DR. SURYA PRAKASH SINGH

Associate Professor of Electrical Engineering Rajkiya Engineering College, Ambedkar Nagar (A U. P. State Government Institution) Ambedkar Nagar – 224122 (U. P.) India

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PROFILE SUMMARY

Full Name Surya Prakash Singh

Father's Name Shri K. P. Singh

Date of Joining 30/12/2017

Department Electrical Engineering

Qualification B. E. (Electrical & Electronics Engineering)-2002

G. L. A. Institute of Technology & Management, Mathura (U. P.)

M. Tech. (Control & Instrumentation)-2005

Motilal Nehru National Institute of Technology, Allahabad (U. P.)

Ph. D. (Power Electronics)-2014

Motilal Nehru National Institute of Technology, Allahabad (U. P.)

Sr.	Designation	Department where	Duration	
No.		employed		
1.	Associate Professor (37400-67000+AGP 9000)	EED, R.E.C., Ambedkar Nagar	December 30, 2017-till now	
2.	Assistant Professor (15600-39100+AGP 7000)	EED, K.N.I.T., Sultanpur	Jan 6, 2014-December 29, 2017	
3.	Assistant Professor (15600-39100+AGP 6000)	EED, K.N.I.T., Sultanpur	Jan 6, 2009-Jan 5, 2014	

Member of Professional Bodies: Senior Member IEEE (USA), Life Member ISTE, Member IE(I) Member IAENG, Member IJCSE

Dr. S. P. SinghAssociate Professor, EED, REC, Ambedkar Nagar <u>Profile Summary</u>

Government Sponsored Research Project:

Name of the research project	Amount	Name of funding Agency	Year of sanction	Duration of project	Status
Integrated Renewable Resources: Storage operation and Management in Smart Grid	Rs. 3 Lakhs	CRIP TEQIP-III AKTU, Lucknow	2019	1 Year	Completed
Development of IoT and Drone Based Agriculture Monitoring System with Objective of Skill Development of Socially Deprive Community	Rs. 44.648 Lakhs	MEITY, New Delhi	2020	2 Years	On-going

Patent: A Novel three-phase to seven-phase Transformer, Patent Number 2021106022, Grant date of patent: 3rd November 2021 for 8 years.

Member of Board of Studies (BoS):

[1] Member of Board of Studies (BoS) of Electrical Engineering Department of IET, Dr. Rammanohar Lohia Awadh University, Ayodhya (U. P.)

Book Authored:

[1] Er. Jaswant Singh and Dr. S. P. Singh, "Elements of Power System", Standard Publishers Distributors, Nai Sarak, Delhi-110006, ISBN No. 978-81-8014-249-9, 1st Edition, 2018.

Research Article in International Magazines / Book Chapters:

[2] S P Singh, Arif Iqbal, Yudhishthir Pandey, Mohammed Aslam Husain, and Jaswant Singh, "Issues and Challenges of Latest Green Energy Technology such as Fuel Cell, waste to energy and Application of AI" Applied Artificial Intelligence (AI) to Green Power Technology, pp. 15-38, 2022, ISBN: 979-8-88697-131-6, **DOI:** https://doi.org/10.52305/ISQD2111

- [3] Yudhishthir Pandey, Arif Iqbal, Surya Prakash Singh, and Mohammed Aslam Husain, "Micro/Pico Hydropower Generation System using Self-Excited Induction Generators and Applications of AI for its Performance Improvement" Applied Artificial Intelligence (AI) to Green Power Technology, pp. 51-64, 2022, ISBN: 979-8-88697-131-6, **DOI:** https://doi.org/10.52305/ISQD2111
- [4] Dr. Mohammed Aslam Husain, Dr. S. P. Singh, Member, IEEE, Md. Tabrez "Intelligent approach for Performance Investigation of Direct Drive Generator based Energy Conversion System under variable speed operations" published in Intelligent Data-Analytics for Power and Energy Systems: Advances in models and applications, springer Book Chapter-23, 2022.
- [5] Dr. S. P. Singh, Member, IEEE, Krishna Kumar Singh, and Bhavnesh Kumar "Performance Evaluation of Brushless DC Motor Drive Supplied from Hybrid Sources" published in Applications of Artificial Intelligence Techniques in Engineering, Springer Nature Singapore Pvt. Limited, Chapter No. 41, ISBN. No. 978-981-13-1821-4, 2018.

PUBLICATIONS

INTERNATIONAL JOURNAL:

Session 2022-23

[1] Jaswant Singh, **S P Singh**, K S Verma, and Bhavnesh Kumar, "A comparative analysis of MPPT Control Techniques to enhanced Solar Energy Utilization and Convergence Time under varying Meteorological Conditions and loads", Frontiers in Energy Research, Vol. 10, July 2022. DOI: https://doi.org/10.3389/fenrg.2022.856702

Session 2021-22

- [2] Vivek Singh, Rakesh Kumar, Ram K Sharma, **S P Singh**, Member, IEEE, Harender Sinhmar, Desh Bandhu Singh, "An investigation on effect of dissimilarity of mass flow rate and number of collectors on yearly efficiency for solar still of single slope type integrated with N similar photovoltaic thermal flat plate collectors", Water Supply, ISSN: 1606-9749, Impact factor 1.275, 2022.DOI: 10.2166/ws.2022.183
- [3] Abdul Hafeez, Mohammed Aslam Husain, **S P Singh**, Anurag Chauhan, Mohd. Tauseef Khan, Navneet Kumar, Abhishek Chauhan, and S K Soni, "Implementation of Drone Technology for Farm Monitoring & Pesticide Spraying: A review", Information Processing in Agriculture, Elsevier, ISSN: 2214-3173, February 2022.DOI: https://doi.org/10.1016/j.inpa.2022.02.002

- [4] Md. Tabrez, Atif Iqbal, Pradip Kumar Sadhu, Mohammed Aslam Husain, **S P Singh**, *Member*, *IEEE*, "Equivalent Circuit modelling of a three-phase transformer using PSO and GA" Journal of Intelligent and Fuzzy Systems, Impact factor 1.851, Special Issue, IOS press, Vol.42, Issue, 2, Jan. 2022, .DOI: 10.3233/JIFS-189741
- [5] Anuj Raturi, Ritvik Dobriyal, R K Sharma, Ashutosh Dwivedi, S P Singh, Member, IEEE, Desh Bandhu Singh "Sensitivity Investigation for Solar still of double slope type included with N similar CPC integrated ETC by incorporating yield and efficiency", Desalination and Water Treatment, Impact factor 1.254, pp.12-26, December, 2021. DOI: 10.5004/dwt.2021.27894
- [6] Jaswant Singh, S P Singh, Member, IEEE, K S Verma, Arif Iqbal, Bhavnesh Kumar "Recent Control Techniques and Management of AC Micro-grids: A critical Review on issues, Strategies, and future trends", International Transaction on Electrical Energy Systems, Impact factor 2.86, pp. 1-39, Wiley, July, 2021. DOI: 10.1002/2050-7038.13035

Session 2020-21

- [7] Jaswant Singh, **S P Singh**, *Member*, *IEEE*, K S Verma, Arif, Iqbal, Yudhishthir Pandey, Dilip Kumar, "Comparison of Controllers used in Fuel Cell for Power Conditioning" Solid State Technology, Scopus Indexed Referred Journal, ISSN No. 0038-111X, Vol. 63, Issue 4, pp. 1866-1876, 2020.
- [8] **S P Singh**, *Member*, *IEEE*, Arif Iqbal, Jaswant Singh, R. Kumar, Ashwin Kumar Yadav, "Smart Garden with IOT based Plant Monitoring System" Solid State Technology, Scopus Indexed Referred Journal, ISSN No. 0038-111X, Vol. 63, Issue 4, pp. 2780-2787, 2020.
- [9] Ravindra Kumar, S P Singh, *Member, IEEE*, Ritik Rajput, Maneesh Kumar Gupta, "Designing of Laboratory based Demand Side Management in the Smart Grid Perspective" Solid State Technology, Scopus Indexed Referred Journal, ISSN No. 0038-111X, Vol. 63, Issue 4, pp.1805-1828, 2020.
- [10] Ravindra Kumar, Himanshu Sagar, S P Singh, Member, IEEE, "Analysis of Distribution Network Protection Issues in the Presence of Disperse Generation" Solid State Technology, Scopus Indexed Referred Journal, ISSN No. 0038-111X, Vol. 63, Issue 4, pp. 1682-1697, 2020.

Session 2019-20

- [11] Kamlesh K. Bharti, Vijay P. Singh, & S P Singh, *Member, IEEE* "PSO-Based: MARL Approach for frequency Regulation of Multi-area Power System" in Journal of Electrical Engineering & Technology (JEET), Impact factor 1.069, ISSN No. 1975-0102, pp. 1-13, DOI: 10.1007/s42835-020-00446-1, 2020.
- [12] Abdul Hafeez, **S P Singh**, *Member*, *IEEE*, "Study of Total Harmonic Distortion (THD) Reduction by Filter in Renewable Energy Inverter" in TEST Engineering

and Management Journal A Scopus Indexed Journal , vol 82, ISSN: 0193-4120 Page No. 15019- 15023. January-February 2020.

Session 2018-19

- [13] Kamlesh K. Bharti, Vijay P. Singh, Raj K. Patel, **S P Singh**, *Member, IEEE* "Impact of Intelligent Demand Response for Load Frequency Control in Smart Grid Perspective" in IETE Journal of Research, Taylor and Francis, Impact factor 1.294, vol. 65, issue 6, pp. 1-12, ISSN: 0377-2063, DOI: 10.1080/03772063.2019.1709570, 2020.
- [14] Rakesh, Ravindra Kumar, S. P. Singh, Jaswant Singh and Dr. Akhilesh Kumar Mishra, "Importance of Earthling and Grounding during Construction and Maintenance", in International Journal of Applied Engineering Research (IJAER), ISSN No.: 0973-4562, Vol. 14, Number 2, pp. 7-12, February 2019.

Session 2017-18

- [15] Shashi Pandey, **S. P. Singh**, and Rahul Singh Yadav, "Performance Comparison of DVR and D-STATCOM for Power Quality Improvement using Non-linear Loads", in International Journal of Advance Research in Science and Engineering (IJARSE), ISSN No.: 2319-8354, Vol. 7, Issue 1, pp. 395-402, April 2018.
- [16] Shashi Pandey, S. P. Singh, and K. G. Upadhyay, "Short Term Electricity Price Forecasting in a Competitive Market by Hybrid Intelligent Approach", in International Journal of Advance Research in Science and Engineering (IJARSE), ISSN No.: 2319-8354, Vol. 7, Issue 1, pp. 421-429, April 2018.
- [17] S. P. Singh, Dinesh Kumar, Pankaj Kumar Gupta, Ankit Kumar Srivastava, Dilip Kumar, and A. S. Pandey, "Performance Comparison of PV system employed with Purturb & Observe (P & O) and Incremental Conductance MPPT Techniques", in International Journal of Emerging Technologies and Innovative Research (JETIR), ISSN No.: 2349-5162, Vol. 5, Issue 2, pp. 622-628, February 2018.
- [18] **S P Singh**, P. K. Gupta, Jaswant Singh, Ravindra Kumar, and H. R. Gurjar, "A Comprehensive Review on MPPT Techniques used for Photo-voltaic Energy Conversion System", in International Journal on Future Revolution in Computer Science & Communication Engineering (IJFRCSCE), ISSN No.: 2454-4248, Vol. 4, Issue 1, pp. 68-81, January 2018.
- [19] Bindeshwar Singh, **S P Singh**, Jaswant Singh, Krishna Kumar Singh, Shashank Dadhich, "Utilities of Differential Algebraic Equations (DAE) Model of SVC and TCSC for operation, Control, Planning & Protection of Power System Environments", in International Journal on Future Revolution in Computer Science & Communication Engineering (IJFRCSCE), ISSN No.: 2454-4248, Vol. 4, Issue 1, pp. 61-67, January 2018.

