

Curriculum Vitae

1. Personal Details		
(i)	Name	Dr. Shailendra kumar Sharma
(ii)	Father's Name	Shri Laxminarayan Sharma
(iii)	Date of Birth	07.05.1972
(iv)	Address for Communication	Professor, Department of Electrical Engineering, Shri G. S. Institute of Technology & Science, 23, Park Road, Indore
(v)	Email id	sksharma.sgsits1972@gmail.com, ssharma@sgsits.ac.in
(vi)	Contact No.	+91-0731-2582217(O)
(viii)	Gender	Male
(ix)	Nationality/Religion	Indian



2.				
No.	Degree	Year	University/Institute	Specialization
(i)	Post Doctoral fellow	2015	Ecole de Technologie Supérieure, University de Quebec, Montreal, Canada	High Penetration of Renewable Energy Sources with Distribution Networks
(ii)	Ph.D.	2012	Indian Institute of Technology, Delhi	Power Electronics for Renewable Energy
(iii)	M.E.	2003	Shri G. S. Institute of Technology & Science, Indore	Electrical Engineering (Specialization in Power Electronics)
(iv)	Bachelor in Electrical Engineering	1998	The Institution of Engineers, (India)	Electrical Engineering

3.	<u>Present Position Held</u>	Professor
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4. <u>Research Experience</u>							
Area of Research Interest: Power Electronics Applications to Renewable Energy, Electrical Drives, Power Quality, Switch Mode Power Supply, Integration of DERs with Distribution Systems							
(a) Ph.D. Dissertation Guidance							
S.No.	Enrollment No.	Name of Ph.D. Student	Topic of Ph.D.	Degree Awarded/ Thesis Submitted RDC	No. of Publication		
					Journal	Conference	Book/Chapter
1.	0801EE14PD01	Ms. Menka Dubey	Solar Photo Voltaic Energy System for Autonomous Application Employing AC	Degree Awarded	7	11	0

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2.	0801EE18PD11	Mr. Pemendra Pardhi	Analysis, Design and Control of Single phase Solar Photovoltaic Supply System	Thesis Submitted	6	11	1
3.	0801EE14PD03	Mr. Shyam Sunder Sharma	Power Quality Improvement in Energy Efficient Lighting System.	RDC approved	1	1	0
4.	0801EE17PD0	Ms. Rinki Keshawni	Optimization of Hybrid Energy Systems for power system	RDC approved	2	2	0
5.	0801EE17PD0	Ms. Toshi Mandloi	Energy management in Micro-grid System	RDC approved	1	0	0
6.	0801EE17PD11	Mr. Sourabh Jain	Design, Development & Control of Smart Loads	RDC approved	1	2	
7.	0801EE18PD0	Mr. Ratndeeep Sharma	Micro-grid Architecture Employing Solid State Transformer	RDC approved	1	2	
8.	0801EE20PD01	Mr. Chandra Kanti Sharma	Analysis, Design and Control of DC Micro grid	RDC approved	0	0	0

(b) Post Graduates

(c) P.G. Dissertation Guidance

	Name of Student Mr./Mis.	Year of Comple tion	Title of Dissertation
(i)	Prateeksha Khare	2023	Artificial Neural Network Based Double Stage Grid Connected Solar Photovoltaic Supply System
(ii)	Mayank Sunhare	2022	Design, Analysis, Development and Control of Switched Reluctance Motor Based Electric Vehicle
(iii)	Vijay Kumar Dubey	2021	Design and Development of Power Converters for Standalone Solar Power Based Street Light System
(iv)	Roopali Dahat	2021	Control of Multilevel VSC in Grid Integrated Photovoltaic Supply System
(v)	Ankit Tripathi	2020	Modeling and Control of Unified Power Quality Conditioners
(vi)	Subham Wani Goshwami	2020	Modeling and Control of Brushless Doubly Fed Reluctance Machine For Wind Energy Conversion Systems
(vii)	Sumit Vyas	2018	Standalone wind energy conversion system employing squirrel cage induction generator for off-grid load
(viii)	Parag Singh	2019	Design, control and implementation of SVM based speed control of squirrel cage induction motor
(ix)	Nikilesh Vinayak Wanjari	2018	High Boost voltage lift DC converters for Solar Photovoltaic Power Generation
(x)	Chitra Bhattacharya	2018	Position sensorless speed control of permanent magnet brushless DC motor drive and its applications

