Sardar Vallabhbhai National Institute of Technology, Surat-395007 (Gujarat)
(Department of Electrical Engineering)

1	Name	Dr. Sabha Raj Arya

2	Present position and Official Address	Assistant Professor, Electrical Engineering Department, Sardar Vallabhbhai National Institute of Technology (S.V.N.I.T.), Dumas Road, Surat -395007 (Gujarat)

3	Email	sabharaj1@gmail.com, sra@eed.svnit.ac.in Phone No: 08511034177 (M) and 09512534809 (M)

4	Date of birth	03/10/1979

5   Research Area

"Power Quality- Filters, Custom Power Devices, Power Electronics Converters for Power Quality, Application of ANN and adaptive control in Power Electronics System, Distributed Power Generation Syste

6   Academic Qualifications

Degree	Year	Specialization	Name of Board/Institute
10th Class	1994	-	M.P. Boards
B. E./B. Tech.	2002	Electrical Engineering	Govt. Engg. College Jabalpur (M.P.)
M.E./M. Tech.	2004	Power Electronics and ASIC design	MNNIT Allahabad
Ph. D.	(2010-2013)	Electrical Power Quality	EED, I.I.T Delhi

7 Recognitions received

Sr. No.	Name of award	Name of society	Year
(i)	Young Engineer Award-2014	Indian National Academy of Engineering (INAE)- Delhi	2014
(ii)	POSOCO Power System Award (PPSA-2014)	Power System Operation Corporation (POSOCO) –A subsidiary of Power Grid Corporation of India Ltd (POWERGRID)-Delhi.	2014
(iii)	Amit Garg Memorial Research Award-2014	From Indian Institute of Technology(IIT) Delhi for the High Impact Publication in a quality journal during the session 2013-2014	2014
(iv)	IEEE-Senior Member	IEEE Industry Applications Society	2015

8 Details of Research and Development Projects

Sr. No.	Name of Project	Funding Agency	Durations
(i)	Development of Adaptive control algorithm for shunt compensator (Minor Project) Amount (Rs.) :1.94 Lac	Gujarat Council on Science and Technology (GUJCOST) Gandhinagar (Gj.) -382011	**Sanctioned** for 2 Year (from: March 2016)
(ii)	Development of Control Algorithms for Shunt and Series connected Custom Power Devices, Applied Amount (Rs.): 44.105 Lacs	Science and Engineering Research Board -New Delhi (Under Extra Mural Research Funding Scheme)	**Sanctioned** for 3 Year (from June :2016)
(iii)	Development of Wind Energy Conversion System with Power Quality Features by Shunt Active Compensator, Amount (Rs.): 3.7 Lacs	Gujarat Energy Development Agency (GEDA) Udyog Bhavan, Sector -11- Gandhinagar-382017	**Applied** for 2 Year (In the month of May 2017)

9 Positions held (from 2004 to present)

Sr. No.	Name of Department/ Institute	Positions	Duration	Nature of work
(i)	(Electrical Engineering Department) Kalinga Institute of Industrial Technology-Patia (Deemed university)- Bhubaneswar-751024	Lecture	**27th July 2004 to 27th Nov. 2006**	Teaching and Research (Supervisor for M.Tech. and B.Tech. students)
(ii)	(Electrical Engineering Department) S.V. National Institute of Technology, Dumas Road, Ichchhanath, Surat-395007	Assistant Professor	**1st Dec.2006 to present**	Teaching and Research (Supervisor for Ph. D, M.Tech. and B.Tech. students)

10 Membership of professional bodies

Sr. No.	Name of society	From	Grade /Member ship number
(i)	Institute of Electrical and Electronics Engineers (IEEE)	2012 to continuous	Senior Member (2015) /92074574
(ii)	The Institution of Engineers (INDIA)	2010 to continuous	Associate member /AM0984518
(iii)	The System society of India	2008 to continuous	Member/ LM28471
(iv)	The Institution of Electronics and Telecommunication Engineers (IETE)	January 2016 to continuous	Member/LM 500011