- [20] S P Singh, Krishna Kumar Singh, Dr. K. S. Verma, Jaswant Singh, and Naveen Tiwari, "A Review on Control of a Brushless DC Motor Drive", in International Journal on Future Revolution in Computer Science & Communication Engineering (IJFRCSCE), ISSN No.: 2454-4248, Vol. 4, Issue 1, pp. 82-97, January 2018.
- [21] Anup Kumar Singh, R. P. Payasi, and S P Singh, "Effect of DG types & Seasonal mixed load models in distributed generation planning", in International Journal of Emerging Technologies and Innovative Research (JETIR), ISSN No.: 2349-5162, Vol. 4, Issue 12, pp. 552-559, December 2017.
- [22] Dilip Kumar Patel, **S P Singh**, Ravindra Kumar, and Kaustubh Kundan Srivastava, "Distributed Generation Planning in Distribution System using Genetic Algorithm", in International Journal of Emerging Technologies and Innovative Research (JETIR), ISSN No.: 2349-5162, Vol. 4, Issue 10, pp. 103-115, October 2017.
- [23] Dilip Kumar Patel, **S P Singh**, and Ravindra Kumar, "Development of Algorithm based on Block pulse function for Numerical protection of Synchronous Generator", in International Journal of Emerging Technologies and Innovative Research (JETIR), ISSN No.: 2349-5162, Vol. 4, Issue 10, pp. 116-126, October 2017.
- [24] Prem Narayan, **S P Singh**, and B K Singh, "A Review of Non-isolated Boost Converters using Two Inductor for High Voltage Applications", in International Journal of Electronics, Electrical and Computational System (IJEECS), ISSN No.: 2348-117X, Vol. 5, Issue 11, pp. 75-90, November 2016.
- [25] Prem Narayan, Ravindra Kumar, Abdul Hafeez, Prem Nath Verma, and S. P. Singh, "Comparison of Parallel and Series Connection of Boost Converter Topology for High Voltage Applications" in International Journal of Innovative Research In Computer and Communication Engineering, ISSN No.: 2230-7656, Vol. 4, Issue 10, pp. 18047-18054, October 2016.
- [26] K P Yadav, S. P. Singh, A K Gautam, and Tarun Varshney, "Power Quality Enhancement by single switch AC-DC Converter" in MIT International Journal of Electrical and Instrumentation Engineering, ISSN No.: 2230-7656, Vol. 4, No. 2, pp. 45-52, August 2014.
- [27] Satyaveer Gupt, S. P. Singh, Deependra Singh, and Manish Trikha, "Performance Investigation of Shunt and Hybrid Active Power Filters for Power Quality Improvement" in MIT International Journal of Electrical and Instrumentation Engineering, ISSN No.: 2230-7656, Vol. 4, No. 2, pp. 53-60, August 2014.
- [28] Shobha Rani, S. P. Singh, A K Gautam, and Alok Pandey, "Performance Investigation of PID and Hybrid Controllers for Speed Control of Induction Motor using Direct Field Oriented (DFO) Control Technique" in MIT International Journal of Electrical and Instrumentation Engineering, ISSN No.: 2230-7656, Vol. 4, No. 2, pp. 61-68, August 2014.

- [29] Vikas Shukla, S. P. Singh, A K Gautam, and Vipul Agarwal, "Performance Investigation of SVPWM Controlled Diode Clamped and Flying Capacitor Multilevel Converters" in MIT International Journal of Electrical and Instrumentation Engineering, ISSN No.: 2230-7656, Vol. 4, No. 2, pp. 69-80, August 2014.
- [30] Chandarani Sutar, K S Verma, A S Pandey, and S. P. Singh, "Wide Area Measurement and Control using Phasor Measurement Unit in Smart Grid" in International Science Press, International Journal of Innovations in Electric Power Systems (IJIEPS), Vol. 3, No. 2, pp.129-139, July-December, 2012.
- [31] Rishabh Dev Shukla, Amrita Singh, and **S. P. Singh**, "Generators for variable speed wind energy conversion systems: A Comparative Study" in International Science Press, International Journal of Energy Systems Computer and Control (IJESCC), Vol. 3, No. 2, pp.103-117, July-December, 2012.
- [32] Ravi Prakash Vishvakarma, S. P. Singh, and T N Shukla, "Multilevel Inverter and its Control Strategies: A Comprehensive Review" in International Journal of Material Science and Electronic Research (IJSMER), Vol. 3, No. 2, pp.215-234, July-December, 2012.
- [33] Bindeshwar Singh, **S. P. Singh**, Manvendra Singh, Rahul Dixit, Nupur Mittal and Anchal Baranwal, "Standalone Power generation by 3-φ Asynchronous Generator: A Comprehensive Survey" in International Journal of Review in Computing (IJRIC), ISSN No.: 2076-3328, Vol. 10, pp.36-51, July, 2012.
- [34] Bindeshwar Singh, Nupur Mittal, K S Verma, Deependra Singh, S. P. Singh, Rahul Dixit, Manvendra Singh, and Anchal Baranwal "Multilevel Inverter: A Literature Survey on Topologies and Control Strategies" in International Journal of Review in Computing (IJRIC), ISSN No.: 2076-3328, Vol. 10, pp.1-16, July, 2012.
- [35] Ravindra Kumar, S. P. Singh, Bindeshwar Singh, and Ravi Prakash Vishvakarma, "Characterization of Voltage Sags and its Mitigation using Custom Power Devices in emerging Power System" in International Journal of Buletin Teknik Elektro Dan Informatika (Bulletin of Electrical Engineering and Informatics (TEI), ISSN No.: 2089-3191, Vol. 2, No. 2, pp.101-121, June 2012.
- [36] Amrita Singh, Bindeshwar Singh, S. P. Singh, and Rishabh Dev Shukla, "Enhancement of Performance Parameters of Wind Power Plants: A Technological Survey" in International Science Press, International Journal of Micro and Nano Electronics Circuits and Systems (IJMNECS), Vol. 5, No. 1, pp.24-45, January-June, 2013.
- [37] Bindeshwar Singh, S. P. Singh, and Suchitra Mishra, "Application of UPFC in Power System Network using MATLAB/Simulink Environment" in International Science Press, International Journal of Micro and Nano Electronics Circuits and Systems (IJMNECS), Vol. 5, No. 1, pp.18-23, January-June, 2013.

- [38] Jaswant Singh, Bindeshwar Singh, **S. P. Singh**, Mohd Naim, and Rahul Dixit, "Performance Evaluation of Permanent Magnet Synchronous Motor (PMSM) Drive using DTC Technique" in International Journal of Reviews in Computing (IJRIC), ISSN No.: 2076-3328, Vol. 9, No. 1, pp.41-61, 10th April, 2012.
- [39] S K Pandey, S. P. Singh, and V P Singh, "Load Frequency Control of an Asynchronous Restructured Power System: A Fuzzy Logic Approach" in International Journal of Engineering, Science and Technology (IJEST), Vol. 4, No. 1, ISSN No. 2141-2839, pp.16-22, March 2012.
- [40] Satyaveer Gupt, Ankit Dixit, Nikhil Mishra and S. P. Singh, "Custom Power Devices for Power Quality Improvement: A Review" in International Journal of Research in Engineering & Applied Sciences (IJREAS), ISSN: 2249-3905, Volume 2, Issue 2, February 2012.
- [41] Nitya Nand, S. P. Singh, Deependra Singh, and Tarun Varshney, "An efficient Control on Photovoltaic Energy Conversion System using Modified Perturb and Observe Technique for Stand Alone Applications" in MIT International Journal of Electrical and Instrumentation Engineering, ISSN No.: 2230-7656, Vol. 2, No. 1, pp. 25-30, Jan. 2012.
- [42] Bindeshwar Singh, Padma Chaturvedi, S.K. Sinha, A. S. Pandey, and **S.P. Singh**, "Enhancement of the Performance Parameters of three phase Induction Motor Using Multilevel Converters: A Literature Survey," International Journal of Reviews in Computing (IJRIC), ISSN No.: 2076-3328, Vol. 8, pp.34-46. October-December, 2011.
- [43] Jaswant Singh, Bindeshwar Singh, **S P Singh**, Mohd. Naim, and Rajneesh Mishra, "Enhancement of Performance Parameters of Three Phase Induction Motor by Vector Control Methods," International Journal of Computational Intelligence Research & Applications (IJCIRA), ISSN No.: 0973-6794, Vol.5, No.1, pp. 41-61, 2011.
- [44] Ravindra Kumar, S. P. Singh, K S Verma, Bindeshwar Singh, and Jaswant Singh, "Voltage Sags Characterization and Their mitigation using Custom Power Devices" in International Journal of Engineering & Technoscienece (IJETs), Vol. 02, Issue 4, pp.320-335, July-August 2011.
- [45] Ravindra Kumar, S. P. Singh, K S Verma, Bindeshwar Singh, and Jaswant Singh, "Voltage Sags Characterization and its Impact Assessment on Equipment Behaviour" in International Journal of Engineering & Technoscienece (IJETs), Vol. 02, Issue 4, pp.302-313, July-August 2011.
- [46] Bindeshwar Singh, S. P. Singh, J Singh, and Mohd Naim, "Performance Evaluation of Three-phase Induction Motor Drive fed from Z-Source Inverter" in International Journal on Computer Science and Engineering (IJCSE), Vol. 03, No. 03, pp.1277-1289, 2011.

[47] Bindeshwar Singh, N K Sharma, A N Tiwari, and S. P. Singh, "Incorporation of FACTs Controllers in Newton Raphson load flow for power flow operation, control and planning: A Comprehensive Survey" in International Journal on Computer Science and Engineering (IJCSE), ISSN No.: 2117-2124, Vol. 02, No. 06, pp. 2117-2124, 2010.

NATIONAL JOURNAL:

- [1] Jaswant Singh, B. Singh, S. P. Singh, & Mohd Naim, "Performance Evaluation of Direct Torque Control with Permanent Magnet Synchronous Motor" in SAMRIDDHI-A Journal of Physical Sciences Engineering & Technology (S-JPSET), ISSN No.: 2229-7111, Vol. 2, Issue 2, pp. 21-30, 2011, Lucknow (U. P.).
- [2] S. P. Singh & Dr. R. K. Tripathi, "Design of Robust Controller through H∞ Approach" in the ICFAI University Journal of Electrical & Electronics Engineering, ISSN No.: 59J-2008-07-02-01, Vol. I, No. 3, pp. 15-29, July, 2008, Hyderabad (Andhra Pradesh).