(xi)	Chaitnya Pansare	2017	Analysis, Design & Implementation of Low Power Solar Power Generating
(xii)	Mr. Jitendra Gupta	2017	Control of Z-Source Converter for Grid Connected Photovoltaic Power Generating System
(xiii)	Mis Apurva Rajput	2017	Voltage Control Employing Impedance Method in Distribution Systems under Penetration of Solar Energy
(xiv)	Mr. Anirudh Sharma	2017	Modelling and Control of Unified Power Quality Conditioner
(xv)	Mr. Pemendra Pardi	2017	Micro Grid control in Stand-alone mode for Rural Electrification
(xvi)	Mr. Saran Chourasiya	2017	Unity Power factor Operation of DFIG based Grid Integrated Wind Power Plant using Matrix Converter
(xvii)	Mis Mayuri Shau	2017	Design and Implementation of Wireless Communication Scheme for Smart Grid
(xviii)	Mr. Gaurav Mani Tiwari	2017	Control of PMSG based Grid Integrated Wind Energy Conversion System with Fault Ride Through Capabilities
(xix)	Mis. Siksha	2014	Backstepping and Adaptive Control Scheme for Permanent magnet Synchronous Motor Drive
(xx)	Mr. Nitesh Singh Rathore	2014	Modeling and Analysis of Sliding Mode Controller based Permanent Magnet Synchronous Motor Drive
(xxi)	Durgesh Nandani Bhatia	2014	Control of Multi-level Voltage Sourced Converters for Grid Interfaced Wind Energy Conversion System
(xxii)	Mr. Vikas Raghuvanshi	2014	Modeling, Analysis and Control of Doubly-Fed Induction Generator Based Stand-Alone Wind Energy Conversion Systems
(xxiii)	Mr. Ankiet Saxena	2014	Modeling & Analysis of Single Switch Dual buck-boost converter circuit for driving LED lamp using current control scheme
(xxiv)	Miss. Pooja Pal	2014	Modeling and Analysis of Load Commutated Inverter fed Wound Field Synchronous Motor Drive
(xxv)	Mr. Bharat Singh Parihar	2013	Improved Power Quality Converters for Permanent Magnet Brushless DC Motor Drive
(xxvi)	Mr. Jayadeep Srikakolapu	2013	Grid integrated wind energy conversion system employing permanent magnet synchronous Generator
(xxvii)	Mr. Rupesh Prajapati	2013	Power quality enhancement using DSTATCOM
(xxviii)	Mr. Sourabh Agrawal	2013	Designing of Versa Module Euro Card analyser
(xxix)	Mr. Manajay Pratap Singh	2013	Design, Modeling and Analysis of Power Filters
(xxx)	Mr. Gaurav Saini	2012	Novel Algorithm for Improved Performance of Dynamic Capacitor Based Single-Phase Induction Motor
(xxxii)	Mr. Sourabh Jain	2012	Improved Power Quality Induction Motor Drive
(xxxiii)	Mr. Saurabh Gupta	2009	Constant Voltage & Constant Frequency Operation of Doubly fed Induction Generator in Isolated Load Application
(xxxiv)	Mr. Anuj Sharma	2009	Constant Voltage & Constant Frequency Operation of Self excited Induction Generator in Isolated Load Application
(xxxv)	Mr. Ratndeeep Sharma	2009	Modeling and simulation of improved DTC for PMSM
(xxxvi)	Mis. Menka Dubey	2009	Direct Power Control Based Boost Converter
(xxxvii)	Mr. Y. V. N. Rao Yaramasu	2008	Fuzzy Logic Based Control & Estimation of Three Phase Induction Motor Drives
(xxxviii)	Mr. Raja Saha	2007	DTC fed Induction Motor Drives
(xxxix)	Mr. Jitendra Chouhan	2008	Analysis and Design of D-STATCOM

(xxxix)	Mr. Sourabh Malviya	2008	Condition Monitoring of Three-Phase Induction Motor Using Wavelets	
(xl)	Mr. Rahul Agrawal	2009	Neural Network Based Selective Harmonic Elimination in Single – Phase Inverter	
(xli)	Mr. Saurabh Gaur	2008	Performance Analysis of Adaptive Filtering Algorithms for System Identification	
(xlii)	Mr. Shitij Joshi	2008	Speech Coding using Linear Predictive Coder and Comparison with Waveform Coders	
(xliii)	Mr. Sourabh Agrawal	2007	Design of VME Bus Analyser	
(xliv)	Mr. Harsh Goud	2006	VLSI Implementation Of 32-Bit Audio Digital Signal Processor	
(xlv)	Mr. Avinash Yadav	2006	Design & development of Algorithm for Pulse Generation of PWM Inverter Using Microcontroller	
(xlvi)	Mr. Kunal Pathak		Hardware Implementation of PC Based VVVF Controller or Three Phase Induction Machine	
(c)	<u>Research Projects</u>			
	Title of Project	Funding Agency	Amount In Rs.	Duration
I.	Smart Loads Design & Development	IEI under PhD Project	0.8 Lakhs	2021-23
II.	Modelling and Control of Grid Integrated Photovoltaic Supply System	IIT, Indore Under TEQIP Phase III	1.25 Lakhs	2019-20
III.	Analysis, Design and Control of Power Electronics Converters for Grid Integrated single-phase Solar Rooftop System	MPCST, Bhopal	9.62 Lakhs	2018-2020
IV.	Wind Energy Conversion Systems: Theory, Practices	MHRD under GIAN	5.41 Lakhs	2016-17
V.	Modernization of Power Electronics & Drives Lab	AICTE under MODROB	Rs. 12 lakhs	2013-14
(d)	<u>Technical Papers Publications</u>			
(I)	<u>Details of Patent and IPR</u>			
1.	Bhim Singh and Shailendra Sharma , “A Novel Four-leg Voltage Source Converter based Voltage and Frequency Controller for Autonomous Wind Energy Conversion System”, Indian Patent, Ref. 2241/DEL/2012 dated 09.08.2012.			
2.	Shailendra Kumar Sharma , Rakesh Saxena and Menka Dubey “Solar energy driven sensorless control of BLDC motor drive”, Indian Patent, in process dated with Application No. 202021007818			
(II)	<u>Book/ Chapter</u>			
1.	Shailendra Kumar Sharma and Pemendra Kumar Pardhi, <i>Control for Grid Synchronization of Single-Phase Voltage Source Converter, In Power Quality: Infrastructures and Control. Studies in Infrastructure and Control.</i> Springer International publishing, Singapore 2023			
(III)	<u>International and National Journals</u>			
1.	Pemendra Kumar Pardhi, Shailendra Kumar Sharma , “Isolated Interleaved Boost Converter Based Single Phase Grid-Interfaced Photovoltaic System,” Accepted for publication in Journal of Electric Power Components & Systems, Taylor & Francis			
2.	Rinki Keshwani, H. K. Verma and Shailendra Kumar Sharma , “Multi-objective Optimal Power Flow Employing a Hybrid Sine Cosine– Grey Wolf Optimizer,” Iranian Journal of Science and Technology,			

