

Name **VIRENDRA KUMAR SHARMA**  
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### Educational Qualifications

S.No.	Examination	Board/University	Year	% Division	Subject
1.	High School (10)	U.P. Board, Allahabad, India	1977	77% I Division	Science, Maths Biology
2.	Intermediate (12)	U.P. Board, Allahabad, India	1979	72.2%, I Division	Maths, Physics Chemistry
3.	B.E.	KREC Surathkal, India	1984	79%, I Division	Electrical Engineering
4.	M.Tech.	IIT Delhi, India	1993	8.33/10	Power Electronics
5.	Ph.D. under QIP	IIT Delhi, India	Joined-July 1995, Submitted-Dec. 1999	Awarded April 2000	Control of Switched Reluctance Motor
6.	PostDocFellow	ETS, Montreal Canada	Sept 2000	Sept 2001	Active Filters

**Specialization :** Information and Signal Processing for Control of Electric Drives

### Details of Present and Previous Employment

	Employer	From	To	Designation
1.	Bhagwant University, Ajmer	July 2014 onwards		Professor, Vice Chancellor
2.	National Institute of Technology Uttarakhand	July 2013 – July 2014		Professor, Dean
3.	Bhagwant Group, New Delhi	August 2011	July 2013	Director
4.	Jamia Millia Islamia, New Delhi, India	18-1-1988 to August 2011		Lecturer, Reader Professor
5.	College of Engineering Pravaranagar, Maharashtra, India	22-2-1985 to	16-1-1988	Lecturer
6.	Lord Shiva Electric Contractor, Noida, India	1-9-1984 to	31-1-1985	Supervisor

Worked as Asstt Executive Engineer, Border Road Organisation through UPSC, Delhi and worked during July- September 1992, posted at 1059 Field Workshop, Det-T. Returned in academics due to research interests.

Worked on lien as Professor & Head of Dept, at Maharashtra Academy of Engineering, Pune during 2006 - 2007. Responsible towards first accreditation of MAE Alandi Pune.

Selected as Trainee Engineer, Indian Airlines, August 1990.

Selected as Small Industry Promotion Officer through UPSC in 1989.

Selected as Professor in Electrical Engineering at Indian Naval Academy through UPSC in 2012.

Selected as Professor in Electrical Engineering at NIT Patna in 2013.

### SUBJECTS TAUGHT (UG & PG)

Power Electronics  
Instrumentation

Microprocessor  
Circuit Analysis

Electromagnetic Field Theory  
Electrical Machines AC / DC

## LABS DEVELOPED

### i) Undergraduate

Power Electronics Lab      Measurement & Instrumentation Lab  
 Electrical Machines Lab      Circuit Analysis Lab      Drives Lab  
 Simulation and modeling

### ii) Graduate Lab

Instrumentation & Control

One Book co-authored with Ram Avtar Sharma on Basic Electrical Engineering, Vrinda Publications, Delhi, pages 620, price 250.

## RESEARCH

	Name of Scholar	Title of thesis	Year of award	University
1.	Hamid Ehsan Akhtar	Reluctance Motor operating under different controllers	2005	Jamia Millia Islamia, New Delhi
2.	A.N. Arvindan	Switching strategies for three phase improved quality converters.	2007	Jamia Millia Islamia, New Delhi
3.	Anis Afzal	Analysis of renewable energy systems	2010	Aligarh Muslim University, Aligarh
4.	Krishna Mohan Soni	Switching strategies for single phase power quality converter.	2012	Jamia Millia Islamia, New Delhi
5.	Narendra Prakash Gupta	Sensor Network Applications	2012	Bhagwant University Ajmer
6.	Suneet Chaudhary	Algorithm for Semantic Web	2012	Bhagwant University Ajmer
7.	Alapati Venkat	Characterization of Special Material	2014	Bhagwant University Ajmer
8.	G. Nazia Sulthana	A Long Term Defense Mechanism Against Distributed Denial of Service	2016	Continued
9.	Asif	Novel Approach for Passive Forgery Detection and Analysis	2016	Continued

