences

Name & Address of the Employer	Designation	Period of Service
BVM Engineering College, V.V. Nagar, Gujarat	Lecturer	1 st Nov 2006 to 14 th July 2007
S.V. National Institute of Technology, Surat, Gujarat	Assistant Professor	16 th July 2007 to January 2019
S.V. National Institute of Technology, Surat, Gujarat	Associate Professor	January 2019 to till date

Invited Lectures | SVNIT, Surat

Sl. No	Title of Lecture	Title of Conference/Seminar
1.	High Voltage on DC Generation	High Voltage Testing Techniques
2.	Placement of DG in Power System	Power Conditioning and Distributed Power Generation
3.	Optimal Placement of Distributed Generation in Distribution System	Power quality and Distributed Power generation
4.	Grid Integration of Renewable Energy	International Conference on Engineering and Technology, Smart Engineering at Parul University

Workshops /Short Term Training Programme Organized | SVNIT, Surat

Sl. No	Program Title	Duration/ No. of Days
1.	High Voltage Testing Techniques	21 st to 25 th Dec, 2009
2.	Modern electrical Energy system	25 th to 29 th Jan ,2010
3.	Application of Evolutionary Computation Techniques in Power System	8 th to 12 th July ,2013
4.	Power Conditioning and Distributed Power Generation	26 th to 30 th Dec, 2016

Name of the Project	Scheme	Sanctioned Amount	Status
Hardware Based Numerical Percentage Bias Differential Protection of Power Transformer	TEQIP-II	Rs. 75000/-	completed

Research Experience

Ph.D Thesis Supervised

Sl.No	Name of the Candidate	Title of Thesis	Year	Status	Supervisor/ Co-supervisor
1	Dharmesh D. Patel	Development of Digital Protective Schemes for Power Transformer	Registered in 2015	Completed In April 2019	Supervisor
2	Aliva Routray (DS16EL002)	Loss Minimization in Distribution System Using Distributed Generation	Registered in Dec-2016	On-going	Supervisor
3	Prashant Kumar	Design and control of DVR using Soft computing	Registered in 2019	On-going	Co-supervisor

M.Tech Thesis Supervised

Sl.No	Name of the Candidate	Title of Thesis	Year	Status
1.	Banker Bhaumik Amitbhai	Analyzing Unified power Flow Controller for Providing Flexibility to Transmission Line	July-2011	Submitted
2.	B.V. Ramprasad	Modelling of DSTATCOM and DVR to mitigate voltage Sag During Starting of Induction Motor	2011-2012	Submitted
3.	Satyendra Singh	An application of Dynamic Voltage Restorer for Voltage Sag and Swell	2012-2013	Submitted
4.	Puvvala Vinod Kumar	Detection of Single line to Ground fault in an Ungrounded Power System	May 2013	Submitted
5.	Valavi Ketansinh B.	Optimization of Unit Commitment Considering Thermal and Pumped Storage Plant	2014-2015	Submitted
6.	Chirag A. Patel	Loss Allocation and optimal Distributed Generation Placement for balanced and Unbalanced Radial Distribution Network	2014-2015	Submitted
7.	Naresh Kumar Palla	Coordinated charging of Plug-in Hybrid Electric Vehicles in Hybrid Distribution Systems	July 2016	Submitted
8.	Satyanarayana B	Optimal Location and Parameter Settings of Fact Devices Under single Line Contingency	July 2016	Submitted
9.	Deepak Joshi	Distribution System Planning with Optimal Conductor Selection	July 2016	Submitted
10.	Ashish Godara	Critical Line Identification Using Line Stability Indices	2016-2017	Submitted
11.	Pankaj Kumar Dahima	Transmission Wheeling Cost Evaluation Using MW mile and MVA mile Methodology	2016-2017	Submitted
12.	Dikhsya Maurya	Optimal Charging and Discharging of Electric Vehicle to the Power Grid	2017-2018	submitted

13.	Rishi Meena	Locational Marginal Price Calculation Using DC Optimal Power Flow	2017-2018	submitted
14	Nand Raj	Performance indices based contingency analysis incorporating FACTS devices	2018-2019	Submitted
15	Ravindra Kumar	Protection circuit and passive balancing for battery management system	2019-2020	Submitted
16	Sanjaya Kumar Sahoo	Load flow analysis in unbalanced radial distribution system using LIM method and loss reduction by capacitor placement	2019-2020	Submitted

