Prof. RAKESH SAXENA

1. Personal Information						
(i)	Name	DR. RAKESH SAXENA				
(ii)	Qualification	Ph.D				
(iii)	Designation	Professor				
(iv)	Email-id	rakeshsaxena@hotmail.com				
(v)	Employee No.	103				
(Vi)	Department	Electrical	0			
(vii)	Experience	36 years				



2. Educational Qualification						
S. No.	Degree	Specialization	Year	University/Board		
1	Ph. D	Electrical (Power Elex. And Drive)	2003	DAVV, INDORE		
2	M.E.	Electrical (Power Elex.)	1987	DAVV, INDORE		
3	B.E.	Electrical	1984	Jiwaji University, Gwalior		
4	Diploma I year	Electronics and TC	1979	MP TECH BOARD, BHOPAL		
5	H. S.	PCM	1978	MP BOARD, BHOPAL		
	Other Qualification					
6	MBA	Finance	2006	DAVV, INDORE		

3. Research Interests

Power Electronics & Drives, Digital controls, High Voltage Engg, Power Quality, Industrial Electronics, Energy Audit.

4. Research Paper Publications

(I) International/National Journal Publications

1. Shailendra Kumar Sharma, Pemendra Kumar Pardhi, Rakesh Saxena, "Fifth-Order Generalized Integrator for a Double-Stage Single-Phase Grid-Interfaced Photovoltaic

- Supply System", IETE Journal of Research, Taylor & Francis, 2022/5/10, 1-15.
- 2. Sunil V Patil, Rakesh Saxena, "Design & Simulation of Brushless DC Motor Using ANSYS for EV Application", 2022 IEEE International Students' Conference on Electrical, Electronics and Computer Science (SCEECS), IEEE, 2022/2/19, 1-5.
- Pemendra Kumar Pardhi, Shailendra Kumar Sharma, Rakesh Saxena, "Integrated DC-DC Converter For Stand-alone Single Phase Photovoltaic Supply System", 2022 IEEE International Conference on Power Electronics, Smart Grid, and Renewable Energy (PESGRE),IEEE, 2022/1/2,1-6.
- 4. Shailendra Kumar Sharma, Pemendra Kumar Pardhi, Rakesh Saxena,"SEPIC for solar energy–based sensorless speed control of induction motor drive", International Transactions on Electrical Energy Systems, Vol. 31, issue 12, 2021/12.
- 5. Menka Dubey, Shailendra K Sharma, Rakesh Saxena, "Design and development of quasi-resonant switched step-up converter for solar energy-based brush-less DC motor drive", International Transactions on Electrical Energy Systems, Vol. 31, Issue 10, 2021/10.
- Pemendra Kumar Pardhi, Shailendra Kumar Sharma, Rakesh Saxena, "Enhanced TOGI Controller for Single-stage Single Phase Grid-tied Solar PV Supply System", 2021 IEEE International Power and Renewable Energy Conference (IPRECON), IEEE, 2021/9/24,pg. 1-5.
- 7. Ram Kishan Khatri, Rakesh Saxena, Yogesh Pahariya,"Investigation of Grid Parameters with the Impact of PV system on Grid connected Variable Load System", Design Engineering, 2021/6/9, pg. 137-145.
- 8. RK Kishan, R Saxena, Y Pahariya,"Performance of Grid Connected PV System with Variable Load System", J NuclEne Sci Power General Techno 10, 2021, Vol. 9, pg. 2.
- 9. Karuna Nikum, Rakesh Saxena, Abhay Wagh,"Power quality issues in commercial load-impact and mitigation difficulties in present scenario", ICCCE 2020, Springer, Singapore, 2021,pg.63-78.
- 10. Menka Dubey, Shailendra Sharma and Rakesh Saxena, "Solar Power-Driven Position Sensorless Control of Permanent Magnet Brushless DC motor for Refrigeration Plant, Accepted for future publications in International Transaction on Electrical Energy system, 2020
- 11. Menka Dubey, Shailendra Sharma and Rakesh Saxena, "Solar Power-Driven Permanent Magnet Synchronous Motor Coupled with Pump Load: Design, Development and Control, Accepted for future publications in International Journal of Power Electronics, 2020
- 12. MenkaDubey,Shailendra K. Sharma and Rakesh Saxena, "Cascaded Boost Buck Converter for Solar Power Driven Stand-alone PMSM Drive", Renewable energy focus, accepted for future publication of Renewable energy Focus Journal,2020
- 13. Nikum, A.Wagh, R. Saxena, B. Mishra, "New economical design of SVC and passive filters to improve power quality at railway substation: a case study:". Journal of The Institution of Engineers (India): Series B, vol. 100, no. 4, pp. 529-540, Oct. 2019
- 14. Nikum, A.Wagh, R. Saxena, B. Mishra, "A New Cost-Effective Approach for Mitigation of PQ Problem to Maximize the System Performance of Industry: A Case Study". *Journal of The Institution of Engineers (India): Series B*, vol. 100, no. 1, pp. 85-94, Feb. 2019
- 15. Menka Dubey, Shailendra Sharma and Rakesh Saxena, "Solar Water Pumping: Need of India, Electrical India Magazine, vol. 59 no.11, pp. 192-195, 2019
- 16. Menka Dubey, Shailendra Sharma and Rakesh Saxena, "Solar Power Based PMSM Drive Employed in Refrigeration Plants for Isolated Areas, *IEEE Transaction on Industry Application*, 54, no.6 pp.6299-6308, Nov./Dec. 2018.
- 17. Nikum, A. Wagh, R. Saxena and B. Mishra,, "<u>Performance Based Economical Design of</u>
 Hybrid Filter and APFC to Improve the Power Quality of Industry", International Journal of