- a. Leadership role in signing MoUs for International tie ups with (a) Sheffield Hallam University, UK, Gannon University, Erie Pennsylvania, USA, EdCIL Noida.
- b. Organized NBA Accreditation, NAAC accreditation, PCI Inspection, University Affiliation, AICTE, UGC Inspection
- c. Instrumental in starting various MTech programs.
- d. Guided several BTech and MTech projects.
- e. Completed Three AICTE sponsored major R&D, Thrust Area Projects.
- f. Completed One University of Pune sponsored Thrust Area Project.
- g. AICTE MODROBS project
- h. Advised one AICTE Entrepreneur Development Project

### Additional Information

- i. N.C.C. B Certificate holder
- j. Founder Secretary of Jamia Chapter of ISTE during 1989-91.
- k. Founder Student Counsellor of Jamia IEE Student Chapter during 1999-2001.
- l. Reviewer of IEE Proceedings-Control, IEEE Trans. on Magnetics, IEEE Conferences-PESC, IEMDC, IECON, Sadhna-Technical Journal published by IISc Bangalore.
- m. Delivered extension lectures at various summer/winter schools and refresher courses.

### Membership of Professional Societies

1. Senior Member IEEE 92833434
2. Chartered Engineer IET London (IEE UK)
3. Life Fellow Member of Institution of Engineers (India), M058846.
4. Life Member of Indian Society for Technical Education (ISTE) LM 28381
5. Life Fellow of Institute of Electronics and Telecommunication Engineers (IETE), New Delhi, India FIETE 08236
6. Life Member of Indian Science Congress, Calcutta, India
7. Life Member of Indian Chapter of International Centre for Theoretical Physics (ICTP), Trieste, Italy, LMICTP 143

### **AWARDS RECEIVED**

1. Merit Scholarship holder for two years during 1978-80 at +2 level
2. Merit Scholarship holder for four years during 1980-84 at undergraduate level
3. QIP Research Fellow for three years during 1995-98 at PhD level.
4. UGC Visiting Research Associate for two years during 2000-2002 at IIT Delhi.
5. Recipient of Institution of Engineers (India) award "**Railway Board Medal**" for research paper published in the Journal of the Institution. Award was presented at 14<sup>th</sup> Indian Engineering Congress held in January 2000 in New Delhi, India

### **HONOURS**

Session Chair, Reporteur and Reviewer for IEEE sponsored conference, transactions and international/national journal.

### Major Projects Completed

	Funding Agency	Title of the Project	Duration/Amount	Status
1.	AICTE, New Delhi	Unity Power Factor Controller	Two Years 1999-2001 Rs. 10.00 Lacs	Completed
2.	AICTE, New Delhi	Power Quality & Energy Audit	Two Years 1999-2001 Rs. 6.50 Lacs	Completed
3.	University of Pune	Digital Watermarking Scheme	2 Y, Rs. 1.5 Lacs 2006-07	Completed
4.	AICTE, New Delhi	MODROBS- Power Electronics Lab	2 Y, 11.5 Lacs 2009-11	Completed

### Visits Abroad

S.No.	Place and Country	Duration	Purpose
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	Visited		
1.	Wisconsin, USA	May 18-21, 1997	To Present Research Paper at IEEE-IEMDC'97, sponsored by JMI, AICTE, DST
2.	Nuremberg, Germany	2-9, June, 2000	To present Research paper at PCIM, sponsored by JMI, INSA
3.	Trieste, Italy	Oct. 9 to Nov. 4, 2000 4 week training program	Microprocessor Based Real-Time Systems, sponsored by ICTP, Trieste Italy
4.	Montreal, Canada	Sept. 21, 2001 –Sept. 2002(One Year contract)	Post Doctoral Fellowship at Ecole de Technologie Superiere, Montreal, Canada
5.	Hong Kong	December 14-16, 2005	To present research paper at IEEE ICIT. Sponsored by JMI, AICTE
6.	KualaLumpur,Malaysia	March 12-15, 2006	Expert committee meeting.
7.	Kumamoto, Japan	May 8-10, 2007	IEEE Conference paper presentation
8.	Taipei, Taiwan	Oct. 29- Nov. 2, 2007	IEEE Conference paper presentation
9.	Geneva, Switzerland	March 10-16, 2008	Conference paper presentation
10.	Muscat, Oman	21-24 October 2009	Education Exhibition
11.	Thimphu Bhutan	August 10-13, 2010	Meeting with Education Minister
12.	Seoul Korea	28-11-2010 to 03-12-2010	IEEE IMS conference paper presentation sponsored by DST and UPTU University
13.	Pattaya, Thailand	27-9-2011 to 30-9-2011	Two Papers presentation in IEEE Thailand conference.
14.	Malaga, Spain	19-23 June 2012	Research Paper presentation
15.	Brussels, Belgium	23-25 June 2012	Research Collaboration
16.	Jakarta, Indonesia	2-3 August 2013	Research Paper presentation
17.	Tel Aviv, Israel	December 6-11, 2014	Eliat Solar Energy Conference
18.	Siem Reap, Cambodia	15-17, July 2015	IEEE Conference on Cybernetics
19.	ICTP Trieste Italy	March 30 April 7, 2016	Workshop on Entrepreneurship for Scientist