B.Tech Project Supervised

Sl.No	Name of the Candidate	Title of Thesis	Year	Status
1.	A K shrivastava, G K Sai, P Maheswati, P Ralegankar	Performance of a Medium Transmission Line	2011	Submitted
2.	V.Kumar, V B Patel, Amit, Gamit priyank	Microcontroller Based Speed control of DC Motor	2012	Submitted
3.	P K Singh, P Gawarikar	Suspension Type Insulator String	2013	Submitted
4.	S singh, S Kumar, Sidhaant, Manchan, Kalsariya, N Maheshwari, N Patel	Programmable Energy Auditing Equipment	2013	Submitted
5.	P K Vankar, S Manavar, S K Serawat, M Parmar, G K Solanki	DC-DC Boost Converter with Variable Duty Ratio	2016	Submitted
6.	Avneesh, P Ishan, B Nadimmohammed, R Kalva, A Nayak, H Pathak	Switched Mode AC Power supply	2017	Submitted

Research Publications

International Journals

- 1 **Khyati D. Mistry**, Ranjit Roy, "Enhancement of Loading Capacity of Distribution System Through Distributed Generator Placement Considering Techno-Economic Benefits with Load Growth", International Journal of Electrical Power and Energy System, Vol.54, pp.505-515.
 - 2 **Khyati D. Mistry**, Ranjit Roy, "Impact of Demand Response Program in Wind Integrated Distribution Network", International Journal of Electric Power System Research. Vol.108, pp.269-281.
 - 3 N.G. Chothani, D.D. Patel, **K.D. Mistry**, "Support Vector Machine Based Classification of Current Transformer Saturation Phenomenon", J. Green Engineering River Publication, Vol., pp. 25-42.
 - 4 Dharmesh D. Patel, N. G. Chothani, **K. D. Mistry**, "An Evolution on Power Transformer Protection with History, Current and Upcoming Development", Journal of Power Technologies
 - 5 Dharmesh D. Patel, N. G. Chothani, **K. D. Mistry**, "Design and Development of Fault Classification Algorithm Based on Relevance Vector Machine for Power Transformer", IET Electrical Power Application
 - 6 A. Routray, **K. D. Mistry** and S. Arya, "Wake Analysis on Wind Farm Power Generation for Loss Minimization in Radial Distribution System", *Renewable Energy Focus*, 2020.
 - 7 A. Routray, **K. D. Mistry** and S. Arya, "Power Loss Minimization in Radial Distribution Systems with Obstructed Solar Astronomical Model and Temperature Effect Using GWO Technique", *Energy Sources, Part A: Recovery, Utilization, and Environmental Effects*, pp.1-20, 2020.
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National Journals

Sl.No		Year
1.	Khyati D. Mistry , “Application of Directional Relay in an Ungrounded Power System to Locate Single Line to Ground Fault”, The Journal of CPRI, September-2011, pp. 161-170.	2011
2.	Khyati D. Mistry , “Voltage Sag Mitigation in A Three-Phase Induction Motor Using DSTATCOM and AVR”, The Journal of CPRI, September-2012, pp. 163-170.	2012
3.	Dharmesh Patel, Nilesh Chothani, Khyati D. Mistry , “A Novel Approach to Transformer Differential Protection Using Sequence Component Based Algorithm”, The Journal of CPRI, Vol. 11, No. 3, Sept 2015, pp. 517-528.	2015

International Conferences

Sl.No	Authors	Title	Journal of Publication	Year
1.	Khyati D. Mistry , R.Roy	Load Flow Solution for Ill-Condition Radial Distribution Network Including Static Load Model and Daily Load Values.	10 th international IEEE Conference on Environment & Electrical Engg., pp.1-4, Rome, Italy.	2011
2.	Khyati D. Mistry , R.Roy	A Novel Method for Distribution System Reconfiguration Including Static Load Model and Daily Load Curve.	2nd International Conference on Electric Power and Energy Conversion Systems (EPECS), pp.1-5, Sharjah.	2011
3.	Khyati D. Mistry , R.Roy	Enhancement of Voltage Stability Index of Distribution System by Network Reconfiguration Including Static Load Model.	IEEE PES Conference on Innovative Smart Grid Technologies - India (ISGT India), pp.17-22, Kollam, Kerala.	2011
4.	Khyati D. Mistry , R.Roy	GSA Based Optimal Capacity and Location Determination of Distributed Generation in Radial Distribution System for Loss Minimization.	11th International Conference on Environment and Electrical Engineering (EEEIC), pp.513-518, Venice.	2012
5.	Khyati D. Mistry , Ananya Deb, R.Roy	Evolutionary computation based size and capacity determination of distributed generation in radial distribution system for loss minimization	12 th international conference on Probabilistic Methods Applied to Power System, PMAPS, Turkey.	2012
6.	Khyati D. Mistry , R.Roy	An elitist artificial bee colony based size and location of distributed generation in radial distribution system for loss minimization	12 th international conference on Probabilistic Methods Applied to Power System, PMAPS, Turkey.	2012
7.	Khyati D. Mistry , R.Roy	CRPSO based Optimal Placement of Multi-Distributed Generation in Radial Distribution System.	IEEE International Conference on Power and Energy (PECon), pp.852-857, Kota, Kinabalu.	2012
8.	Khyati D. Mistry ,	Application of Teaching	www.iitk.ac.in/npsc/Papers/	