11 Short term courses /Seminars Organized at SVNIT (*work as Coordinator and Delivered Expert Lecture*)

1) Design and Control of Power Electronic Circuits using OPAL- Real Time Simulators- March 2017
2) Power conditioning and Distributed Power Generation-Dec.-2016
3) Power Electronic: Circuits and Control-Dec.2015
4) Power Electronics: System and Control –Dec. 2014
5) Power Filter Technology and Control- June 2014
6) Advance Control System Education – Feb.2014

12 Complete lists of refereed Journal papers and papers presented in Conferences

Summary of Publication in International/National Journals

IEEE Transactions	IET-UK	Elsevier	Other International Journals	Total
11	**07**	**02**	**09**	**29**
TIE-2, TPE-2 TII-1, TPWD-1 TIA-3, JESTPE-2	IET(PEc) -3 IET(GTD) -4	EPSR-1 IJEPES-1	ITEES-3 JAPE-2 IJEST-1 IJEEPS-1 EPCS-1 IEIB-1	

Summary of Publication in International/National conferences and communicated papers

International / National conferences	Book Chapters	Communicated Papers in Journals/ conferences	Total
35	**01**	**13**	**49**

(i) Publications in International/National Journals =29

[1] Sanjay Kumar Patel, Sabha Raj Arya, Rakesh Maurya, Chinmay Jain and Bhim Singh,"Control of distributed static compensator using extended structure-enhanced phase-locked loop–based algorithm under nonideal

AC mains," *International Transactions on Electrical Energy Systems,* DOI 10.1002/etep.2354, pp. 1-10, 2017

[2] Vishal E. Puranik and Sabha Raj Arya, "Load Conductance Estimation Based Control Algorithm for Shunt Connected Custom Power Devices," **Accepted for Publication in Asian Power Electronics Journal.**

[3] Sanjay Kumar Patel, Sabha Raj Arya, Rakesh Maurya, "Nonlinear adaptive volterra filter for control of distribution static compensaton," *IEEE Journal of Emerging and Selected Topics in Power Electronics,* **vol. 5,** no. 1, pp.559 - 567, **March 2017.**

[4] Sabha Raj Arya, Bhim Singh, Ram Niwas, Ambrish Chandra and Kamal Al-Haddad, "Power quality enhancement using DSTATCOM in distributed power generation system," *IEEE Transactions on Industry Applications,* vol. 52, no. 6, pp. 5203-5212, Nov.-Dec. 2016

[5] Sabha Raj Arya, and Bhim Singh "Implementation of kernel incremental meta-learning algorithm in distribution static compensator," *IEEE Transactions Power Electronics,* vol.30, no.3, pp.1157-1169, March 2015.

[6] Sabha Raj Arya and Bhim Singh, "Neural Network based conductance estimation control algorithm for shunt compensation," *IEEE Transactions on Industrial Informatics,* vol.10, no.1, pp.569-577, Feb. 2014.

[7] Sabha Raj Arya and Bhim Singh, "Performance of DSTATCOM using leaky LMS control algorithm," *IEEE Journal of Emerging and Selected Topics in Power Electronics,* vol. 1, no.2, pp.104-113, June 2013.

[8] Sabha Raj Arya and Bhim Singh, "An Implementation of DSTATCOM for power quality enhancement using learning vector quantization," *IET Generation, Transmission and Distribution,* vol. 7, no.3, pp.1244-1252, 2013.

[9] Sabha Raj Arya, Bhim Singh, Ambrish Chandra, and Kamal Al-Haddad "Learning based Anti-Hebbian learning algorithm for control of distribution static compensator," *IEEE Transactions on Industrial Electronics,* vol. 61, no.11, pp. 6004-6012, Nov. 2014.