INTERNATIONAL CONFERENCE:

- [1] Pratibha, Ritik Rajput, Anita Yadav, Akhtar Saleem Ansari, Mohammed Aslam Husain, **S P Singh**, *Member*, *IEEE*, "Design of Automatic Corridor Lighting System using PIR Motion Sensor" in International Conference on Control, Automation, Power and Signal Processing (CAPS-2021) organised by PDPM Indian Institute of Information Technology Design and Manufacturing, Jabalpur (India) during December 10-12, 2021, INSN No.: 978-1-6654-4577-1, pp. 1-6.
- [2] Abdul Hafeez, Vikas Tiwari, Vinod Kumar Verma, Akhtar Saleem Ansari, Mohammed Aslam Husain, **S P Singh**, *Member*, *IEEE*, Ahmad Neyaz Khan "Crop Monitoring and Automation weed Detection using Drone" in International Conference on Control, Automation, Power and Signal Processing (CAPS-2021) organised by PDPM Indian Institute of Information Technology Design and Manufacturing, Jabalpur (India) during December 10-12, 2021, INSN No.: 978-1-6654-4577-1, pp. 1-4.
- [3] Abdul Hafeez, S P Singh, Member, IEEE, "Study of Total Harmonic Distortion (THD) Reduction by Filter in Renewable Energy Inverter" in International Conference on Recent Trends in Electrical, Electronics and Computer Science Engineering (ICEECS-2020) Jointly organised by Uma Nath Singh Institute of Engineering & Technology, Deokali, Jaunpur (U. P.) and PES College of Engineering, Mandya (Karnataka) during January 10-11, 2020.
- [4] Ashwin Kumar Yadav, Abhishek Pandey, Lalit Gond, Ravindra Kumar, **S P Singh**, *Member, IEEE*, and Dr. A. K. Mishra, "Smart Garden with IoT based Plant

- Monitoring System" in International Conference on Recent Trends in Electrical, Electronics and Computer Science Engineering (ICEECS-2020) Jointly organized by Uma Nath Singh Institute of Engineering & Technology, Deokali, Jaunpur (U. P.) and PES College of Engineering, Mandya (Karnataka) during January 10-11, 2020.
- [5] Vijay P. Singh, Raj K. Patel, Naveen Kumar Pandey, **S P Singh**, *Member*, *IEEE*, and Kamlesh Bharti, "Impact of Demand Response in Integration of Renewable Energy Resources in Smart Grid" in 8th IEEE International Conference on Power System (ICPS-19) organised by MNIT, Jaipur during December 20-22, 2019. **ISSN No.:** 978-1-7281-4103-9, pp. 1-6, 2019. (Available at IEEE Explorer)
- [6] Kamlesh Kumar Bharti, Vijay P. Singh, Raj K. Patel, and **S P Singh**, *Member*, *IEEE*, "Algorithm for tracking the Maximum Power from PV System" in 3rd IEEE International Conference on Recent Developments in Control Automation & Power Engineering (RDCAPE-19) organised by Amity University Uttar Pradesh, Noida during October 10-11, 2019, ISSN No.: 978-1-7281-2068-3, pp.693-697, 2019 (Available at IEEE Explorer)
- [7] Abdul Hafeez and **S P Singh,** *Member, IEEE* "Comparison of suboptimal control for high order dynamics system" in ADVANCES IN SCIENCE AND TECHNOLOGY, A Proceeding of International Conference, Rajkiya Engineering College Conference-2019, (RECCON-19) In Association with IEEE STB11386 International Conference REC-CON-19 sponsored by TEQIP-III and organised by Department of Electrical Engineering, Rajkiya Engineering College, Ambedkar Nagar during November 28-29, 2019, ISSN No.: 978-93-89296-42-6, pp.114-118, 2019.
- [8] Jaswant Singh, A K Mishra, **S P Singh**, *Member*, *IEEE*, Arif Iqbal and Ravindra Kumar "Comparison of controllers used in fuel cell for Power Conditioning" in ADVANCES IN SCIENCE AND TECHNOLOGY, A Proceeding of International Conference, Rajkiya Engineering College Conference-2019, (RECCON-19) In Association with IEEE STB11386 International Conference REC-CON-19 sponsored by TEQIP-III and organised by Department of Electrical Engineering, Rajkiya Engineering College, Ambedkar Nagar during November 28-29, 2019, ISSN No.: 978-93-89296-42-6.pp.14-20, 2019.
- [9] Amandeep Singh, Yudhishthir Pandey, Mohammed Aslam Husain, Arif Iqbal, S P Singh, Member, IEEE, Akhilesh Kumar Mishra, "Intellectual property rights: Basics and application procedures" in ADVANCES IN SCIENCE AND TECHNOLOGY, A Proceeding of International Conference, Rajkiya Engineering College Conference-2019, (RECCON-19) In Association with IEEE STB11386 International Conference REC-CON-19 sponsored by TEQIP-III and organised by Department of Electrical Engineering, Rajkiya Engineering College, Ambedkar Nagar during November 28-29, 2019, ISSN No.: 978-93-89296-42-6, pp.306-311, 2019.

Session 2018-19

- [10] Rakesh, Ravindra Kumar, S. P. Singh, Jaswant Singh and Dr. Akhilesh Kumar Mishra, "Importance of Earthling and Grounding during Construction and Maintenance", in First International Conference on Emerging Trends in Technology and Applications, Feb. 1-2, 2019, jointly organised by DBATU Lonere, AKTU Lucknow and REC, Kannauj.
- [11] Mohammed Aslam Husain, Arif Iqbal, Yudhishthir Pandey, Dr. S. P. Singh, *Member, IEEE*, and Abu Tariq "A novel fast alternative Duty (FAD) MPPT procedure for Solar PV Hybrid Vehicles" in UPCON-2018 5th IEEE Uttar Pradesh Section International Conference, organized by MMMUT, Gorakhpur, during November 02-04, 2018, ISSN No.: 978-1-5386-5002-8. pp.1-4, 2018. (Available at IEEE Explorer)
- [12] Shashi Pandey, Shashi Kant Chaudhary, Dr. S. P. Singh, *Member, IEEE*, and K. G. Upadhyay "Hankel Norm Approximation of a Highly Unstable Systems" in UPCON-2018 5th IEEE Uttar Pradesh Section International Conference, organized by MMMUT, Gorakhpur, during November 02-04, 2018, ISSN No.: 978-1-5386-5002-8. pp.1-5, 2018 (Got Best Paper Award) (Available at IEEE Explorer)
- [13] Shashi Pandey, Rahul Singh Yadav, Dr. S. P. Singh, *Member, IEEE*, and K. G. Upadhyay "A remedy for Elimination of Harmonics in Solar Integrated Grid System" in IEEE International Conference on Computational and Characterization Techniques in Engineering and Science (CCTES-18), organized by Departments of Electronics & Communication Engineering, Electrical Engineering & Physics, Integral University Lucknow, during September 14-15, 2018, ISSN No.: 978-1-5386-4254-2, pp. 143-147, 2018 (Available at IEEE Explorer)

Session 2017-18

- [14] Neha Singh, Yogesh K. Chauhan, **Dr. S. P. Singh**, *Member, IEEE*, Ankit Kumar Srivastava "Shading issues in Photo-voltaic modules and its Performance Assessment" in IEEE International Conference on Power Energy, Environment and Intelligent Control (PEEIC-18), organized by G. L. Bajaj Institute of Technology & Management, Greater Noida, during April 13-14, 2018. ISSN No.: 978-1-5386-2341-1, pp. 28-287, 2018 (Available at IEEE Explorer)
- [15] **Dr. S. P. Singh,** *Member, IEEE,* Krishna Kumar Singh, and Bhavnesh Kumar "Performance Evaluation of Brushless DC Motor Drive Supplied from Hybrid Sources" in 1st International Conference on Signals, Machines and Automation (SIGMA-18), organized by Department of Instrumentation and Control Engineering, Netaji Subhas Institute of Technology (An Autonomous Institute of Govt. of NCT of Delhi), Delhi during February 23-25, 2018.

- [16] Kumari Gita and **Dr. S. P. Singh,** *Member, IEEE,* "Selective harmonic elimination of Double cell three phase cascaded inverter using PWM Technique" in International Conference on Innovative Entrepreneurship and Start-up (ICIES-17), ISSN No.: 978-93-86256-55-3, pp.115-121, organized by Department of Electronics Engineering, Kamla Nehru Institute of Technology, Sultanpur during March 03-04, 2017.
- [17] Dilip Kumar Patel, **Dr. S. P. Singh,** *Member, IEEE,* A K Gautam and Ravindra Kumar, "Application of GA in MATLAB Environment for optimization in Power System operation and Security" in International Conference on Innovative Entrepreneurship and Startup (ICIES-17), ISSN No.: 978-93-86256-55-3, pp.234-242, organized by Department of Electronics Engineering, Kamla Nehru Institute of Technology, Sultanpur during March 03-04, 2017.
- [18] Dilip Kumar Patel, **Dr. S. P. Singh**, *Member*, *IEEE*, A K Gautam and Ravindra Kumar, "Voltage Source Converter based HVDC Active Power Controller to Damp out Resonance oscillations in Turbine Generator System" in International Conference on Innovative Entrepreneurship and Startup (ICIES-17), ISSN No.: 978-93-86256-55-3, pp.115-121, organized by Department of Electronics Engineering, Kamla Nehru Institute of Technology, Sultanpur during March 03-04, 2017.
- [19] **Dr. S. P. Singh,** *Member, IEEE,* A. K. Gautam, S. P. Tripathi and Dr. Bhavnesh Kumar, "Performance Comparison of MPPT Techniques using Cuk converter for photovoltaic energy conversion system" in 3rd International Conference on Computational Intelligence & Communication Technology (CICT-17), ISSN No.: 978-1-5090-6218-8, pp.1-7, organized by ABES Engineering College, during Feb. 09-10, 2017. (Available at IEEE Explorer)
- [20] **Dr. S. P. Singh,** *Member, IEEE,* A. K. Gautam, Jyoti Dubey, J. P. Pandey and Dr. R. P. Payasi, "Performance Comparison of PMSM Drive using PI and Fuzzy Logic controllers" in 3rd IEEE UP Section International Conference on Electrical, Computer and Electronics Engineering (UPCON-16), ISSN No.: 978-1-4673-8888-7, pp.1-6, organized by Indian Institute of Technology (Banaras Hindu University), Varanasi, during December 09-11, 2016. (Available at IEEE Explorer)
- [21] A. K. Gautam, **Dr. S. P. Singh**, *Member*, *IEEE*, J. P. Pandey, Dr. R. P. Payasi, and Anuj Verma, "Fuzzy logic based MPPT Technique for photo-voltaic Energy Conversion System" in 3rd IEEE UP Section International Conference on Electrical, Computer and Electronics Engineering (UPCON-16), ISSN No.: 978-1-4673-8888-7, pp.1-6, organized by Indian Institute of Technology (Banaras Hindu University), Varanasi, during December 09-11, 2016. (Available at IEEE Explorer)

- [22] Bhavnesh Kumar, Yogesh K Chauhan, and **Dr. S. P. Singh,** *Member, IEEE*, "MRAS based Speed Estimation Strategies for Induction Motor Drives: A Review" in 2016 IEEE Seventh India International Conference on Power Electronics (IICPE-2016), ISSN No.: 978-1-4673-8962-4, pp.1-4, organized by Thapar University, Patiala (Punjab), during November 17-19, 2016. (Available at IEEE Explorer)
- [23] A. K. Gautam, **Dr. S. P. Singh**, *Member*, *IEEE*, Dr. R. P. Payasi and J. P. Pandey, "Performance Investigation of Unified Power Quality Conditioner for Power Quality Improvement in Distribution System" in International Conference on Advance Computational Techniques in Information & Communication Technology (ICACTICT-16), ISSN No.: 978-93-86256-00-3, pp.113-119, organized by Department of Electronics Engineering, Kamla Nehru Institute of Technology, Sultanpur during September 23-24, 2016.
- [24] Surya Prakash Tripathi, **Dr. S. P. Singh,** *Member, IEEE,* Dr. Bhavnesh Kumar, "Performance Comparison of P & O and Fuzzy logic based MPPT Techniques using Cuk Converter for Photo-voltaic Energy Conversion System" in IEEE International Conference on Advance Computational Techniques in Information & Communication Technology (ICACTICT-16), ISSN No.: 978-93-86256-00-3, pp.120-127, organized by Department of Electronics Engineering, Kamla Nehru Institute of Technology, Sultanpur during September 23-24, 2016.
- [25] Prem Narayan Verma, **Dr. S. P. Singh,** *Member, IEEE*, Ravindra Kumar and Prem Nath Verma, "Performance Analysis of Non-isolated Two-inductor and cascade boost Converter for Fuel cell applications" in IEEE International Conference on Advance Computational Techniques in Information & Communication Technology (ICACTICT-16), ISSN No.: 978-93-86256-00-3, pp.128-143, organized by Department of Electronics Engineering, Kamla Nehru Institute of Technology, Sultanpur during September 23-24, 2016.
- [26] Rajiv Kumar, **Dr. S. P. Singh**, *Member*, *IEEE*, Dr. Bhavnesh Kumar, "Performance Comparison of SVPWM and ANN based SVPWM technique for Power Quality Improvement" in 6th International Conference on Advances in Computing and Communications (ICACC-16), ISSN No.: 1877-0509, pp.1024-1037, organized by Rajagiri School of Engineering & Technology (RSET), Kochi, India, during September 6-8, 2016 available online at www.sciencedirect.com
- [27] Abhinav Gautam, *Member, IEEE*, **Dr. S. P. Singh,** Member, *IEEE*, Dr. J. P. Pandey, and Dr. T. N. Shukla, "Performance Investigation of Permanent Magnet Synchronous Motor (PMSM) drive supplied from Hybrid Sources" in IEEE International Conference on Emerging Trends in Electrical, Electronics, and Sustainable Energy Systems (ICETEESES-16), ISSN No.: 978-93-86777-32-5, pp.292-302, organized by Department of Electrical Engineering and Department of Electronics Engineering, sponsored by TEQIP-II, during March 11-12, 2016, KNIT, Sultanpur (U. P.).