## OTHER ACADEMICS RELATED ACTIVITIES

Organised one week refresher course (**summer school**) for academicians and working professionals on the topic “**Recent trends in drives**”, held during April 2001. There were 25 participants from engineering colleges and five from industries. Lectures were delivered by experts from Jamia, IIT, ABB etc. Total fund approx. 1.50 Lacs

Organised two day **national level conference** on “**Recent trends in power management**”, during August 2003. The conference had a large number of papers and was attended by professionals from NTPC, BHEL, NHPC, PGCIL etc. The conference was inaugurated by Shri R.P. Shahi, Secretary, Ministry of Power GOI. Total fund approx. Rs. 3.0 Lacs

Organised three day **national level conference** on “**Signal Processing & Communication**”, during December 27-29, 2008, at MAE Pune. The conference had a large number of papers and was attended by professionals also. The conference was inaugurated by Prof. Moinuddin, Director, NIT Jalandhar. Total fund approx. Rs. 3.75 Lacs

Organised 3 day **Entrepreneurship Development Workshop** for students. Dates: February 26-28, 2009, Sponsored by AICTE, Fund Rs 1.0 Lacs.

Organised three day **national level conference** on “**Signal Processing**”, during March 10-12, 2011, at BIT, Mzn. The conference had a large number of papers and was attended by professionals also. The conference was inaugurated by Prof. S K. Kak, Vice-Chancellor. Total fund approx. Rs. 4.50 Lacs, sponsored by AICTE also.

Advised one day international workshop on RFID Technology. Lectures delivered by Prof. Pasi Lezberg and Prof. Polsila Zuha of University of Turku Finland, 5-12-2011, venue BIT Mzn.

### Administrative experience

Suptdt of UG/PG Theory Exam.	Evening course co-ordinmator
Student Advisor	Moderator
Tabulator	Training incharge
Seminar incharge	Tour incharge
Project Incharge	Head of Department
Entrance Examination Supervisor	Member, Board of Studies, Jamia
NBA Committee Expert, AICTE	Principal

### List of Continuing Education Programs Attended

S.No.	Title of the Course	Venue	From-To	Duration
1.	Orientation Program	Jamia Millia Islamia, New Delhi	April 14-May 11, 1988	4 week
2.	Programming Methodology	IIT Kharagpur	May 15-June 23, 1989	6 week
3.	Artificial Intelligence Tools	IIT Delhi	June 3-16, 1991	2 week
4.	Advances in Power Systems	IIT Delhi	May 20-31, 1991	2 week
5.	Industrial Training	Desein Pvt. Ltd., New Delhi	June 01-July 14, 1992	5 week
6.	Transputers & their Applications	IIT Delhi	May 18-23, 1992	1 week
7.	Power Semiconductor drives	BHU Varanasi	June 14-27, 1993	2 week
8.	Audio-Visual Communication	IIT Delhi	June 3-16, 2001	2 week
9.	Signal Processing Applications	Roorkee University, Roorkee	Dec. 13-31, 1994	2 week
10.	Pollution Free Energy	IIT Delhi	June 16-27, 1997	2 week
11.	Computer Applications in Power Electronics & Drives	IIT Delhi	Dec. 13-17, 1999	1 week
12.	Advances in Medical Instrumentation	Roorkee University	June 20 – July 4, 2000	2 week
13.	Web Design & Development	IIT Delhi	Dec. 11-15, 2000	1 week
14.	Net Surfing & Automation	IIT Delhi	May 8-12, 2001	1 week
15.	Matlab and its applications	MACT Bhopal	2-13 July 2001	2 week
16.	Renewable Energy Technology	MNES, New Delhi	October 16-20, 2003	1 week
17.	BioMedical Signal Processing	NERIST, Itanagar	November 2003	2 week
18.	Power System De-Regulation	College of Engg. Kolaghat	July 2004	2 week