	Transactions of Electrical Engineering, pp. 1-24, available online since 11.07.2023, https://doi.org/10.1007/s40998-023-00631-8(0123456789
3.	Toshi Mandloi, Shailendra Kumar Sharma and S.C. Choubé, “The energy management of islanded micro grid system using farmland fertility algorithm”, <i>Energy Sources, Part A: Recovery, Utilization, and Environmental Effects</i> , vol. 45, no. 2, pp. 5031–5051, May 2023.
4.	Rinki Keswani, Harish Kumar Verma and Shailendra Kumar Sharma , “Combined Emission Economic Load Dispatch with Renewable Energy Sources Employing Hybrid Statistical Multiswarm Particle Swarm Optimizer-Sine Cosine Algorithm”, <i>Electric Power Components and Systems</i> , vol. 51, no.9, pp. 871-897, Feb 2023.
5.	Pemendra Kumar Pardhi, Shailendra Kumar Sharma and Ambrish Chandra, “Grid-integrated Single Phase Solar PV System Employed with Single Switch High Gain Boost Converter” <i>Electric Power Systems Research</i> , vol. 213, pp.1-13, Dec. 2022.
6.	Jayadeep Srikakolapu, Sabha Raj Arya, Rakesh Maurya, and Shailendra Kumar Sharma “Predictive Control-Based DSTATCOM with a Multi-Criterion Decision-Making Method,” <i>The Institution of Engineers, India (series B)</i> , vol. 103, no. 6, pp. 2097-2110. Dec. 2022.
7.	Sourabh Jain and Shailendra Kumar Sharma , “Smart Loads for demand side management of modern supply system, <i>ELECTRICAL INDIA magazine</i> vol. No., July 2022, pp 36-39.
8.	Pemendra Kumar Pardhi and Shailendra Kumar Sharma , “Single Phase Rooftop Supply System”, <i>Electrical India Magazine</i> , vol. 62, no.5, pp. 34-37, May 2022.
9.	Shailendra Kumar Sharma , Pemendra Kumar Pardhi and Rakesh Saxena, “Fifth Order Generalized Integrator for Double-Stage Single Phase Grid Interfaced Photovoltaic Supply System” <i>IETE Journal of Research</i> , pp. 1-16, May 2022.
10.	Menka Dubey, Shailendra Kumar Sharma and Rakesh Saxena, “Solar Power-Driven Permanent Magnet Synchronous Motor Coupled with Pump Load: Design, Development and Control, <i>International Journal of Power Electronics</i> , vol. 15, no. 2, pp. 216-234, 2022.
11.	Ratandeep Sharma and Shailendra Kumar Sharma , “The new way to smart distribution system” <i>ELECTRICAL INDIA magazine</i> , vol. 62 No. 09, September 2022, pp 32-35.
12.	Shailendra Kumar Sharma , Pemendra Kumar Pardhi and Rakesh Saxena, “ SEPIC For Solar Energy Based Sensorless Speed Control of Induction Motor Drive” <i>International Transactions on Electrical Energy Systems</i> , vol.31 no.12 pp.1-19 ,Dec. 2021
13.	Anirudh Sharma, Shailendra Kumar Sharma , Bhim Singh and Priyank Shah, “ Reduced Sensor Based Control of Unified Power Quality Conditioner,” <i>Journal of Institution of India, Series B</i> .
14.	Menka Dubey, Shailendra Kumar Sharma and Rakesh Saxena, “Design and Development of Quasi Resonant Switched Step-Up Converter for solar Energy Based Brush-less DC Motor Drive, <i>International Transaction on Electrical Energy system</i> , vol. 31, no. 10, pp. 1-23, Oct. 2021
15.	Pemendra Kumar Pardhi and Shailendra Kumar Sharma , “High Gain Non Isolated DC Converter Employed In Single Phase Grid-Tied Solar Photovoltaic Supply System,” <i>IEEE Transactions on Industry Applications</i> , vol. 57, no. 5, pp. 5170-5182, Sept.-Oct. 2021
16.	Menka Dubey, Shailendra Kumar Sharma and Rakesh Saxena, “Cascaded Boost Buck Converter for Solar Power Driven Stand-alone PMSM Drive,” <i>Journal of Renewable Energy Focus</i> , vol.35, pp. 32-40 Dec. 2020.
17.	Pemendra Kumar Pardhi, Shailendra Kumar Sharma and Ambrish Chandra, “Control of Single Phase Solar Photovoltaic Supply System,” <i>IEEE Transactions on Industry Applications</i> , vol. 56, no. 6, pp. 7132-7144, Nov.-Dec. 2020.
18.	Menka Dubey, Shailendra Kumar Sharma and Rakesh Saxena, “Solar Power-Driven Position Sensorless Control of Permanent Magnet Brushless DC motor for Refrigeration Plant, <i>International Transaction on Electrical Energy system</i> , vol.30 no.7 pp.1-15, July 2020.
19.	Rinki Keswani, H. K. Verma and Shailendra Kumar Sharma , “Day ahead optimal economic dispatch with solar energy integration using PSO”, <i>International Journal of Research and Analytical Reviews (IJRAR)</i> , vol.6, no.2, pp.75-80, Jun. 2019.
20.	Menka Dubey, Shailendra Kumar Sharma and Rakesh Saxena, “Solar Water Pumping: Need of India, <i>Electrical India Magazine</i> , vol. 59 no.11, pp. 192-195, Nov.2019