- Engineering and Technology, vol.7,n0.4.41, pp. 24-30, 2018.
- 18. Mishra, K. Nikum, R. Saxena and A.Wagh, "Analysis of Accumulative Effect of Harmonics on Low Voltage Distribution Network", *IOSR Journal of Engineering and Technology*, vol.3, pp. 5-14, March 2018.
- 19. Wagh, K. Nikum, R. Saxena and B. Mishra "Simulation of Hybrid D-STATCOM for Commercial Load in Three Phase Four Wire Distribution System", *IOSR Journal of Engineering and Technology*, vol.8, no.5 pp. 7-14, May 2018.
- 20. Mahajan, P.J. Shah and R. Saxena, "Analysis the Response of single and multiple Superconducting fault Current Limiters in Smart Grid for Symmetrical Faults", *Int. Journal of Engineering and Technology*, vol. 5, no. 7, pp. 417-425, July. 2015.
- 21. S. Sarode, P. J. Shah and R.Saxena, "Overview of Interline Dynamic Voltage Restorer for Power Quality Improvement", *Australian Journal of Information Technology & Communication*,vol.2, no.1, pp. 2203-2843, Dec. 2015.
- 22. Pahariya, R. Saxena and B. Singh, "Switched Reluctance Drive in Industrial Application", *The journal of CPRI*, vol.10, no.4, pp. 741-754, Dec. 2014.
- 23. Pahariya and R. Saxena, "Electrical Energy Conservation in Engineering Industry: A Case Study", Int. Iournal of Applied Mechanics and Materials, vol:619, pp. 178-182, Aug. 2014.
- 24. J. Shah, R. Saxena and M.P.S. Chawla, "Digital Control Technologies for Improving the Power Quality of Power Supplies", *Int. journal of Neural Computing and Applications, Springer*, vol.22, pp. 235-248, May 2013.
- 25. Pahariya and R. Saxena, "Implementation of MATLAB Based Flux Linkage Characteristics Model of 8/6 SRM", Int. journal of power Electronics and Drive System, vol.3, no.3, pp. 251-258, Sept. 2013.
- Pahariya, R. Saxena and B.Sarkar "Control Strategy of SRM Converters for Power Quality Improvement" *Int. Journal of Electronics Science and Engineering*, vol. 6, no. 9, pp.1090-1104, 2012.
- 27. J. Shah, R. Saxena and M.P.S. Chawla, "Digital Filter Design with Harmonics Estimation for Power Supplies", *Journal of the Institution of Engineers (IE), India,* Series(B), vol.93, no.2, pp. 73-79, June 2012.
- 28. J. Shah, R. Saxena and M.P.S. Chawla, "Design and modeling of a digital controller for SMPS", International Journal for Power Electronics and Energy (IJPEE- CASER), vol. 1, no. 1, pp. 10-18, July 2012
- 29. J. Shah, R. Saxena and M.P.S. Chawla, "Artificial Intelligence Approaches to Advance Signal Processing and Simulation Methods for Efficient Power Supplies", International Journal of Electrical and Electronic Engineering, Scientific and Academic Publishing (SAP), USA, vol.2, no.4, pp. 217-225 August 2012.
- 30. Dubey, S. Sharma and R. Saxena, "Comparative analysis of direct power control & Tri-level pattern generation-based control techniques used for voltage control of boost converter", ACEEE Int. Journal of Recenttrendsinengineering and technology (IJRTET), vol.6, no. 2, pp 79-83, Nov. 2011
- 31. Pahariya,A. R. Chouhan, R. Saxena and B. Singh, "Switched Reluctance Motor Converter Simulation; A High Efficiency LowCost Comparative Performance Evaluation "Journal of the Institution of Engineers (IE), India—EL,vol.91, no.4, pp 31-36, March 2011.
- 32. Singh, R. Saxena, Y.Pahariya and A.R. Chouhan "Converter Performance Evaluation of SRM in Simulink", *International Journal of Industrial Electronics and Control*, vol. 3, no. 2, pp. 89-101, 2011.
- 33. Saxena, B.Singh and Y. Pahariya, "Measurement of Flux Linkage and Inductance Profile of SRM "International Journal of computer and Electrical Engineering. (IJCEE), Singapore, Asia, vol. 2, no.2, pp.387-389, April 2010.