### List of Workshops/Conferences Attended in India

S.No.	Title of the Conference	Dates	Venue
1.	Indo-British Workshop on Power Electronics, Energy Saving	Dec. 14-18, 1992	IIT Delhi
2.	Indo-British Workshop on Permanent Magnet & Switched Reluctance Motor	Sept. 20-31, 1995	IIT Delhi
3.	National Conference on Continuing Education	Feb. 3-4, 1995	Roorkee University
4.	IEEE International Conference on Power Electronics Drives & Energy Systems (PEDES)	Jan. 8-11, 1996	IIT Delhi

5.	International Conference on Computer Applications in Electrical Engineering (CERA)	Sept. 8-11, 1997	Roorkee University
6.	National Power System Conference (NPSC), Baroda	1998	MS University, Baroda
7.	IEEE International Conference TENCON	Nov. 17-19, 1998	New Delhi
8.	Indo-Italian Workshop on Recent Advances in Material Science	Nov. 10-12, 1999	IIT Delhi
9.	Environmental Challenges of the New Millennium	Nov. 25-27, 1999	JMI, New Delhi
10.	IEEE International Conference on Industrial Technology	Jan. 19-22, 2000	Goa, India
11.	National Seminar on Power 2002	1-2, Nov. 2002	BITS Ranchi
12.	IEEE Workshop on Sensorless Control of Drives	Sept. 26-27, 2003	IIT Delhi
13.	IEEE Workshop on FACTS	April 2004	IIT Delhi
14.	Cigre International Colloquium on FACTS HVDC	23-25 Sept. 2005	Bangalore
15.	PETISCON	January 2005	Kolkata, India
16.	ICHEV	December 2006	Pune, India

## **PUBLICATIONS**

### **A. Refereed International Journals**

1. Sharma Virendra Kumar, Murthy S. S. and Singh Bhim, "An Improved Method to Determine Saturation Characteristics of Switched Reluctance Motor," IEEE Transactions on Instrumentation and Measurement, Vol. 48, No. 5, October **1999**, pp. 995-1000.
2. Anis Afzal, Mohibullah, V.K. Sharma, 'Optimal hybrid renewable energy systems for energy security', International Journal of Sustainable Energy, UK, 29:1, 2010, pp. 48-58.
3. Anis Afzal, Mohibullah, V.K. Sharma, 'Performance analysis of rice husk power generating system', 2010, International Journal of Sustainable Energy, UK, Accepted for Publication.
4. Afzal, A, Mohibullah, and Sharma, V.K., 2010. Optimal hybrid renewable energy systems for energy security: a comparative study. International Journal of Sustainable Energy, Taylor and Francis, 29:1, 48-58.
5. Afzal, A., Sharma, V.K., and Mohibullah, 2008. Energy analysis of solar photovoltaic system for an academic institution in northern India, International J. of Engg. Research & Indu. Appls. (IJERIA), ISSN 0974-1518, Vol. 1, No. VII, pp. 99-112.
6. Afzal, A., Sharma, V.K., and Mohibulalh, 2007. Performance evaluation of wind energy conversion system as an alternative energy source in Indian condition, International J. of Mathematical Sci. & Engg. Appls. (IJMSEA), Vol. 1, No. 1, pp. 155-171.
7. K.M.Soni, H.E. Akhter, 'Power quality standards and performance of ac-dc converters for power quality improvement at input ac mains', Int. Journal of Engg. Research, ISSN 0974-1518, Vol. I, No. II, **2008**, pp. 73-84.
8. Kumar, H., Sharma, V.K., Verma, P., Venkat Babu, G.: Analysis of a New Base Station Receiver for Increasing Diversity Order in a CDMA Cellular System', Das, V.V., Stephen, J., Chaba, Y. (eds.) CNC 2011, CCIS, vol. 142, pp. 104–110, Springer, Heidelberg (2011).
9. Harish Kumar, Pushpneel Verma, V.K. Sharma, Mohit Kumar, 'Design and analysis of downlink scheduling for network coverage for wireless systems', Das, V.V., Stephen, J., Chaba, Y. (eds.) CNC 2011, CCIS, vol. 142, pp. 865-869, Springer, Heidelberg (2011).
10. Ravindra Gupta, Vijay Mohan Shrimal, V.K. Sharma, 'Investigation of Different Parameters of Dynamic Source Routing with varied Terrain Areas and Traffic Condition for Wireless Sensor Network.
11. Sunit Kumar, V.K. Sharma, 'Architecture of Deep Web: Surfacing Hidden Value', (IJCSIS) International Journal of Computer Science and Information Security, ISSN 22295208, Vol. 3, No. 3, June 2011, pp. 5-9.