21.	Menka Dubey, Shailendra Kumar Sharma and Rakesh Saxena, "Solar Power Based PMSM Drive Employed in Refrigeration Plants for Isolated Areas, <i>IEEE Transaction on Industry Application</i> , vol.54, no.6 pp.6299-6308, Nov./Dec. 2018.
22.	M. Rezkallah, Shailendra Sharma , Ambrish Chandra, Bhim Singh and D. R. Rousse, "Lyapunov Function and Sliding Mode Control Approach for the Solar-PV Grid Interface System," <i>IEEE Transactions on Industrial Electronics</i> , vol. 64, no. 1, pp. 785-795, Jan. 2017.
23.	Shailendra Sharma , Ambrish Chandra, Maarouf Saad, S. Lefebvre, D. Asber and L. Lenoir, "Voltage Flicker Mitigation Employing Smart Loads with High Penetration of Renewable Energy in Distribution Systems," <i>IEEE Transactions on Sustainable Energy</i> , vol. 8, no. 1, pp. 414-424, Jan. 2017.
24.	Shailendra Sharma and Bhim Singh, "Performance Evaluation of Fixed Speed and Variable Speed Stand-alone Wind Energy Conversion Systems," <i>Electric Power Components and Systems</i> , vol.44, no.4, pp. 402-410, Jan. 2016
25.	Shailendra Sharma , Bhim Singh, Ambrish Chandra and Kamal Al-Haddad, "Single-Phase Power Generation Employing VFC for Standalone Three-Phase Doubly Wound Asynchronous Generator," <i>IEEE Transactions Industry Applications</i> , vol.51, no.6, pp.4785-4796, Nov.-Dec. 2015
26.	Bhim Singh and Shailendra Sharma , "Voltage and Frequency Controllers for Standalone Wind Energy Conversion Systems," <i>IET, Renewable Power Generation</i> . vol.8, no.6, pp.707-721, August 2014.
27.	Shailendra Sharma and Bhim Singh, "Asynchronous Generator with Battery Storage for Standalone Wind Energy Conversion System," <i>IEEE Trans. Industry Applications</i> , vol. 50, no. 4, pp. 2760-2767, July-Aug. 2014
28.	Shailendra Sharma and Bhim Singh, "Permanent Magnet Brushless DC Generators for Small Scale Stand-Alone Wind Energy Conversion Systems," <i>Electrical India Magazine</i> , vol. 54, no.4, pp. 82-87, April 2014
29.	Bhim Singh and Shailendra Sharma , "Doubly Fed induction generator based off-grid wind energy conversion systems feeding dynamic loads," <i>IET, Power Electronics</i> , vol. 6, no. 9, pp.1917-1926, Nov. 2013
30.	Shailendra Sharma and Bhim Singh, "An Implementation of VFC for Stand-alone Asynchronous Generator Based Wind Energy Conversion System," <i>Asian Power Electronics Journal</i> , vol. 7, no.1, pp. 36-42, Sept. 2013
31.	Sourabh Jain, Shailendra Sharma and R. S. Mandloi, "Improved Power Quality AC Drive Feeding Induction Motor", <i>International Journal of Emerging Trends in Electrical & Electronics</i> , vol.2, no.1, pp. 35-40, April 2013.
32.	Shailendra Sharma and Bhim Singh, "Control of PMSG Based Stand-alone Wind Energy Conversion System," <i>IET, Power Electronics</i> , vol. 5, no.8, pp. 1519-1526, 2012.
33.	Bhim Singh and Shailendra Sharma , "Design and Implementation of Four-Leg Voltage Source Converter Based VFC for Autonomous Wind Energy Conversion System," <i>IEEE Trans. Industrial Electronics</i> , vol. 59, no.12, pp. 4694-4703, Dec. 2012.
34.	Bhim Singh and Shailendra Sharma , "Stand-alone Single-Phase Power Generation Employing Three-Phase Isolated Asynchronous Generator," <i>IEEE Trans. Industry Applications</i> , vol. 48, no.6, pp. 2414-2423, Nov.-Dec. 2012.
35.	Shailendra Sharma and Bhim Singh, "Performance evaluation of asynchronous generator based isolated wind energy conversion system," <i>Journal of Energy and Power Engineering</i> , vol. 3, no.1, pp. 1-11, March 2012.
36.	Shailendra Sharma and Bhim Singh, "Solid State Controller for an IAG Based Stand-alone Wind Energy Conversion System," <i>International Journal of Sustainable Energy</i> , vol.5, no.2, pp.97-108, June 2012
37.	Bhim Singh and Shailendra Sharma , "PMBLDCG Based Stand-alone Wind Energy Conversion System for Small Scale Applications," <i>International Journal of Engineering, Science and Technology</i> , vol. 4, no.1, pp. 65-72, March 2012.
38.	Shailendra Sharma and Bhim Singh, "Wind Energy Conversion Systems," <i>Electrical India Magazine</i> , vol. 1, Jan.2012.
39.	Shailendra Sharma and Bhim Singh, "Performance of Voltage and Frequency Controller in Isolated Wind Power Generation for Three-Phase Four-Wire System," <i>IEEE Trans. Power Electronics</i> , vol. 26,