- 34. Pahariya, R. Saxena and A. J. Siddiqui, "New Electric Motor in Variable Speed Application: BLDC Motor," *IEEMA Journal, Mumbai.*vol.29, no 1, pp.80-85,Jan.2009.
- **35.** Pahariya, R. Saxena and B. Singh "Switched Reluctance Motor Drive; A New Concept in Variable Speed drive", *IEEMA Journal, Mumbai*, vol.25, no 10, pp. 72-76, Oct. 2005.

(II) International Conference Publications

- 1. Rakesh Saxena, Shailendra Sharma and Menka Dubey, "SEPIC converter based Solar Energy Driven Sensorless Induction Motor Drive," Accepted for *IEEE International Conference*, *PESGRE*, Kochi, Kerla, Jan 2020, pp.1-6
- 2. Menka Dubey, Rakesh Saxenaand Shailendra Sharma, "Control of Solar-Power Based PMSM Drive for Compressor Unit," Proc. *IEEE International Conference, ICESIP*, IIITM Kancheepuram, Chennai, Jul. 2019, pp.1-5
- 3. Nikum, A. WaghR. Saxena and A. Mishra, "Power Quality Problems in Large Commercial Load and their Mitigation: A Case Study," Proc. *IEEE International Conference, ICESIP*, IIITM Kancheepuram, Chennai, Jul. 2019, pp.1-5
- 4. Menka Dubey, Shailendra Sharma and Rakesh Saxena, "Control of Solar Power based Soft Switched Boost Converter for PMBLDC Motor Drive," Proc. *IEEE International Conference*, PEDES, IIT Madras, Chennai, 2018, pp.1-5.
- 5. Menka Dubey, Shailendra Sharma and Rakesh Saxena, "Z- Source Inverter Based Solar Power Driven PMBLDC Motor Drive, "Proc. *IEEEPower India Conference, PIICON, NIT Kurukshetra, 2018, pp.1-5.*
- 6. Menka Dubey, Shailendra Sharma and Rakesh Saxena, "Solar Power Based Water Pump Employing Z Source Inverter for PMSM Drive", Proc. IEEE IICPE, NIT, Jaipur, Dec. 2018, pp.1-5
- 7. Mishra and Rakesh Saxena, "Comprehensive review of control schemes for battery and super-capacitor energy storage system", Proc. IEEE ICPS, Pune, Dec. 2017, pp.702-707
- 8. Pansare, S. K. Sharma, C. Jain and R. Saxena, "Analysis of a modified positive output Luo converter and its application to solar PV system," in proc. IEEE Industry Applications Society Annual Meeting, Cincinnati, OH, Oct. 2017, pp. 1-6.
- 9. Jain, R. Saxena and K. Nikum, "Power quality monitoring of different brands of laptops," in proc. International Conference on Information, Communication, Instrumentation and Control (ICICIC), Indore, Aug. 2017, pp. 1-4.
- 10. Nikum, R. Saxena and A. Wagh, "Effect on power quality by large penetration of household nonlinear load," in *proc. IEEE Conference on Power Electronics, Intelligent Control and Energy Systems (ICPEICES)*, Delhi, July 2016, pp. 1-5.
- 11. Nikum, R. Saxena and A. Wagh, "Harmonic analysis of residential load based on power quality," in proc. IEEE PowerIndia International Conference (PIICON), Bikaner, Nov. 2016, pp. 1-6.
- 12. Nikum, R. Saxena and A. Wagh, "Power quality assessment of modern residential load," in proc. IEEE Conference on Power Electronics (IICPE), Patiala, Nov. 2016, pp. 1-4.
- 13. Nikum, R. Saxena and A. Wagh, "Power quality analysis of energy efficient residential load," in proc. *IEEE International WIE Conference on Electrical and Computer Engineering (WIECON-ECE)*, Pune, Dec. 2016, pp. 36-39.
- 14. Dubey, R. Saxena and S. Sharma, "Photo-voltaic system for refrigeration plants in isolated areas," in proc. *IEEE Power India International Conference (PIICON)*, Bikaner, Nov. 2016, pp. 1-6.