12. Sunit Kumar, V.K. Sharma, 'Modeling to Analyze the Deep Web: Surfacing Hidden Value', (*IJCSIS*) *International Journal of Computer Science and Information Security*, ISSN 22295208, Vol. 9, No. 6, June 2011.
13. Sunit Kumar, V.K. Sharma, 'Security challenges in Adhoc Mobile network', (*IJCSIS*) *International Journal of Computer Science and Information Security*, ISSN 22295208, Vol. 3, No. 3, June 2011, pp.1-6.
14. Sunit Kumar, V.K. Sharma, 'Data warehouse and metadata', (*IJCSIS*) *International Journal of Computer Science and Information Security*, ISSN 22295208, Vol. 3, No. 3, June 2011, pp. 16-19.

## **B. Refereed National Journals**

15. Sharma Virendra Kumar, Singh Bhim, and Singh B.P., "Modeling and Simulation of Controllers for Hybrid Stepper Motor," *IETE Technical Review*, Vol. 12, No. 1, Jan.-Feb. **1995**, pp. 21-32.
16. Sharma Virendra Kumar, Singh Bhim, and Murthy S. S., "Dynamic Analysis of Sliding mode Control of Switched Reluctance Motor Drive System," *Journal of Institution of Engineers (India)*, Vol. 79, Dec. **1998**, pp. 119-125.
17. Sharma Virendra Kumar, Singh Bhim, and Murthy S. S., "A Simple Analog Controller for Switched Reluctance Motor," *IETE Technical Review*, Vol. 17 No. 5 Sept.-Oct., **2000**, pp. 247-256.
18. Sharma Virendra Kumar and Gupta J. R. P., "Power Quality Assessment and Harmonic Comparison of Typical Non-Linear Electronic Loads," *IETE Technical Review*, Vol. 17, No. 6, Nov.-Dec., **2000**, pp. 381-386.
19. Sharma Virendra Kumar and Akhter Hamid E., "Performance analysis of switched reluctance motor operating with fixed advance angle control scheme", *Journal of Institution of Engineers (India)*, Vol. 82, March **2002**, pp. 281-288.
20. Sharma Virendra Kumar, "Design and simulation of hybrid fuzzy logic controller for switched reluctance motor drive system, *Journal of Institution of Engineers (India)*, Vol. 83, September **2002**, pp. 100-105.
21. Singh Bhim, Murthy S. S., and Sharma Virendra Kumar, "Modelling of Magnetization Characteristics of Switched Reluctance Motor," *Journal of Institution of Engineers (I)*, Vol. 83, March **2003**, pp. 302-306.
22. Sharma Virendra Kumar and Akhter Hamid E., Chandra A., Al-Haddad Kamal, "Determination of optimum switching angle for speed control of switched reluctance motor," *Indian Journal of Engineering and Material Science, India*, Vol. 6, June **2004**, pp. 254-268.
23. Anis Afzal, V.K. Sharma, Mohibullah, "Performance evaluation of wind energy conversion system as an alternative energy source in Indian condition", *Int. Journal of Mathematic Science & Engineering Applications*, Vol. 1, No. 1, **2007**, pp. 155-171.
24. A.N. Arvindan, V.K. Sharma
25. , 'Microprocessor based Symmetrical Multipulse Modulation in a Three-Phase Improved Power Quality AC-AC Converter with Four-Quadrant Switch Realizations", *IETE Journal of Research*, Vol.53, No.6, November-December, **2007**, pp. 563 - 571.
26. Singh, H., Srivastava, N.K., Afzal, A., and Sharma, V.K., 2005. Energy analysis of solar photovoltaic system for rural applications. *Proc. of 21st National Convention of Electrical Engineers, Institution of Engineers (India)*, New Delhi, Nov. 10-11, 2005, pp. 123-130.