	no.12, pp. 3443-3452, December, 2011
40.	Menka Dubey, Shailendra Sharma and Rakesh Saxena, “Comparative Analysis of Direct Power Control and Tri-Level Pattern Generation Based Control Techniques Used for Voltage Control of Boost Converter,” <i>International Journal of Recent Trends in Engineering and Technology</i> , vol. 6, no.2, pp. 79-83, Nov. 2011.
41.	Bhim Singh and Shailendra Sharma , “Neural Network Based Voltage and Frequency Controller for Isolated Wind Power Generation,” <i>IETE Journal of Research</i> , vol. 57, no.5, pp. 462-472, Sept-Oct. 2011.
42.	Shailendra Sharma and Bhim Singh, “Voltage and Frequency Control of Asynchronous Generator for Stand-alone Wind Power Generation,” <i>IET Power Electronics</i> , vol. 4, no. 7, pp. 816-826, Aug. 2011.
43.	Bhim Singh and Shailendra Sharma , “Stand-alone Wind Energy Conversion System with an Asynchronous Generator,” <i>The Journal of Power Electronics</i> , vol. 10, no.5, pp. 538-547, September, 2010.
44.	Bhim Singh and Shailendra Sharma , “Instantaneous Reactive Power Theory based Control for IAG with Integrated VSC in Wind Power Generation,” <i>The Journal of Institution of Engineers</i> , (India), vol. 91, pp. 23-28, June 2010.
(III)	<u>Technical Papers –International /National Conferences</u>
1.	Pemendra Kumar Pardhi, Shailendra Kumar Sharma and Ambrish Chandra, “Modeling and Control of VIENNA Circuit Employed Single-Phase Single-Stage Solar PV System,” Accepted to present in <i>IEEE International Conference on Power Electronics and Drive Systems (PEDS-2023)</i> will be held in Montreal, Canada on 7 – 10 August 2023
2.	Rinki Keswani, Dr. H.K. Verma, Dr. Shailendra Kumar Sharma, “Optimal power flow integrating renewable energy sources in Microgrid employing Hybrid Grey wolf - Equilibrium Optimizer, <i>IEEE IAS Global Conference on Emerging Technologies (GlobConET 2022)</i> , Arad, Romania, September 2022.
3.	Pemendra Kumar Pardhi and Shailendra Kumar Sharma, “Control of Single-Phase Grid-Integrated Isolated Converter Based PV Supply,” <i>IEEE Industrial Electronics Society Annual On-Line Conference (ONCON)</i> , 2022, pp. 1-6.
4.	Pemendra Kumar Pardhi “Multifunction Solar Photovoltaic Power Fed Single Phase Single Stage Grid-Integrated Supply System” <i>37th M. P. Young Scientist Congress</i> , Chitrakoot, India, March, 2022, pp.-1-12.
5.	Pemendra Kumar Pardhi, Shailendra Kumar Sharma and Rakesh Saxena, “Integrated DC Converter for Stand-alone Single Phase Photovoltaic Supply System” <i>IEEE International Conference on Power Electronics, Smart Grid and Renewable Energy (PESGRE 2022)</i> , Trivandrum, Kerala, India, Jan. 2022, pp.1-6.
6.	Pemendra Kumar Pardhi and Shailendra Kumar Sharma , “Energy Storage-less Single-Phase Photovoltaic Supply System Operating in Grid and Autonomous Modes” <i>IEEE international conference on Smart Technologies for Power, Energy and Control (STPEC 2021)</i> , Bilaspur, Chhattisgarh, India, Dec. 2021, pp.1-6.
7.	Sourabh Jain and Shailendra Kumar Sharma , “Design and Control of Smart Loads with Battery System” <i>IEEE international conference on Smart Technologies for Power, Energy and Control (STPEC 2021)</i> , Bilaspur, Chhattisgarh, India, Sept. 2021, pp.1-6.
8.	Pemendra Kumar Pardhi, Shailendra Kumar Sharma and Rakesh Saxena, “Enhanced TOGI Controller for Single-stage Single Phase Grid-tied Solar PV Supply System,” <i>IEEE International Power and Renewable Energy Conference (IPRECON 2021)</i> , Kollam, Kerala, India, Sept. 2021, pp. 1-5
9.	Sourabh Jain and Shailendra Kumar Sharma , “Design and Control of Smart Loads using Improved Adaptive based P-Q Control,” <i>IEEE International Power and Renewable Energy Conference (IPRECON 2021)</i> , Kollam, Kerala, India, Sept. 2021, pp. 1-5
10.	Ratndeeep Sharma and Shailendra Kumar Sharma , “Solar Photovoltaic Supply System Integrated with Solid State Transformer” <i>IEEE International Conference on Computing, Power and Communication Technologies (GUCON 2021)</i> , Kuala Lumpur, Malaysia, Sept. 2021, pp.1-6.
11.	Mayank Sunhare, Poonam Chaudhary and Shailendra Kumar Sharma , “Solar Power based Integrated Charging System for Switched Reluctance Motor Driven E-Bikes”, <i>Symposium on Power Electronics Converter & Control, Microgrid and Renewable Energy Systems</i> , (PERESC 2020), Bhubaneswar India, Dec. 2020, pp125-133.
12.	Menka Dubey, Shailendra Kumar Sharma , Rakesh Saxena and Bhim Singh, “Sliding Mode Control Solar Energy Driven Induction Motor Drive,” <i>IEEE Power Electronics Drives and Energy System (PEDES2020)</i> , Jaipur, India, Dec. 2020, pp 1-6.
13.	Pemendra Kumar Pardhi, Shailendra Kumar Sharma and Ambrish Chandra, “Solar Photovoltaic Roof-Top System Design and Control Employing High Gain DC Converter,” <i>IEEE Industrial Application Society Annual Meeting</i> , Detroit, Michigan USA, Oct.2020, pp. 1-7.