(Available at IEEE Explorer)

- [28] Vijay Bhagawan Jayaswal, and Abhinav Gautam, *Member, IEEE*, **Dr. S. P. Singh**, Member, *IEEE*, "Optimal Sizing & Siting of DG with Load Models using Genetic Algorithm under different loading Conditions" in International Conference on Emerging Trends in Electrical, Electronics, and Sustainable Energy Systems (ICETEESES-16), ISSN No.: 978-93-86777-32-5, pp.139-146, organized by Department of Electrical Engineering and Department of Electronics Engineering, sponsored by TEQIP-II, during March 11-12, 2016, KNIT, Sultanpur (U. P.). (Available at IEEE Explorer)
- [29] Jyoti Dubey, **Dr. S. P. Singh**, *Member*, *IEEE* and Abhinav Gautam, *Member*, *IEEE*, "Hybrid Electric Vehicles: A state of the Art Review" in International Conference on Advanced and Agile manufacturing Systems ICAM 2015, ISSN No.: 978-93-85777-03-5, pp.442-447, organized by Department of Mechanical Engineering, sponsored by TEQIP-II, during December 28-29, 2015, KNIT, Sultanpur (U. P.).
- [30] **Dr. S. P. Singh,** *Member, IEEE* and Surya Prakash Tripathi, "Comprehensive study of MPPT Techniques used for photo-voltaic energy conversion system: A State of the Art Review" in International Conference on Advanced and Agile manufacturing Systems ICAM 2015, ISSN No.: 978-93-85777-03-5, pp.581-593, organized by Department of Mechanical Engineering, sponsored by TEQIP-II, during December 28-29, 2015, KNIT, Sultanpur (U. P.).
- [31] Nupur Mittal, Bindeshwar Singh, S. P. Singh, Rahul Dixit, and Dasharath Kumar, "Multilevel Inverter: A Literature survey topologies and Control Strategies" in 2nd International Conference on Power Control and Embedded System (ICPCES 2012), ISSN No.: 978-1-4673-1049-9, pp.59-69, 17th-19th December, 2012, MNNIT Allahabad, Allahabad (U.P.). (Available at IEEE Explorer)
- [32] Manvendra Singh, **S. P. Singh**, Bindeshwar Singh, Ajay Shekhar Pandey, Rahul Dixit, and Nupur Mittal, "Standalone Power Generation by 3-φ asynchronous generation: A Comprehensive Survey" in 2nd International Conference on Power Control and Embedded System (ICPCES 2012), ISSN No.: 978-1-4673-1049-9, pp.308-321, 17th-19th December, 2012, MNNIT Allahabad, Allahabad (U.P.). (Available at IEEE Explorer)
- [33] Jaswant Singh, Bindeshwar Singh, **S. P. Singh,** Ravi Chaurasia, and Sulabh Sachan, "Performance Investigation of PMSM Drives using Vector Control Technique" in 2nd International Conference on Power Control and Embedded System (ICPCES 2012), 978-1-4673-1049-9, pp.48-58, 17th-19th December, 2012, MNNIT Allahabad, Allahabad (U.P.). (Available at IEEE Explorer)
- [34] Mohd Naim, Bindeshwar Singh, **S P Singh**, Rajnish Mishra, Prem Nath Verma, Dinesh Kumar and Ravi Prakash Vishvakarma, "Investigation of Transient Performance of VSI fed IM Drives with SVPWM Technique based on P, PI & PID Controllers" in 2nd International Conference on Power Control and Embedded System (ICPCES 2012), 978-1-4673-1049-9, pp.229-235, 17th-19th December, 2012, MNNIT Allahabad, Allahabad (U.P.). (Available at IEEE Explorer)

- [35] Rajnish Mishra, **S P Singh**, Deependra Singh, B Singh, and Dinesh Kumar, "Investigation of Transient Performance of VSI fed IM Drives using V/f and Vector Control Techniques" in 2nd International Conference on Power Control and Embedded System (ICPCES 2012), 978-1-4673-1049-9, pp.86-91, 17th-19th December, 2012, MNNIT Allahabad, Allahabad (U.P.). (Available at IEEE Explorer)
- [36] Chandarani Sutar, Dr. K. S. Verma, Dr. A. S. Pandey, and **S P Singh**, "Wide Area Measurement and Control using Phasor Measurement unit in Smart Grid" in 2nd International Conference on Power Control and Embedded System (ICPCES 2012), 978-1-4673-1049-9, pp.262-266, 17th-19th December, 2012, MNNIT Allahabad, Allahabad (U.P.). (Available at IEEE Explorer)
- [37] Ravi Prakash Vishwakarma, **S P Singh**, and T. N. Shukla "Multilevel Inverters and its Control Strategies: A Comprehensive Review" in 2nd International Conference on Power Control and Embedded System (ICPCES 2012), 978-1-4673-1049-9, pp.267-275, 17th-19th December, 2012, MNNIT Allahabad, Allahabad (U.P.). (Available at IEEE Explorer)
- [38] Garima Singh, Bindeshwar Singh, and **S P Singh**, "Application of Artificial Intelligence Computational Techniques in Engineering Perspectives: A Survey" in an International Conference on Artificial Intelligence & Soft Computing (AISC 2012), pp.56-74, 7th-9th December 2012, IIT (BHU), Varanasi (U.P.).
- [39] Chandarani Sutar, K S Verma, A S Pandey, and **S. P. Singh**, "Next Generation Monitoring, Analysis, and Control for the future Smart Control Centre" in an International Symposium on Recent trends in Electronics & Communication (ISRTEC 2012), pp.1-6, 8th-9th November, 2012, KNIT Sultanpur, Sultanpur (U.P.).
- [40] Garima Singh, Bindeshwar Singh, and **S P Singh**, "Application of Artificial Intelligence Computational Techniques in Mechanical Engineering Fields: A Survey" in an International Symposium on Recent trends in Electronics & Communication (ISRTEC 2012), pp.1-20, 8th-9th November, 2012, KNIT Sultanpur, Sultanpur (U.P.).
- [41] Rajendra Kumar Yadav, **S P Singh**, Deependra Singh, Mohd Naim, and Ravi Prakash Vishvakarma., "Performance Evaluation of Hybrid Active Filter based on SVPWM Technique for Power Conditioning using MATLAB/Simulink Environments" in International Conference on Emerging Trends in Engineering and Technology, pp. 1-9, during 6th-7th April, 2012, organized by College of Engineering, Teerthanker Mahaveer University, Moradabad (U.P.)-244001
- [42] Mohd Naim, Bindeshwar Singh, S P Singh, and Jaswant Singh, "Improvement of Power Factor & Reduction of Harmonics in three-phase Induction Motor by PWM Techniques-A Literature Survey" in 2nd IET International Conference on Sustainable Energy & Intelligent System Conference (SEISCON-2011), pp.529-538, July 20-

- 22, 2011, at Dr. M.G.R. University Maduravoyal, Chennai-600095 (Tamilnadu). (Available at IEEE Explorer)
- [43] S. P. Singh & Prof. R. K Tripathi, "Voltage sags and their characterization using Wavelets" in International Conference on Advances in Electrical Engineering & Electronics Engineering (ICAEEE), pp.1-7, Feb. 25-26, 2011, at Moradabad Institute of Technology, Moradabad (Uttar Pradesh).
- [44] S. P. Singh & Prof. R.K Tripathi, "Voltage sags and their characterization" in International Conference on Power, Control and Embedded System (ICPCES), sponsored by IEEE Joint Societies Chapter of IE/PEL/CS under IEEE UP Section, ISSN No.: 978-1-4244-8542-0, pp.1-6, Nov. 28-December 1, 2010, at MNNIT, Allahabad (Uttar Pradesh). (Available at IEEE Explorer)
- [45] S. P. Singh & Dr. R. K. Tripathi, "Design and rating issues of power components in Active Power filters" in INDICON 2008 IEEE Conference & Exhibition on Control, Communication and Automation, ISSN No.: 978-1-4244-2746-8, pp.1-6, December 11-13, 2008, IIT Kanpur (Uttar Pradesh). (Available at IEEE Explorer)
- [46] S. P. Singh & Dr. R. K. Tripathi, "Design & Comparison for Robust Controller through Loop-shaping & H∞ Approach" in International Conference on Power System Analysis, Control & Optimization (PSACO-2008), pp.377-383, IEEE Hyderabad Section, March 13-15, 2008, Andhra University, Visakhapatnam (Andhra Pradesh).
- [47] **S. P. Singh** & Dr. R. K. Tripathi, "Interpretation and Analysis of Power Quality Measurement" in International Conference on Recent Applications of Soft Computing in Engineering and Technology (RASIET-2007), pp.482-489, IEEE Delhi Section, December 22-23, 2007, IET Alwar (Rajasthan).
- [48] S. P. Singh & Dr. R. K. Tripathi, "Review of Control Strategies for Power Quality Conditioner" in International Conference on Recent Applications of Soft Computing in Engineering and Technology (RASIET-2007), pp.1-8, IEEE Delhi Section, December 22-23, 2007, IET Alwar (Rajasthan).
- [49] S. P. Singh & Dr. R. K. Tripathi, "Application of Active Filters for Power Quality Enhancement" in International Conference on Power System (ICPS-2007), IEEE & PES sponsored (IEEE Bangalore Section), pp.1-6, December 12-14, 2007, CPRI, Bangalore (Karnataka).
- [50] S. P. Singh & Dr. R. K. Tripathi, "A Review of Active Filters for Power Quality Enhancement" in International Conference on Recent Advancements & Applications of Computer in Electrical Engg. (RACE-2007), pp.1-6, IEEE (AES COM LEO Society Chapter India), March 23-24, 2007, Engineering College, Bikaner (Rajasthan).