- 15. Dubey, R. Saxena and S. Sharma, "Direct torque and power controlled PMSM drive," in proc. IEEE Power India International Conference (PIICON), Bikaner, Nov. 2016, pp. 1-6.
- 16. Dubey, S. Sharma and R. Saxena, "Single stage PV system based Direct Torque Controlled PMSM drive for pump load application," in proc. *IEEE International Conference on Power Electronics, Drives and Energy Systems (PEDES)*, Trivandrum, Dec. 2016, pp. 1-5.
- 17. Patil and R. Saxena, "Performance Simulation of 8/6 Switched Reluctance Motor Drive", in *Proc. International Conference on Electronics and Communication Systems (ICECS)*, Tamilnadu, Feb. 2016, pp.1059-1063.
- 18. Patil and R. Saxena, "Microcontroller Based Four Quadrant Operation of Switched Reluctance Motor Drive," in *Proc. International Conference on Advances in Steel, Power & Construction Technology*, Raigarh, Jan. 2015, pp.1-5.
- 19. Dubey, S. Sharma and R. Saxena, "Solar PV stand-alone water pumping system employing PMSM drive," in proc. *IEEE Students' Conference on Electrical, Electronics and Computer Science (SCEECS)*, Bhopal, Mar. 2014, pp. 1-6.
- 20. J. Shah, R. Saxena and M. P. S. Chawla, "Power Quality Improvement in Switch Mode Power Supply Using FPGA based Digital Control approaches," in proc. *International Conference on Advances in Electrical and Electronics (AETAEE)*, 2013, pp. 645-652.
- 21. Saxena and K. Nikum, "Comparative study of different residential illumination appliances based on power quality," in proc. *IEEE India International Conference on Power Electronics* (*IICPE*), Delhi, 2012, pp. 1-5.
- 22. J. Shah, R. Saxena and M. P. S. Chawla, "FPGA based digitalized power supplies," in proc. *IEEE India International Conference on Power Electronics (IICPE)*, Delhi, 2012, pp. 1-5
- 23. Saxena, Y. Pahariya and A. Tiwary, "Modeling and Simulation of BLDC Motor Using Soft Computing Techniques," in proc. *IEEE Conference on Communication Software and Networks*, Singapore, 2010, pp. 583-587.
- 24. A. Khan, A. K. Sharma and R. Saxena, "Expert System for Power Transformer Condition Monitoring and Diagnosis," in *proc. IEEE International Conference on Power Electronic, Drives and Energy Systems*, New Delhi, 2006, pp. 1-6.
- 25. S. Babu, M. Borage, S. Tiwari, S. Kotaiah and R. Saxena, "Analysis and Eexperimentation with passive cancellation of common-mode noise in buck converter," in proc. IEEE International Conference on Electromagnetic Interference and Compatibility (INCEMIC), Bangalore, 2006, pp. 172-180.
- 26. Patel, A. Omer and R. Saxena, "A Model for Micro-controller Based Speed Control of DC motor With Interfacing Using HyperTerminal", in *Proc. International Conference on Advances Research in Electrical and Electronics Engineering*, New Delhi, Dec. 2014,vol.2, no.1, pp.18-23.
- 27. Saxena, S. Jain, A. Omer and K. Nikum "Power Quality Assessment in Residential Illumination System ", in *Proc. International Conference on Electrical Power and Energy Systems (ICEPES)*, Bhopal, Aug. 2010, pp. 1-4.
- 28. J. Shah, R. Saxena and M. P. S. Chawla, "Power Quality Requirement for Uninterruptible Power Supplies "in *Pro.International Conference of Computational Intelligence Communication Systems and Networks (CICSYN*), Indore, July2009, pp 1-5.
- 29. J. Shah, R. Saxena and M. P. S. Chawla, "Various Techniques for Improving the Power Quality in Power Supplies", in *Pro.International Conference of Computational Intelligence Communication Systems and Networks (CICSYN)*, Indore, July2009, pp 1-5.
- 30. S. Babu, M. Borage, S. Tiwari, S. Kotaiah and R. Saxena, "Evaluation of passive lossless snubbers for high frequency switching converters", in *Proc. IEEE Annual Symposium on Power Systems*, Bangalore, Nov. 2004, pp.1-8.
- 31. K. Shrivastava, R.Saxena, A. Khajanchee and C. M. Pauddar"New control scheme of a 3-