14.	Rinki Keswani, Harish Kumar Verma and Shailendra Kumar Sharma , "Dynamic Economic Load Dispatch incorporating Renewable Energy Sources using Multi Swarm Statistical Particle Swarm Optimization," <i>IEEE International Conference on Computing, Power and Communication Technologies (GUCON 2020)</i> , Delhi, India, Oct. 2020, pp.1-6.
15.	Pemendra Kumar Pardhi and Shailendra Kumar Sharma , "Design and Control of Isolated Boost Converter in Photovoltaic Supply System Integrated With Grid," <i>IEEE International Conference on Computing, Power and Communication Technologies (GUCON 2020)</i> , Delhi, India, Oct. 2020, pp.1-7.
16.	Shyam Sunder Sharma, Shailendra Kumar Sharma and Rakesh Saxena, "Modeling, Design and Control of Zeta converter for Dimmable LED Lights," <i>IEEE International Conference on Computing, Power and Communication Technologies (GUCON 2020)</i> , Delhi, India, Oct. 2020, pp.1-6.
17.	Menka Dubey, Shailendra Kumar Sharma and Rakesh Saxena, "Solar Energy Based ZSI Fed Induction Motor Drive for Water Pumping," <i>IEEE International Conference on Computing, Power and Communication Technologies (GUCON 2020)</i> , Delhi, India, Oct. 2020, pp.1-6.
18.	Pemendra Pardhi and Shailendra Kumar Sharma , "Power Optimized Architecture Based Single Phase Grid tied Solar Photo Voltaic Supply System," Accepted for <i>IEEE International Conference, PESGRE</i> , Kochi, Kerala Jan 2020, pp.1-7
19.	Rakesh Saxena, Shailendra Kumar Sharma and, Menka Dubey, "SEPIC converter based Solar Energy Driven Sensorless Induction Motor Drive," Accepted for <i>IEEE International Conference, PESGRE</i> , Kochi, Kerala Jan 2020, pp.1-6
20.	Menka Dubey, Shailendra Kumar Sharma and Rakesh Saxena, "Control of Solar-Power Based PMSM Drive for Compressor Unit," Proc. <i>IEEE International Conference, ICESIP</i> , IITM Kancheepuram, Chennai, Jul. 2019, pp.1-5
21.	Pemendra Pardhi and Shailendra Kumar Sharma , "Implementation of Robust Controller for VSI Feeding Stand-alone Loads," Proc. <i>IEEE International Conference, ICESIP</i> , IITM Kancheepuram, Chennai, Jul. 2019, pp.1-5
22.	Menka Dubey, Shailendra Kumar Sharma and Rakesh Saxena, "Control of Solar Power based Soft Switched Boost Converter for PMLDLC Motor Drive," Proc. <i>IEEE International Conference, PEDES</i> , IIT Madras, Chennai, Dec. 2018, pp.1-5
23.	Chitra Bhattacharya, Shailendra Kumar Sharma and H. K. Verma, "Improved Power Quality of Sensorless Speed Controlled PMLDLC Motor Drive", Proc. <i>IEEE International Conference, PEDES</i> , IIT Madras, Chennai, Dec. 2018, pp.1-5.
24.	Menka Dubey, Shailendra Kumar Sharma and Rakesh Saxena, "Z- Source Inverter Based Solar Power Driven PMLDLC Motor Drive," Proc. <i>IEEE Power India Conference, PIICON</i> , NIT Kurukshetra, Dec. 2018, pp.1-5.
25.	Menka Dubey, Shailendra Kumar Sharma and Rakesh Saxena, "Solar Power Based Water Pump Employing Z Source Inverter for PMSM Drive", Proc. <i>IEEE IICPE</i> , NIT, Jaipur, Dec. 2018, pp.1-5.
26.	Chitra Bhattacharya, Shailendra Kumar Sharma and H. K. Verma, "Performance Analysis of Reduced DC Ripple Converter Fed Sensorless Speed Controlled PMLDLC Motor Drive," Proc. International Conference for Convergence in Technology, I2CT Oct. 27-28, 2018, S. D. M Institute of Technology, Ujire, Manglore, pp. 1-6
27.	Chitra Bhattacharya, Shailendra Kumar Sharma and H. K. Verma, "A Voltage Controlled Sensorless Speed Control of PMLDLC Motor Drive for an Electric Two-Wheeler," Proc. <i>IEEE Conference on Power Electronics Intelligent Control and Energy Systems ICPEICES</i> , DTU, New Delhi, OCT. 22-24, 2018, pp. 1-6
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45.	R. Prajapati and Shailendra Kumar Sharma , "Fuzzy Logic Controller based Distribution Static Compensator," <i>Proc. IEEE SCEECs</i> , MANIT, Bhopal, March 2014, pp. 1-6.
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52.	Shailendra Kumar Sharma and Bhim Singh, "Stand-Alone Wind Energy Conversion System Feeding Single-Phase Loads," <i>Proc. National Power System Conference</i> , BHU, Banaras, Dec. 2012, pp.1-6.
53.	Shailendra Kumar Sharma and Bhim Singh, "Autonomous Wind Energy Conversion System Employing Synchronous Generator," <i>Proc. IEEE Conference IICPE 2012, Delhi Technological University, New Delhi</i> , Dec. 2012, pp. 1-6.