NATIONAL CONFERENCE:

- [1] **S P Singh**, *Member*, *IEEE*, et. al. "Voltage Stability in Emerging Power System using Coordinated control of SVC and TCSC" in National Conference on Computational and Characterization Techniques in Engineering and Sciences CCTES-19 sponsored by TEQIP-III and organised by Department of Applied Sciences and Humanities, Rajkiya Engineering College, Ambedkar Nagar during September 06-07, 2019.
- [2] Pavan Prakash Gupta, S K Sinha, and **S P Singh**, *Member*, *IEEE*, "Performance Investigation of Multipulse Converter fed Vector Controlled Induction Motor Drive" in 4th Students' Conference on Engineering and Systems (SCES-2015) Cosponsored by IEEE joint Society Chapter of IE/PEL/CS Technically sponsored by IEEE UP Section, ISSN No.: 978-1-4673-8598-5, pp. 1-7, during November 6-8, 2015, MNNIT Allahabad, Allahabad (U. P.).
- [3] Nikhil Gupta, **Dr. S. P. Singh**, *Member*, *IEEE*, "Power Quality Improvement in Distribution system using Unified Power Quality Conditioner" in 2nd National Power & Energy System Conference (NPESC-15) sponsored by TEQIP II, April 10-11, 2015, Organized by Department of Electrical Engineering, Kamla Nehru Institute of Technology, Sultanpur (U. P.)-228 118
- [4] **S P Singh**, *Member*, *IEEE*, and R K Tripathi "Performance Comparison of SPWM and SVPWM Techniques in NPC Bidirectional Converter" in 3rd Students' Conference on Engineering and Systems (SCES-2013) Co-sponsored by IEEE joint Society Chapter of IE/PEL/CS Technically sponsored by IEEE UP Section, ISSN No.: 978-1-4673-5629-9, pp. 382-392, during April 12-14, 2013, MNNIT Allahabad (U. P.).
- [5] Amrita Singh, **S. P. Singh**, "State of the Art Generators for Wind Energy Conversion Systems" in National Conference on Recent Trends in Energy Systems (NCRTES-2013), 05th-06th April, 2013, Department of Electrical Engineering, Kamla Nehru Institute of Technology, Sultanpur, (U.P.)-228 118.
- [6] Jaswant Singh, Bindeshwar Singh, **S P Singh**, and Mohd Naim "Investigation of Performance Parameters of PMSM Drive using DTC-SVPWM Technique" in 2nd Students' Conference on Engineering and Systems (SCES-2012) Co-sponsored by IEEE joint Society Chapter of IE/PEL/CS Technically sponsored by IEEE UP Section, ISSN No.: 978-1-4673-0455-9, pp. 382-387, during 16-18, March, 2012, MNNIT Allahabad (U. P.).
- [7] Nitya Nand Singh, **S P Singh**, Deependra Singh, Ravi Prakash Vishvakarma, Bindeshwar Singh "An efficient Control on Photovoltaic Energy Conversion system using Modified Perturb and Observe Technique for stand alone applications" in IEEE Students' Conference on Electrical, Electronics and Computer Science

- (SCEECS 2012), ISSN No.: 978-1-4673-1515-9, pp. 1-4 during 1st-2nd March, 2012, organized by IEEE MANIT Student Branch at Maulana Azad National Institute of Technology, Bhopal (M.P.)
- [8] Ravi Prakash Vishvakarma, S P Singh, T N Shukla, Shashank Kumar Kushwaha, Devbrat "3-Phase Grid Connected Liquid Solar arrays Photovoltaic Inverter Control loop design" in IEEE Students' Conference on Electrical, Electronics and Computer Science (SCEECS 2012), ISSN No.: 978-1-4673-1515-9, pp. 1-4 during 1st-2nd March, 2012, organized by IEEE MANIT Student Branch at Maulana Azad National Institute of Technology, Bhopal (M.P.)
- [9] Anuj Verma, **Dr. S. P. Singh**, *Member*, *IEEE*, and R. P. Payasi, *Member*, *IEEE* "Fuzzy logic based MPPT Technique for photo Voltaic Energy Conversion System" in National Conference on Recent Advances in Electrical Engineering (RAEE-15) sponsored by TEQIP II, ISSN No.: 978-3-642-37948-2, pp. 1-8, April 25-26, 2015, Organized by Department of Electrical Engineering, Madam Mohan Malviya University of Technology, Gorakhpur (U. P.)-273 010
- [10] **S. P. Singh** & Dr. R. K. Tripathi, "DC Bus Capacitor Voltage Balancing Strategy in NPC Converter" in 17th National Power System Conference (NPSC), ISSN No.: 978-81-8487-439-6, pp. 125-130, 12th-14th December, 2012, IIT (BHU), Varanasi (U. P.).
- [11] **S. P. Singh** & Dr. R. K. Tripathi, "Performance Evaluation of Artificial Neural Network based SVPWM Technique for NPC Converter" in 17th National Power System Conference (NPSC), ISSN No.: 978-81-8487-439-6, pp. 156-162, 12th-14th December, 2012, IIT (BHU), Varanasi (U. P.).
- [12] Nupur Mittal, Dr. K.S. Verma, Dr. Deependra Singh, **S.P. Singh**, Rahul Dixit and Manvendra Singh "Multilevel Inverter: A Literature Survey on Topologies and Control Strategies" in National Conference on Recent Advances in Electronics and Electrical Engineering (NCAEEE 2012), organized by Department of Electronics & Communication Engineering & Electrical & Electronics Engineering, Dev Bhoomi Institute of Technology, Dehradun (U.K.)-248007,), pp.1-13, on 17th March, 2012,
- [13] Rahul Dixit, B. Singh, **S. P. Singh**, Nupur Mittal, and Manvendra Singh "Adjustable Speed Drives: Review on Different Inverter Topologies" in National Conference on Recent Advances in Electronics and Electrical Engineering (NCAEEE 2012), organized by Department of Electronics & Communication Engineering & Electrical & Electronics Engineering, Dev Bhoomi Institute of Technology, Dehradun (U.K.)-248007, pp.1-11, on 17th March, 2012,
- [14] Satyaveer Gupt, S. P. Singh, and Deependra Singh "A Review on Active Power Filter and its Control Techniques" in AICTE Sponsored National Conference on Computer Applications in Electrical Engineering: Recent Trends (CAEE-RT 11),

- pp. 1-9, 16th-17th December, 2011, Department of Electrical Engineering, MITS Gwalior (M.P.)
- [15] Ravi Prakash Vishvakarma, S. P. Singh, and T.N. Shukla "Performance Comparison of Modulation Techniques for Induction Motor Fed Cascaded Neutral-Point-Clamp Inverter" in AICTE Sponsored National Conference on Computer Applications in Electrical Engineering: Recent Trends (CAEE-RT 11), pp. 1-7, 16th-17th December, 2011, Department of Electrical Engineering, MITS Gwalior (M.P.)
- [16] Jaswant Singh, Bindeshwar Singh, **S. P. Singh**, Mohd. Naim and Dilip Kumar, "Enhancement of Performance parameters of three-phase induction motors by vector control methods" in National Conference on Recent Development in Electrical Engineering (NCRDEE, 2011), pp.29-44, 10th-11th June, 2011, Department of Electrical Engineering, Jalpaiguri Government Engineering College, Jalpaiguri, (W.B.)-735102.
- [17] Mohd. Naim, Bindeshwar Singh, S. P. Singh, Jaswant Singh, and Dilip Kumar, "Improvement of Power Factor and Reduction of Harmonics in three-phase Induction motor by PWM Techniques" in National Conference on Recent Development in Electrical Engineering (NCRDEE, 2011), pp.45-59, 10th-11th June, 2011, Department of Electrical Engineering, Jalpaiguri Government Engineering College, Jalpaiguri, (W.B.)-735102.
- [18] J. Singh, S. P. Singh, B. Singh and Mohd. Naim, "Performance evaluation of Three-phase Induction Motor drive fed from Z-source Inverter" in National Conference on Recent Advances in Electrical Power and Energy System Management (RAEPESM, 2011), pp.1-6, 25th-26th March, 2011, Department of Electrical Engineering, M.M.M. Engineering College, Gorakhpur, (U.P.)-273010.
- [19] C.P. Singh, S. P. Singh, & Dr. R. K.Tripathi, "A Lab VIEW based Power Factor Correction of Single phase Nonlinear Loads with an Active Power Filter" in National Conference on Recent Advances in Electrical & Electronics Engineering (RAEEE-09), ISSN No.: 979-81-8424-261-3, pp.1-6, 23th-24th December, 2009, Department of Electrical Engineering, National Institute of Technology, Hamirpur (H.P.)-177055.
- [20] S. P. Singh & Dr. R. K.Tripathi, "Rating issues and DC Bus capacitor selection for Design of a Three-phase Four-Wire Active Power Filters in Active Filters" in 15th National Power System Conference (NPSC), pp.1-6, 16th-18th December, 2008, IIT Bombay, Mumbai (Maharashtra).
- [21] S. P. Singh & Dr. R. K. Tripathi, "Design and Implementation of Three phase four wire Active Filters" in National Conference on Emerging Trends in Electrical, Electronics and Computer Engineering, IEEE Co-Sponsored, pp.1-7, September 5-6, 2008, AKGEC, Ghaziabad (Uttar Pradesh).

- [22] S. P. Singh & Dr. R. K. Tripathi, "Rating issues and DC Bus capacitor selection in Active Filters" in National Conference on Emerging Trends in Electrical, Electronics and Computer Engineering, IEEE Co-Sponsored, pp.1-6, September 5-6, 2008, Ghaziabad (Uttar Pradesh).
- [23] S. P. Singh & Dr. R. K. Tripathi, "Comparative Analysis of Different VSI Topologies & Control Strategies used for Three-Phase Active Power Filters" in National Conference on Current Trends in Technology, 'NUCONE-2007', ISSN No.: 81-8424-261-1, pp.1-6, November 29-December1, 2007, Nirma University, Ahmedabad (Gujarat).
- [24] S. P. Singh & Dr. R. K. Tripathi, "Mitigation of Voltage Sags with Dynamic Voltage Restorer Using Wavelets" in National Conference on Current Trends in Technology, 'NUCONE-2007', ISSN No.: 81-8424-261-1, pp.1-5, November 29-December1, 2007, Nirma University, Ahmedabad (Gujarat).

LIST OF PG THESES SUPERVISED

M.TECH.:

- [1] "Impact Assessment of DG from minimization of Total Real Power loss view point" by Bindu Jee Gyanish, KNIT, Sultanpur, affiliated to Dr. A. P. J. Abdul Kalam Technical University, Lucknow (U. P.) on April, 2018.
- [2] "Performance Comparison of PV System employed with perturbed & observe (P & O) and Incremental Conductance MPPT Techniques" by Pankaj Kumar Gupta, KNIT, Sultanpur, affiliated to Dr. A. P. J. Abdul Kalam Technical University, Lucknow (U. P.) on May 15, 2018.
- [3] "Performance Evaluation of Brushless DC Motor Drive Supplied from Hybrid Sources" by Krishna Kumar Singh, KNIT, Sultanpur, affiliated to Dr. A. P. J. Abdul Kalam Technical University, Lucknow (U. P.) on September 15, 2017.
- [4] "Power flow control of PMSG based Wind Energy Conversion System" by Naveen Kumar, KNIT, Sultanpur, affiliated to Dr. A. P. J. Abdul Kalam Technical University, Lucknow (U. P.) in November 05, 2016.
- [5] "Performance Comparison of PMSM Drive using PI and Fuzzy Logic Controllers" by Jyoti Dubey, KNIT, Sultanpur, affiliated to Dr. A. P. J. Abdul Kalam Technical University, Lucknow (U. P.) in September, 2016.
- [6] "Performance Comparison of MPPT Techniques using CUK Converter for Photovoltaic Energy Conversion System" by Surya Prakash Tripathi, KNIT, Sultanpur, affiliated to Dr. A. P. J. Abdul Kalam Technical University, Lucknow (U. P.) in July, 2016.