[10] Sabha Raj Arya, Ram Niwas, Krishan Kant, Bhim Singh, Ambrish

Chandra and Kamal Al-Haddad" Power quality improvement in isolated distributed generation system using DSTATCOM,"*IEEE Transactions on Industry Applications,* vol. 51, no.06, pp. 4766-4774, Nov/Dec. 2015.

[11]   Sabha Raj Arya and Bhim Singh,"Power quality improvement under nonideal AC mains in distribution system,"*Journal of Electric Power System Research*, vol.106, pp.86-94, 2014.

[12]   Bhim Singh and Sabha Raj Arya,"Implementation of single-phase enhanced phase-locked loop-based control algorithm for three-phase DSTATCOM,"*IEEE Transactions on Power Delivery,* vol. 28, no. 3, pp.1516-1524, July 2013.

[13]   Bhim Singh and Sabha Raj Arya,"Adaptive theory-based improved linear sinusoidal tracer control algorithm for DSTATCOM,"*IEEE Transactions on Power Electronics,* vol. 28, no.8, pp.3768-3778, Aug. 2013.

[14]   Bhim Singh and Sabha Raj Arya,"Back-Propagation control algorithm for power quality improvement using DSTATCOM,"*IEEE Transactions on Industrial Electronics,* vol.61, no.3, pp.1204-1212, March 2014.

[15]   Bhim Singh, Sabha Raj Arya, Ambrish Chandra, and Kamal Al-Haddad "Implementation of adaptive filter based control algorithm for distribution static compensator,"*IEEE Transactions on Industry Applications,* vol. 50, no.5, pp.3026-3036, Sept / Oct 2014.

[16]   Bhim Singh and Sabha Raj Arya,"Composite observer-based control algorithm for distribution static compensator in four-wire supply system,"*IET Power Electronics,* vol. 6, no.2, pp. 251-260, Feb. 2013.

[17]   Bhim Singh, Sabha Raj Arya and Chinmay Jain "Simple peak detection control algorithm of DSTATCOM for power quality improvement,"*IET power Electronics,* vol. 7, no.7, pp. 1736-1746, 2014.

[18]   Bhim Singh, Sabha Raj Arya, Chinmay Jain and Sagar Goel "Implementation of four leg distribution static compensator," *IET Generation, Transmission and Distribution,* vol.8, no.6, pp. 1127-1139, 2014.

[19]   Bhim Singh, Sunil kumar, Sabha Raj Arya, "Hyperbolic tangent function-based least mean-square control algorithm for distribution static

compensator"*IET Generation, Transmission and Distribution,* vol.8, no.12, pp.2102-2113, 2014.

[20] Bhim Singh, Krishan Kant Bhalla and Sabha Raj Arya,"Notch filter based fundamental frequency component extraction to control DSTATCOM for mitigating current related power quality problems" *IET power Electronics,* vol.8, no.9, pp.1758-1766, 2015*.*

[21] Sanjay Kumar Patel, Sabha Raj Arya, Rakesh Maurya and Bhim Singh, "An interior point algorithm for optimal control of DSTATCOM under distorted supply voltage conditions,"*IET Generation, Transmission and Distribution,* vol. 10, no. 8, pp. 1778-1791, 2016.

[22] Sanjay Kumar Patel, Sabha Raj Arya, Rakesh Maurya and Bhim Singh, "Control of DSTATCOM using three phase enhanced phase-locked loop," *Journal of Electrical Power and System Components,* vol. 44, no. 13, pp. 1515-1529, 2016.

[23] Bhim Singh, Sabha Raj Arya and Pankaj K. Verma "An implementation of double-frequency oscillation cancellation technique in control of DSTATCOM," *International Transactions on Electrical Energy Systems,* DOI 10/1002/ETEP, 2013.

[24] Bhim Singh and Sabha Raj Arya"Adaptive control of four-leg VSC based DSTATCOM in distribution system,"*International Journal of Emerging Electric Power Systems.* vol. 15, no.1, pp. 93-99, 2014.