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66.	Shailendra Kumar Sharma and Bhim Singh, "Performance Evaluation of Asynchronous Generator based Isolated Wind Energy Conversion System," Proc. <i>National Power System Conference, NPSC</i> , Hyderabad, India, Dec. 2010, pp. 589-596
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69.	Bhim Singh, Shailendra Kumar Sharma , A. Chandra and K.L. Haddad "Voltage and frequency control with reduced switch integrated voltage source converter for IAG in wind energy conversion system," Proc. <i>IEEE Power and Energy Society General Meeting, USA</i> , July 2010, pp.1-7.
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81.	Shailendra Kumar Sharma , R S Tare, S Dwivedi and A Parakh" A Novel Approach for Power Quality Improvement in Single Phase UPS System" <i>IEEE sponsored International Conference on Recent Advancements and Applications of Computer in Electrical Engineering, Bikaner, Rajasthan, March 2007</i> , pp.1-5.
82.	R S Tare, C. Dondariya and Shailendra Kumar Sharma , "New Voltage Stability Proximity Indices for online Voltage Stability Monitoring of Power System", <i>IEEE sponsored International Conference on Recent Advancements and Applications of Computer in Electrical Engineering, Bikaner, Rajasthan, March 2007</i> , pp.1-5.

6.	<u>Membership of Professional Societies</u>
I.	Life Member, Indian Society of Remote Sensing (ISRS)
II.	Senior Member, IEEE
III.	Fellow, IE (India)
IV.	Vice chairman, IEEE IRS committee, MP section from the year 2022
V.	Branch Counselor, IEEE Student Branch, SGSITS from the year 2018
VI.	Branch Counselor, IEEE PELS student Branch, SGSITS from the year 2023

7.	<u>Testing and Consultancy Projects undertaken</u>
I.	Technical Manager , Centre of Pump Engineering, SGSITS, (NABL accredited lab for motors & Pumps Testing)

II.	Vetting of Pump House Electrical Substation & Control Circuit Design of Smart City Project, Ujjain
III.	Vetting of electrical design and drawings of Khargone Lift Canal Project
IV.	Vetting of electrical design and drawings of Sujalpur city water supply pumping arrangement
V.	Involves in industrial testing activities of the EED.

8. Referee/ Reviewer in Scientific Journal/Magazine/ Conferences	
I.	IEEE Transactions on Industrial Electronics
II.	IEEE Transactions on Industrial Informatics IEEE Transactions on Sustainable Energy
III.	IET Journal of on Renewable Power Generation
IV.	IET Journal of Power Electronics
V.	International Journal of Sustainable Energy
VI.	International Journal of Electric Power Components & Systems
VII.	International Journal of Control Engineering Practice (Elsevier Journal series)
VIII.	International Journal of Neuro computing (Elsevier Journal series)
IX.	Journal of Institution of Engineers (Electrical Engineering series)
X.	Journal of Institute of Electronics & Telecommunication Engineering) IETE
XI.	Transactions of the Indian National Academy of Engineering
XII.	The 38 th Annual Conference of the IEEE Industrial Electronics Society, 2012, Canada
XIII.	The 5 th IEEE India International Conference on Power Electronics, 2012, New Delhi
XIV.	The 5 th IEEE POWER INDIA Conference, 2012, New Delhi
XV.	The IEEE SCEECS held during March 1-2, 2014, MANIT, Bhopal, India

8. New courses developed as well as major innovations/significant changes carried out in different courses in this period	
I.	Proposed a new Subject Advanced DC/AC Inverters EE61003 For MTech Power Electronics during academic session 2021-22.
II.	Proposed a new Subject Intelligent Power Electronics Converters EE61603 For MTech Power Electronics during academic session 2021-22.
III.	Revised the syllabus of EE4259 (Power Electronics Applications) in the board of studies meeting held in the electrical engineering department on 13 th August 2012 subsequently approved by Academic Council. The subject is part of curriculum titled HVDC & FACTs for the BE final year Student of Electrical Engineering.
IV.	Proposed to revise the syllabus of EE6162 (Power Electronics Supply System & Design) in the board of studies meeting held in the electrical engineering department on 13 th August 2012 subsequently approved by Academic Council.
V.	Proposed to revise the syllabus of EE6109 (Forced Commutated Circuits & Power Electronics Applications) in the board of studies meeting held in the electrical engineering department on 13 th August 2012 subsequently approved by Academic Council. The subject is a part of curriculum titled Power Electronics Inverters & Choppers for PG Power Electronics students in first semester.
VI.	Developed manual for PG power Electronics laboratory in During July-Oct. 2012.
VII.	A proposal of Rs. 60 lakhs has been submitted for enhancement of research facilities in the department and under TEQIP phase II and approved by governing body of SGSITS in March 2012.