- [7] "Power Quality Improvement through three-level NPC Converter using SPWM and SVPWM Technique" by Abhinav, KNIT, Sultanpur, affiliated to U. P. Technical University, Lucknow (U. P.) in September, 2015.
- [8] "Optimal Sizing & Siting of DG with load models using genetic algorithm under different loading conditions" by Vijay Bhagawan Jayaswal, KNIT, Sultanpur, affiliated to Dr. A. P. J. Abdul Kalam Technical University, Lucknow (U. P.) in December, 2015.
- [9] "Performance Investigation of ANN based SVPWM Technique for Power Quality Improvement" by Rajiv Kumar, KNIT, Sultanpur, affiliated to U. P. Technical University, Lucknow (U. P.) in September, 2015.
- [10] "Performance Investigation of Multi-pulse Converter fed Induction motor drive using Vector Control Technique" by Pavan Prakash Gupta, KNIT, Sultanpur, affiliated to U. P. Technical University, Lucknow (U. P.) in June 2015.
- [11] "Enhancement of Voltage Profile using STATCOM" by Ziaur Rahman Ansari, KNIT, Sultanpur, affiliated to U. P. Technical University, Lucknow (U. P.) in May, 2015.
- [12] "Distribution Generation Planning in Distributed Systems using Genetic Algorithm" by Dasharath Kumar, KNIT, Sultanpur, affiliated to U. P. Technical University, Lucknow (U. P.) in Jan, 2015.
- [13] "Performance Analysis of Diode Clamped Inverter fed Three Phase Induction Motor Drive using SVPWM Technique" by Deepak Pandey, KNIT, Sultanpur, affiliated to U. P. Technical University, Lucknow (U. P.) in December, 2014.
- [14] "Power Quality Improvement in Distribution System using Power Quality Conditioner (UPQC)" by Nikhil Gupta, KNIT, Sultanpur, affiliated to U. P. Technical University, Lucknow (U. P.) in December, 2014.
- [15] "Fuzzy Logic based MPPT Technique for Photo-Voltaic Energy Conversion System" by Anuj Verma, KNIT, Sultanpur, affiliated to U. P. Technical University, Lucknow (U. P.) in February, 2015.
- [16] "Harmonic Elimination in Distribution System using Active Power Filter" by Shashank Mishra, KNIT, Sultanpur, affiliated to U. P. Technical University, Lucknow (U. P.) in December, 2014.

- [17] "Performance Evaluation of a DFIG based Wind energy Conversion system under grid disturbances" by Amrita Singh, KNIT, Sultanpur, affiliated to U. P. Technical University, Lucknow (U. P.) in September, 2014.
- [18] "Performance Investigation of Permanent Magnet Synchronous Motor (PMSM) Drive Supplied from Hybrid Source," by Abhinav Kumar Gautam, KNIT, Sultanpur, affiliated to U. P. Technical University, Lucknow (U. P.) in August, 2014.
- [19] "Speed Control of Chopper fed Separately excited DC Motor driven by PI and fuzzy speed controllers" by Deepak Giri, KNIT, Sultanpur, affiliated to U. P. Technical University, Lucknow (U. P.) in June, 2014.
- [20] "Power Quality Enhancement using Active Power Filters" by Satyaveer Gupt, KNIT, Sultanpur, affiliated to U. P. Technical University, Lucknow (U. P.) in April, 2014.
- [21] "Performance Investigation of PID and Hybrid (PID+Fuzzy) Controllers for Speed Control of Induction Motor using Direct Field Oriented (DFO) Control Technique" by Shobha Rani, KNIT, Sultanpur, affiliated to U. P. Technical University, Lucknow (U. P.) in January, 2014.
- [22] "Power Quality Enhancement in Distribution System using D-STATCOM" by Sunil Kumar Singh, KNIT, Sultanpur, affiliated to U. P. Technical University, Lucknow (U. P.) in November, 2013.
- [23] "Grid Connected Wind Energy Conversion System using STATCOM for Power Quality Improvement" by Manvendra Singh, KNIT, Sultanpur, affiliated to G. B. Technical University, Lucknow (U. P.) in September, 2013.
- [24] "Performance Investigation of SVPWM Controlled Diode Clamped and Flying Capacitor Multilevel Converters" by Vikas Shukla, KNIT, Sultanpur, affiliated to G. B. Technical University, Lucknow (U. P.) in September, 2013.
- [25] "Single-switch AC-DC Converters for Power Factor and Efficiency Enhancement" by Keshav Pratap Yadav, KNIT, Sultanpur, affiliated to G. B. Technical University, Lucknow (U. P.) in July, 2013.
- [26] "Voltage Sag Characterization using Wavelet" by Manju Singh Lodhi, KNIT, Sultanpur, affiliated to G. B. Technical University, Lucknow (U. P.) in December, 2012.

- [27] "Power Quality Improvement through Neutral Point Diode Clamp Clamp Converter using Artificial Neural Network based Space Vector Pulse Width Modulation Technique" by Ravi Prakash Vishvakarma, KNIT, Sultanpur, affiliated to G. B. Technical University, Lucknow (U. P.) in September, 2012.
- [28] "Investigation of Transient Performance of VSI-Fed Induction Motor Drive using Volts/Hz and Vector Control Technique" by Rajneesh Mishra, KNIT, Sultanpur, affiliated to G. B. Technical University, Lucknow (U. P.) in April, 2012.
- [29] "Investigation of Transient Performance of VSI-Fed Induction Motor Drive with SVPWM Technique using P, PI, and PID Controllers" by Mohd. Naim, KNIT, Sultanpur, affiliated to G. B. Technical University, Lucknow (U. P.) in April, 2012.
- [30] "Performance Investigation of PMSM Drives using Vector Control Technique" by Jaswant Singh, KNIT, Sultanpur, affiliated to G. B. Technical University, Lucknow (U. P.) in April, 2012.
- [31] "Space Vector PWM Controlled Hybrid Active Power Filter For Power Conditioning" by Rajendra Kumar Yadav, KNIT, Sultanpur, affiliated to G. B. Technical University, Lucknow (U. P.) in January, 2012.
- [32] "An efficient Control on Photovoltaic Energy Conversion system using Modified Perturb and Observe Technique for Stand Alone Applications" by Nitya Nand Singh, KNIT, Sultanpur, affiliated to G. B. Technical University, Lucknow (U. P.) in December, 2011.
- [33] "Voltage Sag Characteristics, their Impact on Equipment Behaviour and Mitigation by using Custom Power Devices" by Ravindra Kumar, EED, KNIT, Sultanpur, affiliated to G. B. Technical University, Lucknow (U. P.) in June, 2011.
- [34] "Performance evaluation of Z-Source Inverter Fed three phase induction motor drive using PWM and SVPWM Techniques" by Varun Kumar, EED, KNIT, Sultanpur affiliated to U. P. Technical University, Lucknow (U. P.) in June, 2010.

WORKSHOP / SHORT-TERM COURSES/ SEMINAR/FDP/CONFERENCE ATTENDED:

[1] One-day Workshop on "Filing Process of Patents", Organized by the Department of Mechanical Engineering and Electrical Engineering, Faculty of Engineering, Integral University, Lucknow on July 23rd, 2022 at Integral University, Lucknow.

- [2] Two-weeks Professional Development Program (PDP) on "Recent Trends in Green Technology for Sustainable life", Organized by the Department of Electrical Engineering Faculty of Engineering, Integral University, Lucknow during November 2-16, 2021.
- [3] Two days 2021 IEEE Region 10 International Workshop on Panel of Conference Organizers (POCO-21) organized online by IEEE UP Section on October 30-31, 2021.
- [4] One-week AICTE Training and Learning (ATAL) Academy Faculty Development Program on "Energy Management & Planning in Smart City for Sustainable Development", Organized by Rajkiya Engineering College, Sonbhadra, during September 20-24, 2021.
- [5] One-week AICTE Training and Learning (ATAL) Academy Faculty Development Program on "Electric Vehicles: Challenges in charging and their impact on Power Grid", Organized by College of Engineering, Thalassery, Kerala during September 06-10, 2021.
- [6] One-week Faculty Development Program on "Power System Optimization & Control", Organized by Department of Electrical Engineering, Rajkiya Engineering College, Ambedkar Nagar during December 14-18, 2020.
- [7] One-week AICTE Training and Learning (ATAL) Academy Faculty Development Program on "Electric Vehicles", organized by the National Institute of Technology, Mizoram November 10-14, 2020.
- [8] One-week online workshop on Advanced Pedagogies: Active learning and Digital Tools Organized by IIT Hyderabad during October 05-09, 2020.
- [9] One-week AICTE Training and Learning (ATAL) Academy Faculty Development Program on "Artificial Intelligence", organized by Rajkiya Engineering College, Sonbhadra September 21-25, 2020.
- [10] One-week Faculty Development Program on Professional Development Training for TEQIP-III Senior Faculty organized by the Indian Institute of Management (IIM), Jammu during January 2-6, 2020.
- [11] One-week short-term course on Recent Advances in Renewable & Emerging Energy Technologies with Emphasis on Solar, wind, and fuel cell sponsored by TEQIP-III and organized by Department of Electrical Engineering, Rajkiya Engineering College, Ambedkar Nagar during August 27-31, 2019.

- [12] Attended Executive Leadership program offered by Art of living organized by Dr. A. P. J. Abdul Kalam Technical University, Lucknow at Rishikesh during July 26-28, 2019.
- [13] One-week National Workshop on NBA and NAAC Accreditation organized by Engineering Staff College of India at Gangtok during June 18-22, 2019.
- [14] One-week week workshop on Nurturing Start-up / Entrepreneurial skills in Budding Engineers organized by Rajkiya Engineering College, Ambedkar Nagar during February 15-19, 2019.
- [15] One-week faculty development program on "Essentials of Teaching-learning process and Research Methodology" organized by Departments of Electrical Engineering, Rajkiya Engineering College, Ambedkar Nagar & sponsored by TEQIP-III during February 04-08, 2019.
- [16] One-week short-term course on "Recent Advances in Electrical Engineering during September 10-14, 2018, organized by the Department of Electrical Engineering, Rajkiya Engineering College, Ambedkar Nagar sponsored by TEQIP-III.
- [17] One Week National Workshop on "Evolving Drifts in Computer Science (NWEDCS-2018)" Organized by the Department of Information Technology & sponsored by TEQIP-III of Rajkiya Engineering College, Ambedkar Nagar, during May July 09-13, 2018.
- [18] One week TEQIP III sponsored Special Summer Workshop on Active Learning, Autonomy, Academic Governance and R & D at IIT Roorkee held from June 25-29, 2018.
- [19] One week Short Term course on "SCILAB Programming through ICT" sponsored by National Institute of Technical Teachers' Training & Research, Chandigarh at Rajkiya Engineering College, Ambedkar Nagar, during May 14-18, 2018.
- [20] One week Short Term Training Programme on "Laboratory and Workshop Management Issues" jointly organized by the Department of Electrical Engineering, Rajkiya Engineering College, Ambedkar Nagar & National Institute of Technical Teachers' Training & Research, Kolkata during April 09-13, 2018.
- [21] One Week Faculty Development Program on "Intellectual Property Rights and Entrepreneurship Development" at Kamla Nehru Institute of Technology (KNIT), Sultanpur (U. P.) supported by TEQIP-III by Institute of Entrepreneurship Development, U.P., Lucknow during February 13-17, 2018.

- [22] One Week short-term course on "Power System Volt/VAR Control and Voltage Stability(PSCVS-2017)" under Global Initiative of Academic Networks (GIAN), organized by the Department of Electrical Engineering, Motilal Nehru National Institute of Technology (MNNIT), Allahabad (U. P.), during December 26-30, 2017.
- [23] One Week short-term course on "Thermal Power Plants: Past and Present" sponsored by Technical Education Quality Improvement Program-II, organized by Department of Mechanical Engineering, Kamla Nehru Institute of Technology (KNIT), Sultanpur (U. P.), during February 20-25, 2017.
- [24] One Week Faculty Development Program on "Recent Advances in Renewable Energy Technologies and Smart Micro-grids" sponsored by Technical Education Quality Improvement Program-II, organized by the Department of Electrical Engineering, Kamla Nehru Institute of Technology (KNIT), Sultanpur (U. P.), during September 13-17, 2016.
- [25] Two Weeks FDP on "Simulation and Mathematical Tools for Engineering Research" sponsored by All India Council for Technical Education (AICTE), New Delhi, organized by Department of Electronics Engineering, Kamla Nehru Institute of Technology (KNIT), Sultanpur (U. P.), during July 04-15, 2016.
- [26] One Week FDP on "Disaster Management & Mitigation Measures" sponsored by World Bank Technical Education Quality Improvement Program-II, organized by the Department of Civil Engineering, Kamla Nehru Institute of Technology (KNIT), Sultanpur (U. P.), during April 26-30, 2016.
- [27] One Week FDP on "Recent Advances in Numerical and Optimization Techniques (RANOT-16)" sponsored by World Bank Technical Education Quality Improvement Program-II, organized by Department of Civil Engineering, Kamla Nehru Institute of Technology (KNIT), Sultanpur (U. P.), during March 1-5, 2016.
- [28] QIP Short-term course on "Microcontroller and its Applications to Power Converters" organized by Department of Electrical Engineering, Indian Institute of Technology (IIT), Roorkee (U. A.), during December 21-25, 2015.
- [29] One Week FDP on "Embedded System Development" sponsored by World Bank Technical Education Quality Improvement Program-II, organized by the Department of Electronics Engineering, Kamla Nehru Institute of Technology (KNIT), Sultanpur (U. P.), during November 2-6, 2015.