## **C. Refereed International Conferences Outside India**

27. Sharma Virendra Kumar, Singh Bhim, and Singh B.P., "Dynamic Analysis of Full Step and Half Step Control of Variable Reluctance Step Motor," Accepted at IEEE-PEDS, Feb. 21-24, 1995, Singapore.
28. Murthy S. S., Singh Bhim, and Sharma Virendra Kumar, "A Frequency Response Method to Estimate Inductance Profile of Switched Reluctance Motor," IEEE-PEDS 1997, Singapore, pp. 181-187.
29. Sharma Virendra Kumar, Singh Bhim, and Murthy S. S., "Performance Analysis of Unity Power Factor Converter-Inverter Fed Switched Reluctance Motor Drive," IEEE-IEMDC 1997, Wisconsin, USA, pp. WA1 5.1-5.3.
30. Singh Bhim, Sharma Virendra Kumar, and Murthy S. S., "Performance Analysis of Adaptive Fuzzy Logic Controller for Switched Reluctance Motor Drive System," 33<sup>rd</sup> IEEE-IAS Annual Meeting, 1998, St. Louis, MO, USA, Vol. I, pp. 571-579.
31. Sharma Virendra Kumar, Murthy S. S., and Singh Bhim, "Analysis of Switched Reluctance Motor Drive System Under Fault Conditions," 33<sup>rd</sup> IEEE-IAS Annual Meeting, 1998, St. Louis, MO, USA, Vol. I, pp. 553-562.
32. Singh Bhim, Sharma Virendra Kumar, and Murthy S. S., "Performance Comparison of PID Sliding Mode and Fuzzy Logic Controller for Four Quadrant Operation of Switched Reluctance Motor Drive System," IEEE-PEDES 1998, Australia, pp. 99-108.
33. Murthy S. S., Singh Bhim, and Sharma Virendra Kumar, "Steady State Analysis of Switched Reluctance Motor Operating as a Generator," IEEE-IEMDC 1999, Seattle, Washington, USA.
34. Sharma Virendra Kumar and Rai H.C., "Design and Simulation of H $\infty$  Control of Switched Reluctance Motor," PCIM, 2000, Nuremberg, Germany, pp. 405-409.
35. Sharma Virendra Kumar, Singh Bhim and Murthy S. S., "Power Quality Comparison of Switched Reluctance Motor and Permanent Magnet Motor," IEEE TENCON 2000, Malaysia, pp. 300-303.
36. H. E. Akhter and Sharma Virendra Kumar, "Stability analysis of Switched Reluctance Motor operating with fixed advance angle control scheme," IEEE PEDS'2001, Indonesia, pp. 732-737.
37. Hamid E. Akhter, Sharma V.K. "Modeling, Simulation and Performance Analysis of Switched reluctance Motor Operating with Optimum Value of Turn and Turn Switching Angles", IEEE Power Electronics Specialist Conference, 2003, Mexico, June 15-19, 2003, pp 1020-1025.
38. A. N. Arvindan and V. K. Sharma, Simulation based performance analysis of the high frequency bi-directional improved power quality ac-dc converter with four quadrant switch realizations, ICIT 2005, Hong Kong, pp. 981-986.
39. A. N. Arvindan and V. K. Sharma, Simulation of improved power quality multilevel converter. IEEE Power India Conference, New Delhi, April 2006.
40. A. N. Arvindan and V. K. Sharma, Harmonic Analysis of Microprocessor based Three-Phase Improved Power Quality AC/AC Voltage Controller using Power MOSFETs, IEEE International Symposium on Industrial Electronics, IEEE-ISIE-2006, July 9-13, 2006, ETS-Montreal, Canada, pp. 763-768.
41. Navnit Mishra and V.K. Sharma Steady state and transient study of fuzzy controlled load commutated Current Source Inverter, China International Conference on Electricity Distribution, Beijing, China, Sept., 17-20, 2006.
42. Automation in industries using micro-PLC implemented by FPGA technology, Dhanashri Gawali, V. K. Sharma, EPE October 2006, Romania, pp. 909-914.
43. Prachi Rajarapollu, Sharma, V. K., 'Design and analysis of satellite based disaster warning system – II,' TENCON 2007 IEEE Region 10 Conference, Taiwan, Oct. 30-Nov. 2, 2007, pp. 1-4.
44. Sharma V.K., Yogita M. Vaidya, 'Radio frequency identification based rail wagon monitoring system, 4<sup>th</sup> IEEE International Conference on Mechatronics, May 2007, Fukuoka, Japan, pp. 1-6.