VIII.	For modernization of Power electronics lab, grant of Rs. 12.00 Lakhs was received from the AICTE during 2013-14. The project has been completed within time duration and an Electrical Drive lab has set up with latest state of art equipment and in operation from Oct. 2014.
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8.	<u>Invited Lectures/Talks Delivered</u>
I.	Delivered an expert lecture on topic “ Modelling & Simulation of Single Phase Solar Rooftop Supply System” during the DST-STUTI training program at SGSITS on 16 th June 2023.
II.	Delivered an expert talk on “Solar Power Plants” in ATAL sponsored two-week Short Term Training Program (STTP) on “Design & Development of Academic Institute Nano Satellite in Indian Space Prospective ” organized by at CRRST, SGSITS during Feb. 12 th -24 th 2023.
III.	Delivered an online talk on “ Vector Control Method for Induction Motor, BLDC and PMSM Motors” to faculties & students of Guru Govind Singh College of Engineering & Research, Nashik, Maharashtra on 29 th April 2023.
IV.	Delivered an invited talk on “Control strategies for dispatching Energy storage Systems with Wind & Solar Power Plants in Grid/standalone Mode Operation” in ATAL sponsored two-week Short Term Training Program (STTP) on “ Innovations and Challenges of Energy Storage Technologies ” at Electrical Engineering Department of Maulana Azad National Institute of Technology (MANIT) Bhopal on 19 th October 2022.
V.	Delivered an expert on-line lecture on topic “ Solar Power based AC Drives” in the Online AICTE-RGPV TTP titled “ Application of Industry 4.0 and Electric Vehicle ” organized by Prestige Institute of Engineering, management & Research scheduled from 21 – 26, June, 2021
VI.	Delivered an invited talk on “ Charging Topologies for Electric Vehicles ” AICTE Training And Learning (ATAL) Academy sponsored online Faculty Development Program (FDP) on Electric Vehicles during December 30th, 2020.
VII.	Expert Talk on topic “Power Quality Improvement in Standalone System” in FDP at VNIT, Surat on 3 march 2020.
VIII.	Expert Talk on topic “Emerging Application of Power Electronics” in FDP at Prestige Institute of Engineering Management and Research, Indore on 4 Feb 2020.
IX.	Expert Talk on subject “Smart Loads for Demand Side Management,” on 6 th Dec.2019 in STTP organized at MANIT, BHOPAL.
X.	Expert Talks on topic “Simulation of Circuits & Machines” in FDP at Vikrant Institute of Technology, Indore under TEQIP Phase III during 11/12 th June 2019.
XI.	Expert Talk on topic “Inverters and Cyclo-converters” on 24 th March 2019 at Mandsaur University, Mandsaur.
XII.	Expert Talk on topic “Power Quality Improvement in Electrical Drive Systems” on 1 st March, 2019 at Medi-Caps University, Indore.
XIII.	Expert talk on topic “Conservation of Energy in Drives System” in National Seminar on Recent Developments in Electrical Drives for Industrial Application during 27 th March 2018 at LNCT, Indore.
XIV.	Expert Talk on topic “Hybrid Standalone Power Generating Stations” in FDP on Integration of Renewable Energy Based AC/DC coupled Microgrid at OIST, Bhopal during 15.02.2018.
XV.	Expert lecture on “DC/DC converters” in FDP on Power Electronics Devices & Its Applications in Power System on 09.02.2018 at TIT, Bhopal.

XVI.	Delivered two sessions on “Application of Power Electronics Converters” in wintered FDP on Power Electronics Jointly organized by: Electronics & ICT Academies at- IIT Guwahati, IIT Roorkee, NIT Warangal, NIT Patna, MNIT Jaipur & IIITDM Jabalpur at MNIT, Jaipur during 19.12.2017.
XVII.	Host Speaker (delivered ten lectures) in one week Global Interactive programme on Wind Energy Conversion Systems during 19.01.2016-23.12.2016 at SGSITS, Indore.
VIII.	Delivered an expert talk on “DSP applications for Electrical Engineer” during STTP on Programming skills for Electrical Engineers during 1 st -11 th Sept. 2014 in SGSITS.
XIX.	Delivered talk on “Power Filter Application in Distributed Generation” during 30.06.2014 to 04.07.2014 at Department of Electrical Engineering, SVNIT, Surat.
XX.	Visiting Faculty at IIT, Indore During Jan. 2012-May 2012.
XXI.	Delivered Expert Talk on “Flexible AC Transmission System” on National Seminar during 24.08.2012 at IES group of Institutions Bhopal.
XXII.	Delivered three sessions on “Power Quality & Distributed Generation” in FDP sponsored by AICTE during 03.05.2012 at OIST, Bhopal.
XIII.	Delivered two sessions on “Power Electronics Supply System” on 9-10 th October 2012 at Malwa Institute of Technology, Indore.

(Dr. Shailendra Sharma)
Professor, EED