- [30] TEQIP School on "System and Control" organized by Knowledge Incubation for TEQIP, Indian Institute of Technology (IIT), Kanpur (U. P.), during August 4-9, 2015.
- [31] One Week Short-Term Training Programme on "Simulation and Mathematical Tools for Engineering Applications" sponsored by Technical Education Quality Improvement Program-II, organized by Department of Electronics Engineering & Department of Electrical Engineering, Kamla Nehru Institute of Technology (KNIT), Sultanpur (U. P.), during July 27-31, 2015.
- [32] One Week Faculty Development Programme on "Essentials of Teaching-Learning Process" sponsored by Technical Education Quality Improvement Program-II, organized by Department of Applied Sciences & Humanities, Kamla Nehru Institute of Technology (KNIT), Sultanpur (U. P.), during April 27-May 02, 2015.
- [33] One Week Faculty Development Programme on "Mathematica 10" sponsored by Technical Education Quality Improvement Program-II, organized by the Department of Mechanical Engineering, Kamla Nehru Institute of Technology (KNIT), Sultanpur (U. P.), during March 23-27, 2015.
- [34] Faculty Development Programme on "Entrepreneurship Development" sponsored by Entrepreneurship Development Institute of India (EDI), Ahmedabad under the aegis of National Science and Technology Entrepreneurship Development Board (NSTEDB), Department of Science and Technology, Government of India, New Delhi, organized by Department of Electronics Engineering, Kamla Nehru Institute of Technology (KNIT), Sultanpur (U. P.), during February 16-28, 2015.
- [35] QIP Short-term course on "Power Generation Technologies: Present Status and Future Trends" conducted by Department of Electrical Engineering& Department of Mechanical Engineering, Indian Institute of Technology (IIT), Kanpur (U.P.), during December 1-5, 2014.
- [36] AICTE Recognized Short term course on "Solid State Control of Electric Drives through ICT" organized by the Department of Electrical Engineering, Kamla Nehru Institute of Technology (KNIT), Sultanpur (U. P.) during July 21-25, 2014.
- [37] QIP Short-term course on "Power Electronics Applications in large pumped storage hydropower plants" organized by Department of Water Resources Development and management, Indian Institute of Technology (IIT), Roorkee (U. A.), during July 14-18, 2014.

- [38] AICTE Recognized Short term course on "VLSI Design through ICT" organized by the Department of Electronics Engineering, Kamla Nehru Institute of Technology (KNIT), Sultanpur (U. P.) during March 10-14, 2014.
- [39] QIP Short-term course on "Multilevel Inverters and its applications" organized by Department of Electrical Engineering, Indian Institute of Technology (IIT), Roorkee (U. A.), from December 30-Jan 3, 2014.
- [40] Faculty Development Programme on "Entrepreneurship Development" sponsored by Entrepreneurship Development Institute of India (EDI), Ahmedabad under the aegis of National Science and Technology Entrepreneurship Development Board (NSTEDB), Department of Science and Technology, Government of India, New Delhi, organized by Department of Mechanical Engineering, Kamla Nehru Institute of Technology (KNIT), Sultanpur (U. P.), during December 16-27, 2013.
- [41] QIP Short-term course on "Power System Economics" conducted by Department of Humanities & Social Sciences and Department of Electrical Engineering, Indian Institute of Technology (IIT), Kanpur (U.P.), during July 26-30, 2013.
- [42] QIP Short-term course on "High Voltage Direct Current Transmission: Past and Present" organized by Department of Electrical Engineering, Indian Institute of Technology (IIT), Roorkee (U. A.), during July 08-12, 2013.
- [43] Faculty Development Programme on "Entrepreneurship Development" sponsored by Entrepreneurship Development Institute of India (EDI), Ahmedabad under the aegis of National Science and Technology Entrepreneurship Development Board (NSTEDB), Department of Science and Technology, Government of India, New Delhi, organized by Department of Mechanical Engineering, Kamla Nehru Institute of Technology (KNIT), Sultanpur (U. P.), during February 25-March 08, 2013.
- [44] Short-term term course on "Renewable Energy with emphasis on Wind and Solar" organized by National Institute of Technical Teachers' Training & Research, Bhopal (Ministry of Human Resource Development, Govt. of India) from December 31st 2012-January 11th, 2013.
- [45] QIP Short-term course on "Power Markets: Economics and Management" organized by Department of Electrical Engineering, Indian Institute of Technology (IIT), Kanpur (U.P.), during October 29-November 02, 2012.
- [46] QIP Short-term course on "Intelligent Informatics in Electrical Engineering" organized by Department of Electrical Engineering, Indian Institute of Technology (IIT), Kanpur (U.P.), from 17th-21st September 2012.

- [47] QIP Short-term course on "Digital Design Techniques: Applications to Control System" organized by Department of Electrical Engineering, Indian Institute of Technology (IIT), Roorkee (U.A.), during May 30-June 3, 2011.
- [48] Workshop on "Mission 10X Faculty Empowerment Workshop" Organized by Wipro Technologies, Bangalore and KNIT, Sultanpur during November 22-26, 2010.
- [49] QIP Short term course on "Intelligent System Applications to the Smart Electric Grid solutions" organized by Department of Electrical Engineering, Indian Institute of Technology (IIT), Kanpur (U.P.), during November 15-19, 2010.
- [50] QIP Short term course on "Improved Quality AC/DC Converters" organized by Quality Improvement Programme Centre & Electrical Engineering Department, Indian Institute of Technology (IIT), Roorkee (Uttarakhand), during June 15-19, 2009.
- [51] AICTE Approved Faculty Development Programme on "Stress of Life: Causes and Prevention", organized by Department of Humanities and Social Sciences, MNNIT, Allahabad (U.P.), during June 8-12, 2009.
- [52] Workshop on "Pedagogy Training" organized by Effective Quality Upgradation Assistance for Technical Education (EQUATE), New Delhi at Kamla Nehru Institute of Technology, Sultanpur (U.P.) during January 12-17, 2009.
- [53] Short-term term course on "Energy Management" jointly organized by Motilal Nehru National Institute of Technology, Allahabad & National Institute of Technical Teachers' Training & Research, Chandigarh during March 27-31, 2006.
- [54] Short-term term course on "Power Electronics Laboratory Practices" jointly organized by Motilal Nehru National Institute of Technology, Allahabad & National Institute of Technical Teachers' Training & Research, Chandigarh during March 28-April 2, 2005.

CONFERENCES/WORKSHOPS / SHORT TERM COURSES/SEMINAR/FDP ORGANIZED:

[1] Member of Organizing Committee of One-week online Workshop on "Recent Research in Power Converter and Control-I", Organized by Department of Electrical Engineering, Rajkiya Engineering College, Ambedkar Nagar during February 21-26, 2022.

- [2] Convenor of One-week Faculty Development Program on "Power System Optimization & Control", Organized by Department of Electrical Engineering, Rajkiya Engineering College, Ambedkar Nagar during December 14-18, 2020.
- [3] Convenor of One DayWebinar on Electric Vehicle Development using Ansys Multiphysics organised by Department of Electrical Engineering, Rajkiya Engineering College, Ambedkar Nagar on August 13, 2020.
- [4] Convenor of Two Days International Seminar on Recent Advances in Science & Technology (ISRAST-2020) sponsored by TEQIP-III and organised by Department of Electrical Engineering, Rajkiya Engineering College, Ambedkar Nagar during February 16-17, 2020.
- [5] General Chair of International Conference REC-CON-19 sponsored by TEQIP-III and organised by Department of Electrical Engineering, Rajkiya Engineering College, Ambedkar Nagar during November 28-29, 2019.
- [6] Technical and Advisory Committee of National Conference on Computational and Characterization Techniques in Engineering and Sciences CCTES-19 sponsored by TEQIP-III and organized by Department of Applied Sciences and Humanities, Rajkiya Engineering College, Ambedkar Nagar during September 06-07, 2019.
- [7] Convenor of One-week workshop on Environmental Management for Eco-friendly Infrastructure Development sponsored by TEQIP-III and organised by Department of Electrical Engineering & Department of Civil Engineering, Rajkiya Engineering College, Ambedkar Nagar during September 02-06, 2019.
- [8] Convenor of One-week short term course on Recent Advances in Renewable & Emerging Energy Technologies with Emphasis on Solar, wind and fuel cell sponsored by TEQIP-III and organised by Department of Electrical Engineering, Rajkiya Engineering College, Ambedkar Nagar during August 27-31, 2019.
- [9] Member of Advisory Committee of One-week National Workshop on "Image Forensic using Machine Learning" organized by Department of Information Technology, Rajkiya Engineering College, Ambedkar Nagar sponsored by TEQIP-III during August 26-30, 2019.
- [10] Member of organizing Committee of Three weeks Induction Programme (IP) for newly admitted students organized by Rajkiya Engineering College, Ambedkar Nagar sponsored by TEQIP-III during August 01-21, 2019.

- [11] Coordinator of One-week National Workshop on "Developing critical thinking using Management System (LMS) and ICT tools "organized by Department of Electrical Engineering, Rajkiya Engineering College, Ambedkar Nagar and HRDC, Integral University, Lucknow during August 05-09, 2019, sponsored by TEQIP-III.
- [12] Coordinator of Student Excellenece & Learning Program (SELP) oragnised by Rajkiya Engineering College, Ambedkar Nagar sponsored by TEQIP-III during April 3-14, 2019.
- [13] Member of Advisory Committee of One-week National Workshop on "Image Processing Computer Vision & Applications" organized by Department of Information Technology, Rajkiya Engineering College, Ambedkar Nagar sponsored by TEQIP-III during February 15-19, 2019.
- [14] Convenor of One-week National Workshop on "Nurturing Start-up/ Entrepreneurial Skills in Budding Engineers" organized by PariKalpana Start-up Cell, Rajkiya Engineering College, Ambedkar Nagar in Twinning with YMCA University of Science & Technology, Faridabad sponsored by TEQIP-III during February 15-19, 2019.
- [15] Convenor of One-week faculty development program on "Essentials of Teaching-learning process and Research Methodology" organized by Departments of Electrical Engineering, Rajkiya Engineering College, Ambedkar Nagar & sponsored by TEQIP-III during February 04-08, 2019.
- [16] Coordinator of Two days workshop on "Entrepreneurial skill and Start-up" organized by Start-up Cell, Rajkiya Engineering College, Ambedkar Nagar & sponsored by TEQIP-III during February 06-07, 2019.
- [17] Chairman of One-week National Workshop on "MATLAB & its Applications in Engineering" organized by Departments of Electrical Engineering, Rajkiya Engineering College, Ambedkar Nagar during January 28-Feb. 01, 2019.
- [18] Convenor of One-week short term course on "Real-Time Simulation of FACTS and HVDC through ICT" organized by Departments of Electrical Engineering, Rajkiya Engineering College, Ambedkar Nagar during January 28-Feb. 01, 2019.
- [19] Convenor of One-week short term course on "Artificial Intelligence & optimization through ICT" organized by Departments of Electrical Engineering, Rajkiya Engineering College, Ambedkar Nagar during January 21-25, 2019, 2019.
- [20] Convenor of One-week short term course on "Recent Advances in Electrical Engineering, organized by Department of Electrical Engineering, Rajkiya Engineering College, Ambedkar Nagar sponsored by TEQIP-III during September 10-14, 2018.