[25] Bhim Singh, G Bhubaneswari and Sabha Raj Arya "Review on power quality solution technology,"*Asian Power Electronics Journal,* vol. 6, no.2, pp.19-27, 2012.

[26] Bhim Singh and Sabha Raj Arya,"Design and control of a DSTATCOM for power quality improvement using cross correlation function approach,"*International Journal of Engineering, Science and Technology*, vol. 4, no. 1, pp. 74-86, 2012.

[27] Vishal Puranik and Sabha Raj Arya,"SOGI-FLL Based adaptive filter for DSTATCOM under variable supply frequency," *Institution of Engineers Section-B,* DOI 10.1007/s40031-016-0274-0.

[28] B.R. Ananthapadmanabha, Rakesh Maurya and Sabha Raj Arya,

"Magnetic energy recovery switch based power quality AC-DC converters," *International Transactions on Electrical Energy Systems,* **DOI 10.1002/ETEP.2350**

[29] Bhim Singh, Sunil kumar and Sabha Raj Arya, "An improved control algorithm of DSTATCOM for power quality improvement,"*International Journal of Electrical Power and Energy Systems,* vol. 64, pp.493-504, 2015*.*

(ii) Publications in International/National Conferences = 35

[30] Sanjay K. Patel, Sabha Raj Arya and Rakesh Maurya, "Harmonic Mitigation Technique for DSTATCOM using Continuous Time LMS Adaptive Filter," *in Proc.* **3rd IEEE Uttar Pradesh Section International Conference on Electrical, Computer and Electronics (UPCON),** 2016, pp. 1-8.

[31] Ashish Patel, Sabha Raj Arya and Anjana Jain,"Variable step learning based control algorithm for power quality in PMSG based power generation system, *in Proc.* **IEEE Power India Conference (PIICON),** 2016*,* pp. 1-7.

[32] Parlee Doley, Sanjay K Patel and Sabha Raj Arya, "Control algorithm based on amplitude adaptive filter for DSTATCOM," *in Proc.* **IEEE Power India Conference (PIICON),** 2016, pp.1-7.

[33] J.Bangarraju, V. Rajagopal, Sabha Raj Arya, B. Subhash and V. Nagamalleswari, "Control of DVR Using SPLL Strategy in Distribution System" *in Proc.* **IEEE Power India Conference (PIICON),** 2016, pp. 1-6.

[34] Ashish Kumar Patel and Sabha Raj Arya, "Distributed power generation system using PMSG with power quality features*, in Proc. International Conference on Next Generation Intelligent Systems,* 2016, pp. 1-7.

[35] Krishan Kant, Sabha Raj Arya and Bhim Singh, "A current sensorless control algorithm of DSTATCOM for power quality improvement," *in Proc. of* **Annual IEEE India Conference (INDICON)**, 2015, pp.1-6.

[36] Vishal. E. Puranik, Sabha Raj Arya and Anjana Jain, "Comparative study

of compensation techniques of DVR with composite observer," *in Proc. of* **International conference on Power and Energy Systems: Towards Sustainable Energy (PESTSE),** 2016, pp. 1-6.

[37] Sabha Raj Arya, Krishan Kant, Ram Niwas, Bhim Singh, Ambrish Chandra and Kamal Al-Haddad" Power quality improvement in isolated distributed generation system using DSTATCOM,"*in Proc. of IEEE Industry Applications Society Annual Meeting* **(IAS)**, 2014, pp.1-8.

[38] Bhim Singh, Sabha Raj Arya, Ram Niwas, Ambrish Chandra, *and* Kamal Al-Haddad, "Distributed power generation system and power quality improvement using DSTATCOM*," in Proc. of 2014 IEEE International Conference on Power Electronics, Drives and Energy Systems (PEDES)*, Dec. 2014, pp.1-6

[39] Sabha Raj Arya, and Bhim Singh,"Kurtosis driven variable learning adaptive filter for suppression of power quality problems, *in Proc. of INDICON,* 2013, pp. 1-6.