phase to 1-phase cyclo-converter circuit", in *Proc. International Conference on Automation* (ICARCV), Singapore, Sept. 1992, pp. co-5.6.1- co-5.6.5.

(III) National Conference Publications

- 1. Kulkarni, M. Mishra, R. Saxena and R. Jain, "Study of non-Distributive Testing algorithm for Automated flaw detection using ultrasonic techniques", in proc. *National Symposium onInstrumentation (NSI-40)*, Coimbattore, Sep. 2015, pp. 1-6.
- 2. Kapadia, V.K. Dwivedi, A. Singh, M.Borage, S. Tiwari and R. Saxena, "Comparison of Interleaved series input parallel output(ISIPO) forward converters with different secondary-side Configuration", in *proc*.National Conference on Power Electronics System & Applications (PESA), Rourkela, Sep. 2013, pp. 1-6.
- 3. S.Murty,R. Saxena, N. K. Singh and R. Somalwar"Potential Grid enhancement with the quality Improvement in Solar Design", in *proc.National Conference on Power Electronics System & Applications (PESA)*, Rourkela, Sep. 2013, pp. 1-6.
- 4. Nagar, R. Saxena and Y. Pahariya, "A Study of Phase Control Method for SRM Converter Based on Microcontroller", in *proc. National Conference on Modelling & Simulation of Electrical Systems (MSES-2013)*, Bhopal, Feb. 2013, pp.14-16.
- 5. Dubey S. Sharma, R. Saxena and H. R. Kamath, "Voltage Control for Boost Converter based on Direct Power Control", in *proc. National Conference on Advanced in Energy Conversion Technologies (AECT)*, Manipal, Feb. 2011, pp.1-6.
- 6. Dubey S. Sharma and R. Saxena, "Voltage Control for Boost Converter", in proc. National Conference on Recent Advances in Computational Techniques in Electrical Engineering (RACTEE), Punjab, Mar 2010, pp.1-6.
- 7. Tiwary, Y. Pahariya and R. Saxena, "Modelling of BLDC Motor in PSIM", in *proc. National Conference on Challenges of Power Sector in 21st Century,* Jabalpur, Nov. 2007, pp. 107-110.
- 8. Pahariya and R. Saxena"Case Study: Energy Audit of an Engineering Industry", in *Proc. National Conferenceon Power System (NCPS)*, Ujjain, April 2007, pp. 240-243.
- 9. Pahariya, A. J. Siddiqui and R. Saxena"Modern Trend in Variable Speed Applications: BLDC Motor", in *Proc. National Conferenceon Power System (NCPS)*, Ujjain,April2007, pp. 36-39.
- 10. Saxena, B.Singh and B.Sarkar "Switched reluctance motor a new concept in industrial drives", in *Proc. All India seminar on Modern trends in Industrial drives,* Indore, Feb.,1999, pp. 51-58.