45. Sharma V.K., Chavan Y.V. et al, 'Development of a Microcontroller Based Enhanced Security System Using GSM Communication for Electric Vehicle,' IAMF, EET, Geneva, March 10-13, 2008.
46. Satyam, R.D. Kamble, V.K. Sharma, 'Motion control of numerically controlled machine using FPGA and microcontroller,' IEEE International conf. ICECE, Dhaka, Bangladesh, Dec. 22-23, 2008.
47. K.M. Soni, H.E. Akhter, V.K. Sharma, 'Neural network based ac-dc boost converter with improved power factor and regulated voltage', IEEE IMS Seoul Korea, 2010, pp. 78-682.
48. Anis Afzal, Harish Kumar, V.K. Sharma, 'Hybrid Renewable Energy Systems for Energy Security Using Optimization Technique', IEEE ICUE, Thailand, Sept 27-30 2011.
49. Harish Kumar, Manish Sharma, V.K. Sharma, 'Design and Simulation of Active Antenna for Communication in Smart Grids', IEEE ICUE, Thailand, Sept 27-30 2011.

#### **D. Refereed International Conferences Within India**

50. Sharma Virendra Kumar, Singh Bhim, Murthy S. S., Chandra A., Al-Haddad Kamal, "Performance Analysis of Fuzzy Logic Based Speed Controller for Switched reluctance Motor Drive," Proc. IEEE-PEDES 1996, New Delhi, India, pp. 373-380.
51. Murthy S. S., Singh Bhim, and Sharma Virendra Kumar, "Finite Element Analysis to Achieve Optimum Geometry of Switched Reluctance Motor," IEEE-TENCON 1998, New Delhi, India, pp. 414-418.
52. Sharma Virendra Kumar, Singh Bhim and Murthy S. S., "PC Based Real-Time Digital Implementation Scheme for Speed Control of Switched Reluctance Motor Drive System", 6<sup>th</sup> International Conference on Electrical Rotating Machines Elroma 2004, Feb 2004, New Delhi, pp. v3-v9.
53. A Novel Scheme For Digital Implementation Of Optimum Torque Controlled Variable Speed Switched Reluctance Motor Drive System" IEEE PCI, Nov. 2004, New Delhi, pp. 226-230.
54. Modeling simulation and performance analysis of four-quadrant operation of switched reluctance motor drive system, IEEE PCI, Nov. 2004, New Delhi, pp. 219-225.
55. Emerging Trends in Power Quality Issues of Industrial Drives and their Mitigation Techniques, IEEE PCI, Nov. 2004, New Delhi, pp. 63-68.
56. Microprocessor based three-phase ac controller using power Mosfets, IEE Int. Conf. PEITSICON, Jan. 2005, Kolkata, pp. 281-285.
57. Modeling, simulation and performance analysis of improved power quality ac-dc converter, IEE Int. Conf. PEITSICON, Jan. 2005, Kolkata, pp. 529-533.
58. A. N. Arvindan and V. K. Sharma, "Transformer less Bi-directional Improved Power Quality AC-DC converters for HVDC Applications," in Proc. International Colloquium on Role of HVDC, FACTS and Emerging Technologies in Evolving Power Systems, pp.115-128, CIGRE (India), held in September 23-24, 2005 at Bangalore, India.
59. A. N. Arvindan and V. K. Sharma, Simulation based performance analysis of dual supply bi-directional improved power quality ac-dc matrix converter, CERA 2005, IIT Roorkee, pp. 389-392.
60. Arvindan, A. N., Sharma, V. K., 'Simulation based Performance Analysis of Dual Supply Bi-directional Improved Power Quality AC-DC Matrix Converter with Four Quadrant Switch Realizations', Annual IEEE INDICON, 11-13 Dec. 2005, pp. 600 – 604.
61. A.N.Arvindan, and V.K. Sharma, Hysteresis-Band Current Control of a Four Quadrant AC-DC Converter giving IEEE 519 compliant performance at Leading and Lagging Power Factors, IEEE ICIT, Mumbai 2006, pp. 1397-1402.
62. A.N. Arvindan, and V. K. Sharma, Performance Analysis of a Unity Power Factor Improved Power Quality Bi-Directional Buck Boost AC-DC Converter, IEEE ICIT Mumbai, 2006, pp. 2142-2147.
63. Advance computer communication systems in hybrid vehicles, P.V. Suryavanshi, V. K. Sharma, IEEE Int. Conf. on Hybrid Vehicles, Pune, December, 2006.
64. Control, alarm and indicator system in modern electric vehicles, R.D. Kamble, V. K. Sharma IEEE Int., Conf. on Hybrid Vehicles, Pune, December, 2006.
65. Sharma V.K., Wani M.G., Soni M.K., 'High frequency SMPS based inverter with improved power factor,' IEEE Conf. PEDES 2006, Delhi, pp. 1-7.
66. Darshil, Satyajit, V.K. Sharma, 'Development of PLC based elevator system with colour sensing capabilities for material handling in industrial plant,' IEEE International Conf. Powercon, Delhi, India, October 2008, pp.