[40] Bhim Singh, Sabha Raj Arya, Sunil Kumar, Ambrish Chandra and Kamal Al-Haddad, "Implementation of DSTATCOM using neural network based radial basis function," i*n Proc. of IEEE Industry Applications Society Annual Meeting* **(IAS),** 2013, pp.1-8.

[41] Bhim Singh, Sabha Raj Arya, Chinmay Jain and Sagar Goel, "Multifunction capabilities of DSTATCOM in distribution system using four-leg voltage source converter,"*in Proc. of 5th International Conference on Power and Energy Systems,* 2013, pp.1-9.

[42] Bhim Singh, Sabha Raj Arya,"Adaptive control of four-leg VSC based DSTATCOM in distribution system,"*in Proc. of 5th International Conference on Computer Applications in Electrical Engineering (CERA),* 2013, pp.1-5.

[43] Bhim Singh, Sunil kumar, Sabha Raj Arya, Ambrish Chandra and Kamal Al-Haddad, "A comparative study of adaptive control algorithm in distribution static compensator,"*in Proc. of 39th Annual Conference on IEEE Industrial Electronics Society,* 2013, pp. 1-6.

[44] Bhim Singh, Sabha Raj Arya, Ambrish Chandra and Kamal Al-Haddad"Variable step learning control algorithm for VSC Based Shunt," *in*

Proc. of IEEE 4th International Symposium on Power Electronics for Distributed Generation Systems, Rogers, Arkansas 2013, pp.1-6.

[45] Sabah Raj Arya, Bhim Singh, Ambrish Chandra, and Kamal Al-Haddad"Power factor correction and zero voltage regulation in distribution system using DSTATCOM,"*in Proc. of 2012 IEEE International Conference on Power Electronics, Drives and Energy Systems (PEDES),* Dec. 2012, pp.1-6

[46] Bhim Singh, Sabha Raj Arya, Ambrish Chandra and Kamal Al-Haddad"Implementation of adaptive filter based control algorithm for distribution static compensator,"*in Proc. of IEEE Industry Applications Society Annual Meeting (IAS),* 2012, pp.1-8.

[47] Bhim Singh and Sabha Raj Arya"Admittance based control algorithm for DSTATCOM in three phase four wire system,"*in Proc. of 2[ed] International Conference on Power, Control and Embedded Systems (ICPCES),* Dec. 2012, pp.1-8.

[48] Sabha Raj Arya, Bhim Singh, Ambrish Chandra, and Kamal Al-Haddad"Control of DSTATCOM using adjustable step least mean square control algorithm,"*in Proc. of IEEE Fifth Power India Conference*, Dec.2012, pp.1-6.

[49] Sabha Raj Arya, Bhim Singh, Ambrish Chandra, and Kamal Al-Haddad"Control of shunt custom power device based on Anti-Hebbian learning algorithm,"*in Proc. of 38th Annual Conference on IEEE Industrial Electronics Society*, Oct. 2012, pp.1246-1251.

[50] Bhim Singh and Sabha Raj Arya" Software PLL based control algorithm for power quality improvement in distribution system,"*in Proc. of 2012 IEEE 5th India International Conference on Power Electronics (IICPE),* pp.1-6, 6-8 Dec. 2012.

[51] Sabha Raj Arya, and Bhim Singh"CTF control algorithm of DSTATCOM for Power factor correction and zero voltage regulation*," in Proc. of 2012 IEEE Third International Conference on Sustainable Energy Technologies (ICSET)*, pp.157-162, Sept.2012.

[52] M.R. Dhandhara, Sabha Raj Arya"Comparison between Peak current and Hysteresis current control input power factor correction techniques in

rectifier system," *in Proc. of International Conference on Control, Automation, Communication and Energy conversion*, vol.-2, 2010, K.E.C. Perundurai, Erode pp. 816-823.