5. List of Conferences/Workshops/Seminars Organized

- 1. Two days National Workshop on "Curriculum Innovation & choice Based Credit System in Technical Education" on June 2-3, 2015 UGC Sponsored.
- 2. Two days National Conference on "Power Transmission and Distribution" on September 22-23, 2014 organized by IPMA, Bhopal.
- 3. "M.P. Council of Science & Technology" young Scientist Congress, judged the Technical Session February 28-29, 2012.
- 4. "Intelligent Control of Electric Drives" short term course under the QIP Programme, August 31-September 4, 2006, (1 week) at EED, IIT, Roorkee.
- 5. "Flexible AC Transmission System" short term training programme under TEQIP, 13-15 July

- 2005 (3 days) at MANIT, Bhopal.
- 6. "Preparing young minds for enterprising future", National Workshop, 9 April 2005 (1 day) at MANIT, Bhopal.
- 7. "Geotechnical Problems: Case Studies (NSGPC-04), 3rd October 2004, SGSITS Indore (M.P.).
- 8. Workshop in "Curriculum innovation of B.E. Programs" in Electrical Engg., Electrical & Elex. Engg. & Elex& Instrumentation at RGPV, Bhopal during 23-24 May & 16-17 June 2003.
- 9. "Computer Application in Power Electronics, Electrical Machines and Drives", short-term course under the QIP programme, 13-17 December 1999. (1 week) at EED, IIT New Delhi.
- 10. "Recent trends in Power Electronics Applications", short term course under the QIP programme, 3-7 May 1999 (1 week) at EED, IIT, Bombay.
- 11. "Recent Advances in Power Electronics", short term course, 10-21 August 1998 (2 week) at Centre for continuing education IISC, Bangalore.
- 12. Workshop in "Helping Students Develop Better Learning Skills and Habits", sponsored by ISTE-CIICP, New Delhi and organized by Columbia Institute of Technology, Canada, September 21-23, 1995, at S.J. College of Engineering Mysore.
- 13. Workshop on energy efficient motors, 30-31 March 1995 at EED SGSITS, Indore.
- 14. "Microprocessor Systems", instruction enhancement programme under IMPACT project, May 9 to July 1, 1994 (8 week) at IIT, Delhi.
- 15. "Modern trends in computer based automation", ISTE winter school, Jan. 3-14, 1994 (2 week) at SGSITS, Indore.
- 16. "Power Electronics", instructions enhancement programme under IMPACT project, Feb. 1 to March 26 1993 (8 week) at IISC, Bangalore.
- 17. "Permanent Magnet and Switched Reluctance Motors and Control", microprocessor application programme, INDO-BRITISH workshop, September 21-25 1992 (1 week) at IIT, Delhi.
- 18. "Modelling and Energy System Analysis", short term course of ISTE, July 13-25 1992 (2 week) at MACT, Bhopal.
- 19. "Electrical Drives and Control", ISTE-TISCO special course, December 16-21, 1991 (1 week) at TISCO, Jamshedpur.
- 20. Workshop on Engineering subject terminology, sponsored by commission of scientific and technical terminology (CSTT), MHRD, New Delhi, February 19-22, 1990 at SGSITS, Indore.
- 21. "Thyristor Drives", ISTE winter school, December 12-23, 1998 (2 week), at Anna University, Madras.
- 22. "Adjustable Speed A.C. Drive Systems", QIP programme, June 22 July 5, 1987 (2 week) at University of Roorkee.
- 23. "Data Processing Techniques", correspondence-cum-contact computer education programme, sponsored by DOE and ISTE, December 6 February 9, 1987 (8 weeks) at SGSITS, Indore.