	R.Roy	Learning Based Optimization for Size and Location Determination of Distributed Generation in Radial Distribution System	NPSC2012/papers/12068.pdf	
8.	Khyati D. Mistry, R.Roy	TLBO Based Optimal Placement of Distributed Generation in Radial Distribution System.	TENCON 2014 - 2014 IEEE Region 10 Conference, pp.1-6, Bangkok.	2014
9.	Dharmesh Patel, Nilesh Chothani, Khyati D. Mistry	Sequence Component of Current Based Differential Protection of Power Transformer.	IEEE 12 th international conference INDICON-15 held at Jamia Millia University, New Delhi.	2015
10.	Khyati D. Mistry, R.Roy, Chirag Patel	Loss Allocation in Radial Distribution System with Multiple DG Placement using TLBO.	IEEE International Conference on Electrical, Computer and Communication Technologies (ICECCT),pp.1-5, Coimbatore.	2015
11.	Khyati D. Mistry	MSFL Based Determination of Optimal Size and Location of Distributed Generation in Radial Distribution System.	International IEEE Conference on Electrical and Electronics Optimization Techniques (ICEEOT),pp. 530-535, Chennai.	2016
12.	Deepak Joshi, S. Burada, Khyati D. Mistry	Distribution System Planning With Optimal Conductor Selection	IEEE 1st International Conference on Power Electronics, Intelligent Control and Energy Systems (ICPEICES 2016).	2016
13.	S. Burada, Deepak Joshi Khyati D. Mistry	Contingency Analysis of Power System by using Voltage and Active Power Performance Index	IEEE 1st International Conference on Power Electronics, Intelligent Control and Energy Systems (ICPEICES 2016).	2016
14.	Dharmesh D. Patel, K. D. Mistry, N. G. Chothani	Digital Differential Protection of Power Transformer using DFT Algorithm with CT Saturation Consideration	IEEE 19th National Power System Conference NPSC-2016, IIT Bhubaneswar 19-21 December	2016
15.	D. D. Patel, N. G. Chothani, K. D. Mistry	Transformer Inrush/Internal fault Identification Based on Average Angle Second Order Derivative of Current.	IEEE-PES 2017 Asia-Pacific Power and energy Engineering Conference(APPEEC), Bangalore,8-10 November.	2017
16.	A. Routray, K. D. Mistry, S. Arya	Analysis of Wake Effect on Wind Power Generation for Loss Minimization in Distribution System	IEEE Conference on Energy, Systems and Information Processing (ICESIP), Kancheepuram, India,2019.	2019
17.	A. Routray, K. D. Mistry, S. Arya	Loss Minimization in Distribution System Considering Hourly Data Driven Probabilistic Solar Astronomical Model with GWO Technique	IEEE Conference on Energy, Systems and Information Processing (ICESIP), Kancheepuram, India,2019.	2019
18.	A. Routray, K. D. Mistry, S. Arya	Loss Minimization in a Radial Distribution System with DG Placement Using Jaya Optimization Technique	IEEE International Conference on Sustainable Energy Technologies and Systems (ICSETS), pp. 336-340, Bhubaneswar, India, 2019.	2019

National Conferences

Sl. No.	Authors	Title	Journal of Publication	Year
1.	Khyati Mistry, B. R. Parekh	Design of Dry Type Transformer Using New Insulating Material (NOMEX).	National Conference on Recent Advances in Electrical Machine and Power System, Changa.	12 th -13 th Sept 2008
2.	Khyati Mistry, R.Roy	Automatic generation Control of Interconnected Thermal-Hydro Power System integrated with SMES and Ultra capacitor.	SVNIT, (Electrical Engg. Department) Surat.	22 nd -23 rd Mar 2012
3.	Khyati Mistry, R.Roy	Application of Teaching Learning Based Optimization for Size and Location Determination of Distributed Generation in Radial Distribution System	Banaras Hindu University, Varanasi, (NPSC).	14 th Dec 2012
4.	Dharmesh D.Patel, Khyati. D. Mistry, N. G. Chothani	Digital Differential Protection of Power Transformer using DFT Algorithm with CT Saturation Consideration	19th National power System Conference NPSC-2016, IIT Bhubaneswar.	19 th -21 st Dec 2016