[53] Bhim Singh, Sabha Raj Arya, Chinmay Jain, Sagar Goel, Ambrish Chandra, and Kamal Al-Haddad, Four leg VSI based active filter in distribution system" *in Proc. of National Power System Conference, Dec.* 2014, pp.1-6.

[54] Bhim Singh, Krishan Kant Bhalla and Sabha Raj Arya,"Voltage Sensorless control algorithm for power quality improvement in distribution network" *in Proc. of National Power System Conference, Dec.* 2014, pp.1-6.

[55] Bhim Singh, Sabha Raj Arya, Chinmay Jain, Sagar Goel, Ambrish Chandra and Kamal Al-Haddad "Application of voltage source converter for power quality improvement," *in Proc. of National system Conference,* **IIT Jodhpur**, 2013,pp.1-6.

[56] Bhim Singh and Sabha Raj Arya,"A New Isolated Topology of DSTATCOM with Unipolar Switching,"*in Proc. of National Power System Conference,* **2012**, IIT-BHU Varanasi, pp.1-6.

[57] Bhim Singh and Sabha Raj Arya"Design and control of DSTATCOM for power quality improvement using cross correlation function approach,"*in Proc. of National Electrical Engineering Conference*, 2011,KNIT Sultanpur,pp.1-8.

[58] Sabha Raj Arya and Bhim Singh"MWLSE control algorithm of DSTATCOM for power quality improvement,"*in Proc. of National Electrical Engineering Conference (NEEC-2011) on Power and Energy Systems for Tomorrow*, 2011, DTU Delhi, pp.1-6.

[59] M.R. Dhandhara and S.R. Arya,"Design, and Analysis of Border line Current ControlTechnique for Input Power Factor Correction,"*in Proc. of National Conference on Recent Advances in Electrical Engineering*,Dec. 26th and 27th 2008, J.N.T.U. college of Engg. Anantpur.

[60] M.R. Dhandhara and S.R. Arya, "Design, analysis and implementation of input power factor correction technique in uncontrolled rectifier system,"*in*

Proc. of National Conference on Recent Advances in Electrical Engineering, Dec.26th and 27th 2008, J.N.T.U. college of Engg. Anantpur.

[61] Sabha Raj Arya and Rakesh Maurya,"Analysis of chopper fed D.C. Drive with PWM and hysteresis current control scheme,"*in Proc. of 31st National Systems Conference*, P-133, 2007.

[63] Rakesh Maurya, S.R.Arya and S.P.Srivastava,"Analysis of grid connected power converter for variable speed wind energy conversion,"*in Proc. of 31st National Systems Conference*, p-147, 2007.

[64] Sabha Raj Arya and P.Samuel, "Harmonic power flow analysis and suppression of harmonics using harmonic filter*," in Proc. of National Conference on Soft Computing and Machine*, C.O.B. Bhubaneswar , 24th to 26th march 2006.

[65] Biswajit Nayak and S. R. Arya,"Analysis of chopper fed DC drive with PID and Fuzzy logic controller,"*in Proc. of National Conference on Soft Computing and Machine*, C.O.B. Bhubaneswar, 24th to 26th march 2006.

(iii)   Publication as Book Chapters =01

[66] Bhim Singh, Sabha Raj Arya, Chinmay Jain, Sagar Goel, Ambrish Chandra and Kamal Al-Haddad , Application of voltage source converter for power quality improvement, *Lecture Notes in Electrical Engineering*, vol. 327, Chapter 29, pp.335-346, Springer India, New Delhi.

(iv) Communicated in International/National   Journals / Conference = 13

[1] B.R. Ananthapadmanabha, Rakesh Maurya and Sabha Raj Arya,"Hybrid converter for electric vehicle battery charging with power quality features," Communicated to *Institution of Engineers (INDIA) after R1*.

[2] Sabha Raj Arya, Rakesh Maurya, Amin Qureshi and Ashutosh K. Giri, "Control approach for effective utilization of single phase induction generator," **Communicated to IET Renewable Power Generation.**

[3] Sabha Raj Arya, Rakesh Maurya, Amin Qureshi and Ashutosh K. Giri, "Design of Distributed Power Generation System using Single Phase Induction Generator and its Control,"**Communicated to Journal of Electrical Power and System Components**.