6. Invited Lectures/Expert Talks/Chairmanships at Conferences

- 1. Each semester lecture on "Advances in Electrical Drives" for M-tech Energy Management students at School of Energy & Environmental Sciences, DAVV, Indore.
- 2. Lecture on "Innovative Trends in Electronics and Communication Engineering" at Atharva College of Engineering, Malad, Mumbai on February 14, 2015.
- 3. Lecture on, "High Voltage Distribution System" National Seminar on Impact of Aggregate

- technical & commercial Losses in distribution "HVDS" September 9, 2014 at Department of Electrical and Electronics IES group of institution Bhopal M.P.
- 4. Lecture on "Advances in Electrical & Electronics Engineering" International Conferences on emerging trends in Instrumentation, Communication, Electrical & Electronics Engineering ICE-IEEE 2014 January 23,2014 at Shri Vaishnava Institute of Technology & Science Indore
- 5. Lecture on "Microcontroller Based four Quadrant DC Drive Trainer for Electric Drives Lab" in National Conference on Future Trends in Wireless Communication and Applications on November 08-09, 2011.
- 6. Lecture on, "Energy Auditing & Financial Aspects of Energy Conservation" in short Term Training program "Prospects of energy conservation and Management" on March 17,2011at Dr.Bhim Rao Ambedkar Polytechnic College, Gwalior.
- 7. Lecture on "Institute-Industry interaction, Impact to overall quality" in National Workshop on Quality Management in Technical Education on March 6, 2009 at MITS, Gwalior.
- 8. Lecture on "Recent Trends in efficient motor for Industrial Drives" in National Conference on Challenges of Power sector in 21st Century on November 13, 2007, at JEC, Jabalpur.
- 9. Lecture on "Application of GIS in Efficient Electrical Network" in National conference on Energy Efficient System, August 11-12, 2008, Electrical Engg. Dept., Jabalpur Engineering College
- 10. Lecture on "Electrical Awareness, Safety and saving" at Khandelwal creative group, Indore on June 25, 2006.
- 11. Lecture on "Intelligent & Efficient Power System" on August 13, 2002 at Jabalpur Engineering College M.P.
- 12. Lecture on "Energy Efficient Motor & Drive Switched Reluctance Motor a New Concept in Industrial Drives" on July 4,2002 at Govt. Engg. College, Jabalpur in the short term course on Intelligent and Efficient Power System July under TIFAC center of relevance and excellence in high voltage & power system Engg.
- 13. Lecture on, "Ground Water Economics" on October 16, 1995 at SGSITS Indore.
- 14. Lecture on "Energy Efficient Motor" workshop held in EED SGSITS, Indore during March 30-31 1995.

1. Professional Membership: IEEE (USA), IE (INDIA), ISTE, IWRS, ISLE, CEPRD.

2. Present Administrative Responsibilities:

(a) Institutional

- 1. Head of the Department (Electrical) from 1 Dec 2012- continue (3 year 2 months)
- 2. Head of the Department of management studies (MBA) from March 10,2012- September 10, 2013 (1 year 6 months).
- 3. Chief Coordinator (IIPC) Industry Institute Partner ship Cell of the Institute (April 2002-continue)
- 4. Chief Warden Hostel from 31.12.2003 to 20.11.2007(4 years), 22.2.2011- till date (5 years), Hostel Warden from 22.6.1991 to 30.12.2003(12 year 6 months), Total 21 year 6 months.
- 5. Member of Academic Council and standing committee of the Institute.
- 6. Chairman BOS Electrical and Member of the Institute.
- 7. In charge College Basket Ball team (Since 06.08.1996- continue)
- 8. In charge PG (Electrical) in the department.
- 9. In charge PG Research Laboratory in the department.
- 10. Member Institute Discipline Committee.

11. Faculty Advisor / Mentor of Electrical Clubs CEE, E-cell and Upkaar (Students activities Club).

(b) Outside the Institute

- Independent Director (MPPKVVCL) Indore.
- Experts for MPVFL Indore for Projects funding.
- Experts of various committee and flying squad for RGPV Bhopal.
- 1. Member Board of Studies (Electrical Engg.) RGPV, Bhopal.
- 2. Member Board of Studies (Electrical Engg.) MITS, Gwalior.
- 3. Member Board of Studies (Electrical Engg.) SATI, Vidisha.
- 4. Member Board of Studies (Electrical Engg.) JEC, Jabalpur.
- 5. Member DAVV, Indore University proctorial Board since 20.10.2014.
- 6. Member External Technical Committee DAVV, Indore since 15.03.2012.