## National Conferences

67. Singh Bhim, Sharma Virendra Kumar, and Murthy S. S., "Dynamic Control of Switched Reluctance Motor using PID speed Controller," National Power System Conference (NPSC), Baroda, India, 1998, pp. 547-554.
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## **Brief Introduction of Prof. VK Sharma**

Prof. V. K. Sharma has done his B.E. from KREC (NIT) Surathkal, MTech from IIT Delhi and PhD also from IIT Delhi. He has done one year stint as post doctoral fellow at Ecole Technologie Superiere at Montreal Canada. His area of interests include DSP control of electric drives, active filters, power electronics application to power systems and renewable energy conversion techniques, sensor networks, computational algorithms etc. He has more than 100 technical research papers in international and national journals conferences. He has completed a few sponsored projects in the area of R&D, Thrust and Modernization. He has guided a number of scholars for PhD awarded at Jamia, AMU and Bhagwant University Ajmer. He has traveled to USA, Canada, Germany, Italy, France, Japan, Malayasia, Thailand, Korea, Hong King, Cambodia, Switzerland, Spain, and Israel for presenting research papers, chairing sessions and delivering lectures. He is a Senior Member of IEEE, Fellow IETE, and Member IE(I). He has worked in Jamia Millia Islamia, NIT Uttarakhand and MIT Institutes Pune. He has organized conferences, faculty development programs, workshops and seminars. He has successfully organized NBA and NAAC accreditations in the institutes where he has worked. He also got his institutes, departments and programs approved by PCI, BCI, NCTE, AICTE etc. He has been expert committee member of various committees at AICTE, NBA, NAAC etc. Due to his meritorious contributions in the field of education, he has been awarded Lions Education Award, Railway Board Medal, UGC visiting research fellow etc. He has received Best College of the Region award for his institutes. He has been organizing Jan Chetna Program at Bhagwant University to create awareness in rural masses about health check up camps, AIDS, Beti Bachao Beti Padhao, Sarv Shiksha Abhiyan, Swachh Gramin Bharat etc. Currently he is working as Professor in Electrical Engineering and Vice Chancellor of Bhagwant University Ajmer. He is an accomplished scientist with large number of research publications to his credit. He is actively involved in computational and experimental research work. Good number of research scholars work with him and contribute in scientific development. His interests in nuclear engineering, composite materials, signal processing, sensor networks and industrial rives has built a large fan following with many senior scientists visiting his laboratory. He is an asset to the institute and contributes in academic, research and development activities and leads his research community.