[4] Sanjay K. Patel, Sabha Raj Arya,Rakesh Maurya and B.Chitti Babu, A new control scheme for DSTATCOM based on frequency adaptive disturbance observer, Communicated to **IEEE Journal of Emerging and Selected Topics in Power Electronics.**

[5] Sanjay K. Patel, Sabha Raj Arya and Rakesh Maurya,"Control of three phase DSTATCOM using optimal step LMS algorithm," **Communicated to IEEE Transactions on Industrial Electronics.**

[6] B.R. Ananthapadmanabha, Rakesh Maurya and Sabha Raj Arya," Improved Power Quality Switched Inductor Cuk converter for battery charging application" **Communicated to IEEE Transactions on Power Electronics.**

[7] Sanjay Kumar Patel, Sabha Raj Arya, Rakesh Maurya, Chinmay Jain and Bhim Singh,"Power quality problems and solution in distribution system," **Communicated to Institution of Engineers(INDIA).**

[8] B.R. Ananthapadmanabha, Rakesh Maurya and Sabha Raj Arya, "Electric vehicle battery charger with improved power quality cuk-derived PWM converter" **Communicated to IET Power Electronics.**

[9] J. Bangarraju, V. Rajagopal, Sabha Raj Arya and Sanjay K. Patel, "Neural network based admittance estimation strategy for control of dynamic voltage restorer," **Communicated to International Transactions on Electrical Energy Systems**

[10] Bhim Singh, Sabha Raj Arya, Ambrish Chandra and Kamal Al-Haddad, "Comparison of Various ANN based control algorithms for DSTATCOM,"Communicated to IET Generation, Transmission and Distribution.

[11] Bhim Singh, Sabha Raj Arya, Sunil Kumar, Ambrish Chandra, and Kamal Al-Haddad, "Comprehensive study on circuit theory based control algorithms for DSTATCOM," **Communicated to Institution of Electronics and Telecommunication Engineers.**

[12] Vishal Puranik and Sabha Raj Arya, "Load conductance estimation based

control algorithm for shunt connected custom power devices,"**Communicated to Asian Power Electronics Journal.**

[13] Vishal. E. Puranik and Sabha Raj Arya and Anjana Jain,"Design and control of dynamic voltage restorer with energy optimization technique," **Communicated to the Institution of Electronics and Telecommunication Engineers(INDIA).**

13 Conference/Seminars/Short term course Attended

Sr. No.	Conference /Seminars	Organized By	Sponsor	During	Day	Weeks
1	Short term course on **Modern Optimization Technique in Power system**	University College of Engineering Burla (Orissa)	-	Dec.,19-31, 2005	12	2
2	**Testing in Electrical Engg**	SVNIT –Surat	-	January, 3-5 2007	3	-
3	National workshop on P**ower Electronics**	IIT- Bombay		September,6-7 2007	2	-
4	Short term course on **VLSI And Embedded System**	Cental Institute of Tool design , Hyderabad (A.P.)		Dec17-22, 2007	5	1
5	Short term course on **Electric power quality: monitoring, analysis and mitigation**	IIT Kanpur		April 07-11 ,2008	5	1
6	Staff training program **infrastructural and curricular development of electrical drives laboratory**	N.I.T. Warangal (A.P.)	-	September-24-26, 2008	3	-
7	Short term course on **Application of mathematical sciences and soft computing**	SVNIT	-	Dec, 8-12, 2008	5	1