3. Other Responsibilities

- 1. Member New Energy Foundation NGO of IIT, Bombay.
- 2. Member Giants International, Indore.
- 3. Member Nagar Suraksha Samiti, Indore.

(a) Various Institutional Responsibilities already taken:

- 1. Assistant Superintendent of examination of the institute.
- 2. G. Coordinator.
- 3. Assistant Superintendent and OSD in MP PSC, Pre Bed, PET, PMT, Banks, GATE, JEE Exams.
- 4. Members of various Institute Committees.
- 5. Coordinated resource generation committee of the Institute in the social Gathering and carnival held on March 21-24 2002.
- 6. Secretary ISTE & Executive Committee Member (1992 2007)
- 7. Faculty Advisor ISTE students chapter (1994 2007).

(b) Various Outside the Institute Responsibilities:

- 1. Observer and Flying squad member for RGPV, Bhopal Examination.
- 2. 2. Member RGPV. Bhopal for new institute affiliation.
- 3. 3. Expert nominated by DTE & RGPV, Bhopal for Faculty Recruitment.
- 4. 4. AICTE observer for CMAT, GPAT Exams.
- **4. Award :** Received best technical paper award at Bangalore. (Annexure -1(4))

5.Activities / Courses organized in the institute as a Coordinator:

- 1. Workshop on "Solar System" with Kwatt Solutions Pvt. Ltd, Bombay for students During September 12-13 2015 and January 9-10, 2016 (4 days).
- 2. Two week short term course on "Programming skills for Electrical Engineers", Sponsored by TEQIP-II September 01-11, 2014.
- 3. Workshop on "TI C2000 Microcontrollers for Real- time Application" Sponsored by TEQIP-II, March 24-25, 2014.

- 4. PHOTON "Illumination Light show" with ISLE during October18-20, 2013.
- 5. Workshop on "Technical education policy & prospectus in M.P." for the principal of all M.P. Engg. Colleges & Polytechnic on 20th June 2002.
- 6. National Industrial Trade Fair Dec. 27-30 2001 at SGSITS, Indore during golden jubilee celebration.
- 7. All India seminar on "Modern Trends in Industrial Drives" with IE India during Feb. 19-20 1999.
- 8. ISTE Winter School on "Industry Institute Partnership" during Dec. 29 1997-Jan 3 1998.
- 9. ISTE AICTE Winter School on "Institutional Planning & Management" during March 26-31 1997.
- 10. "Manthan" a technical paper presentation contest of students in 1995 & 13-14 April 1996 with ISTE student chapter.
- 11. Seminar-cum-Workshop on "Strategic Planning & Institutional Development" with Canada Indian Institutional cooperation project of ISTE during August 25-27 1994.

6. Expert Lecture Organized:

- 1. Lecture on "Electronics Energy Metering System" for III & IV year students on 17th October 2003 by Experts from Secura Meters Ltd., Udaipur.
- 2. Lecture on "Goal Setting" for III & IV year students on 16th September 2003 by Prof. B.K. Prafulbhai S. Shah, DDIT, Nadiad.
- 3. Lecture on "VLSI Technology with DSP Implementation" for the III & IV year students on 13^{th} May 2003 by SIMPLIFY, Bangalore.

7. Courses Taught & Developed:

- 1. PG Level Basic power electronics, electrical drives and dynamics, static power converter circuit.
- 2. UG Level Industrial electronics, power electronics, Basic electrical engg., advance. Electrical drives, high voltage engineering.
- 3. Development Actively involved in the development of the power electronics lab (UG Level) & PG research lab & drives lab (PG Level).

8. Practical Training:

- 1. A testing division of MPEB Indore under QIP scheme from May 11 to August 10, 1988.
- 2. At BHEL Hardwar from July 17 to July 31, 1984 during B.E.
- 3. At Satna Cement Works, Electrical Division, from July 16 to July 30, 1983 during B.E.