8	Short term course on **Advance Engineering Optimization Through Intelligent Techniques**	SVNIT	-	Dec, 14-18, 2009	5	1
9	Participation certificate **Tutorials PEDES2010**	IIT Delhi		20th Dec 2010	1	0
10	Short term course on **Building Integrated Photovoltaic Thermal System**	IIT Delhi		Feb., 8-14, 2011	7	1
11	Short term course on **Research Methodology** and **Intellectual Property Rights** (IPR)	EQUATE	-	Feb.,4-7, 2014	5	1
12	Short term course on **Application of Evolutionary Computation Techniques on Power System**	SVNIT	-	July, 14-18, 2014	5	1
13	Short term course on **Mathematical Modeling in Science and Engineering**	SVNIT	-	June,23-27, 2014	5	1
14	Short term course on **Power Electronics Applications for Renewable Integration**	IITK		30th March,30 to April, 1, 2015	3	-
15	Short term course on **Advance Power Electronics and Electrical Drives**	MANIT – Bhopal		3rd to 7th Jan 2016	5	1
16	Short term course on **Mathematical Modeling, Optimization, Fractional Calculus and their Computations in Engg. and Science**	SVNIT – Surat		21st-25th June 2016	5	1

14 Supervision of M. Tech students in the area of Power Electronics

(A) Total number of student supervised up to 2015   = **09**

Sr. No.	Thesis title	Year
(i)	Power Generation System using Permanent Magnet Synchronous Generator with Power Quality Features (Submitted on 30/06/2016)	2016
(ii)	Design and Control of Shunt Connected Custom Power Devices (Submitted on 30/06/2016)	2016
(iii)	Design and implementation of shunt and series connected custom power devices	2015
(iv)	Solar system with power quality features and its application in water pumping	2015
(v)	Analysis of load performance and power quality improvement in inverter fed induction fed induction motor drives	2010
(vi)	Design and analysis of input power factor correction converters for low and medium power application in AC/DC converters	2009
(vii)	Design and analysis of input power factor correction technique in uncontrolled rectifier system	2008
(viii)	Design and Analysis Chopper Fed DC drives	2006
(ix)	Design and analysis of single phase full bridge SPWM inverter	2006

(B) Number of M. Tech student supervision ongoing (2016-2017) = 03

15 Supervision of Ph D. students in the area of Power Electronics/ Electrical Power   Quality

(i) Number of Ph. D student supervision ongoing up to 2017 = **05**

Sr. No.	Name of student/ research scholar	In the area of	Year of registration	Co-guide (If any)
(i)	Mr. Sanjay Kumar Patel	Custom Power Devices	2014	as a Principal Guide
(ii)	Mr. B. R. Ananthapadmanabha	Power Factor Correction Converters	2014	as a Co-Guide
(iii)	Mr. Ashutosh Giri	Distributed Power Generation System	2016	as a principal Guide
(iv)	Mr. T A Naidu	Design and control of DVR	2017	as a principal Guide
(v)	Ms. Aliva Routray	Reduction of power losses in distribution line	2017	as a Co-Guide

16   Reviewer for the Journals

IEEE Transactions on Industrial Electronics

IEEE Transactions on Power Electronics

IET Power Electronics

International Transactions on Electrical Energy Systems

IEEE Journal of Emerging and Selected Topics in Power Electronics

Journal of Electric Power Components and Systems

Journal of Electric Power System Research

17 Present Administrative Duties

(i) Chief Hostel Warden-Raman Bhavan SVNIT Surat, From June 2014 to March 2017.

(ii) Warden-in-Charge, Bhabha Bhavan, SVNIT Surat from Dec. 2013 upto June 2014.

(iii) Hostel warden, Bhabha Bhavan, SVNIT Surat from Dec. 2008 upto July 2009.

(iv) Associate Hostel warden, Tagore Bhavan, SVNIT Surat from Feb 207 upto Dec 2008.

(v) Co- in-Charge Power Electronics Lab. and Electrical Drives Lab., SVNIT Surat

(vi) Associate with Office of Dean Academic   for examination and result related work from 9th may 2017 to continue.

DATE : 27/06/2017
PLACE: Surat

Dr Sabha Raj Arya
(Ph No. 08511034177)