- [21] Co-convenor of Three Weeks Induction Programme (IP) for newly admitted students, organized by Rajkiya Engineering College, Ambedkar Nagar & sponsored by TEQIP-III, during August 01-21, 2018.
- [22] Advisor of One Week National Workshop on "Evolving Drifts in Computer Science (NWEDCS-2018)" Organized by Department of Information Technology & sponsored by TEQIP-III of Rajkiya Engineering College, Ambedkar Nagar, during July 09-13, 2018.
- [23] Chairman of One Week Short Term course on "SCILAB Programming through ICT" sponsored by National Institute of Technical Teachers' Training & Research, Chandigarh at Rajkiya Engineering College, Ambedkar Nagar, during May 14-18, 2018.
- [24] Coordinator of One Week Short Term Training Programme on "Laboratory and Workshop Management Issues" jointly organized by Department of Electrical Engineering, Rajkiya Engineering College, Ambedkar Nagar & National Institute of Technical Teachers' Training & Research, Kolkata during April 09-13, 2018.
- [25] Convenor of One day Institutional Training Programme on "Energy Efficiency: Challenges & Opportunities" sponsored by Petroleum Conservation Research Association (PCRA), organized by Career Development Cell, Kamla Nehru Institute of Technology (KNIT), Sultanpur (U. P.), on October 07, 2017.
- [26] Coordinator of One Week short term course on "Thermal Power Plants: Past and Present" sponsored by Technical Education Quality Improvement Program-II, organized by Department of Mechanical Engineering, Kamla Nehru Institute of Technology (KNIT), Sultanpur (U. P.), during February 20-25, 2017.
- [27] Coordinator of One Week Faculty Development Program on "Recent Advances in Renewable Energy Technologies and Smart Micro-grids" sponsored by Technical Education Quality Improvement Program-II, organized by Department of Electrical Engineering, Kamla Nehru Institute of Technology (KNIT), Sultanpur (U. P.), during September 13-17, 2016.
- [28] Organizing Secretary of Two Weeks Faculty Development Program on "Simulation and Mathematical Tools for Engineering Research" organized by Department of Electronics Engineering, Kamla Nehru Institute of Technology, Sultanpur during July 04-15, 2016.
- [29] Co-convenor of International Conference on Emerging Trends in Electrical, Electronics and Sustainable Energy Systems (ICETEESES-16) organized by Department of Electrical Engineering and Department of Electronics Engineering, Kamla Nehru Institute of Technology, Sultanpur during March 11-12, 2016.

- [30] Coordinator of One Week Short Term Training Programme on "Simulation and Mathematical Tools for Engineering Applications" sponsored by Technical Education Quality Improvement Program-II, organized by Department of Electronics Engineering & Department of Electrical Engineering, Kamla Nehru Institute of Technology (KNIT), Sultanpur (U. P.), during July 27-31, 2015.
- [31] Convenor of Two days "2nd Workshop on Curriculum Development in Electrical Engineering" sponsored by Technical Education Quality Improvement Program-II, organized by Department of Electrical Engineering, Kamla Nehru Institute of Technology (KNIT), Sultanpur (U. P.), during May 15-16, 2015.
- [32] Convenor of Two days "1st Workshop on Curriculum Development in Electrical Engineering" sponsored by Technical Education Quality Improvement Program-II, organized by Department of Electrical Engineering, Kamla Nehru Institute of Technology (KNIT), Sultanpur (U. P.), during May 15-16, 2015.
- [33] Convenor of 2nd National Power & Energy System Conference (NPESC-15) organized by Department of Electrical Engineering, Kamla Nehru Institute of Technology, Sultanpur during April 10-11, 2015.
- [34] Co-convenor of Faculty Development Programme on "Entrepreneurship Development" sponsored by Entrepreneurship Development Institute of India (EDI), Ahmedabad under the aegis of National Science and Technology Entrepreneurship Development Board (NSTEDB), Department of Science and Technology, Government of India, New Delhi, organized by Department of Applied Sciences and Humanities, Kamla Nehru Institute of Technology (KNIT), Sultanpur (U. P.), during February 16-28, 2015.
- [35] Coordinator of Two days Workshop on "Advances in optimization techniques and their Application in Power System (WAPTAPS-15)" organized by Department of Electrical Engineering, Kamla Nehru Institute of Technology, Sultanpur during Feb. 20-21, 2015.
- [36] Convenor of 1st National Power & Energy System Conference (NPESC-14) organized by Department of Electrical Engineering, Kamla Nehru Institute of Technology, Sultanpur during April 25-26, 2014.
- [37] Co-convenor of Faculty Development Programme on "Entrepreneurship Development" sponsored by Entrepreneurship Development Institute of India (EDI), Ahmedabad under the aegis of National Science and Technology Entrepreneurship Development Board (NSTEDB), Department of Science and Technology, Government of India, New Delhi, organized by Department of Applied Sciences and

- Humanities, Kamla Nehru Institute of Technology (KNIT), Sultanpur (U. P.), during December 16-27, 2013.
- [38] Coordinator of one day National Seminar on Advances in Power System (NSAPS 2013)" organized by Department of Electrical Engineering, Kamla Nehru Institute of Technology, Sultanpur on September 07, 2013.
- [39] Co-Coordinator of One day Workshop on "NPTEL Awareness" organized by Department of Electrical Engineering, Kamla Nehru Institute of Technology, Sultanpur on August 02, 2013.
- [40] Coordinator of National Conference on "Recent Trends in Energy Systems (NCRTES 2013)" organized by Department of Electrical Engineering, Kamla Nehru Institute of Technology, Sultanpur during April 5-6, 2013.
- [41] Co-coordinator of Faculty Development Programme on "Entrepreneurship Development" sponsored by Entrepreneurship Development Institute of India (EDI), Ahmedabad under the aegis of National Science and Technology Entrepreneurship Development Board (NSTEDB), Department of Science and Technology, Government of India, New Delhi, organized by Department of Mechanical Engineering, Kamla Nehru Institute of Technology (KNIT), Sultanpur (U. P.), during February 25-March 08, 2013.
- [42] Co-Coordinator of One day Workshop on "Programming with MATLAB" organized by Department of Electrical Engineering, Kamla Nehru Institute of Technology, Sultanpur on February 02, 2013.
- [43] Organizing Secretary of an International Symposium on "Recent Trends in Electronics & Communication Engineering (ISRTEC 2012)" organized by Department of Electronics Engineering, Kamla Nehru Institute of Technology, Sultanpur during Nov. 8-9, 2012.
- [44] Co-Convenor of National Conference on "Emerging Trends in Electrical and Electronics Engineering (ETEEE 2011)" organized by Department of Electrical & Electronics Engineering, Kamla Nehru Institute of Technology, Sultanpur during Nov. 26-27, 2011.
- [45] Organising Member of National Seminar on "MATLAB and its Applications in Electrical Engg (MAEE 2009)" organized by Department of Electrical Engineering, Kamla Nehru Institute of Technology, Sultanpur, during Dec. 14-16, 2009.

- [46] Organising Member of "Workshop on Virtual Instrumentation & its applications (WVIA 09)" sponsored by TEQIP, MNNIT & National Instruments, India by Department of Electrical Engineering, Motilal Nehru National Institute of Technology, Allahabad (U.P.), during March 18-20, 2009.
- [47] Organising Member of National Seminar on "Non-Conventional Energy Resources & its Utilization (NCERU 2009)" organized by Department of Electrical Engineering, Kamla Nehru Institute of Technology, Sultanpur & IEEE UP Section, during Feb. 27-28, 2009.
- [48] Organising Member of Workshop on "Circuit Simulation using SPICE and VHDL" organized by Department of Electrical Engineering, Motilal Nehru National Institute of Technology, Allahabad during April 8-10, 2006.

KEY NOTE ADDRESS/EXPERT LECTURES/PLENARY TALK DELIVERED:

- [1] An Invited Talk delivered on "Smart Distribution Grid for Power Management" in AICTE Training and Learning (ATAL) Two-weeks Faculty Development Programme on Energy Management Renewable Energy Challenges for Alternative Eco-friendly System (EMCAEFS) from February 6-10, 2923 organized by the Department of Electrical Engineering, Madan Mohan Malaviya University of Technology, Gorakhpur.
- [2] An Invited Talk delivered on "Fuzzy logic based MPPT Techniques for photovoltaic Energy Conversion systems" through online mode (Google Meet) in Two-weeks Professional Development Programme on Renewable Energy and its future in India held during November 10-23, 2021 jointly organized by the Department of Electronics and Communication Engineering and Department of Physics, Integral University, Lucknow.
- [3] An Invited Talk delivered in Webinar on "DC-DC Converters" through online mode (Google Meet) Hosted by Shri Ramswaroop Memorial University, Lucknow on June 12, 2021.
- [4] An Invited Talk delivered in Webinar on "Power Quality Improvement using Multilevel Converter" through online mode (Google Meet) Hosted by Shri Ramswaroop Memorial University, Lucknow on September 29, 2020.
- [5] An Invited Talk delivered in Five Days National Workshop on "Learning by Performing through Virtual Lab" through video conferencing Hosted by IET, Dr. Rammanohar Lohia Avadh University, Ayodhya (U. P.) on July 06, 2020.

- [6] An Expert Lecture delivered on "Recent Advances in Distributed Generation System and Management" in International Conference REC-CON-19 sponsored by TEQIP-III and organised by Department of Electrical Engineering, Rajkiya Engineering College, Ambedkar Nagar during November 28-29, 2019.
- [7] An Expert Lecture delivered on "Introduction to MATLAB/Simulink for Research Work" in AICTE Sponsored one week short term training program on Simulation Techniques for Engineering Research organised by Department of Electronics Engineering, KNIT, Sultanpur during November 14-19, 2019.
- [8] An Expert Lecture delivered on "Recent Advances in Distributed Generation System and Management in India" in National Conference on Computational and Characterization Techniques in Engineering and Sciences CCTES-19 sponsored by TEQIP-III and organised by Department of Applied Sciences and Humanities, Rajkiya Engineering College, Ambedkar Nagar during September 06-07, 2019.
- [9] An Expert Lecture delivered on "Recent Advances in MPPT Techniques" in One week short term course on Recent Advances in Renewable & Emerging Energy Technologies with Emphasis on Solar, wind and fuel cell sponsored by TEQIP-III and organised by Department of Electrical Engineering, Rajkiya Engineering College, Ambedkar Nagar during August 27-31, 2019.
- [10] An Expert Lecture delivered on "Current trends and challenges of Lithium Ion Battery for Electric Vehicle in India" on April 09, 2019 in One-week Short Term Course on Emerging Power Technologies and Management on "Emerging Power Technologies and Management" jointly organized by Departments of Electrical Engineering, KNIT, Sultanpur and Department of Electrical Engineering, MNNIT, Allahabad, Prayagraj during April 08-13, 2019.
- [11] An Expert Lecture delivered on "MATLAB Application /Simulink in Power Electronics" on February 20, 2019 in One-week faculty development program on "MATLAB and its Applications in Electrical Engineering" organized by Departments of Electrical & Electronics Engineering, Rajarshi Rananjay Sinh Institute of Management & Technology, Amethi during February 19-23, 2019.
- [12] An Expert Lecture delivered on "Outcome based Education" on February 07, 2019 in One-week faculty development program on "Essentials of Teaching-learning process and Research Methodology" organized by Departments of Electrical Engineering, Rajkiya Engineering College, Ambedkar Nagar during February 04-08, 2019.
- [13] An Expert Lecture delivered on "Power Quality Problems and its Improvement through Multilevel Bidirectional converter" on September 15, 2018 in IEEE International Conference on Computational and Characterization Techniques in Engineering and Science (CCTES-18), organized by Departments of Electronics & Communication Engineering, Electrical Engineering & Physics, Integral University Lucknow, during September 14-15, 2018.

- [14] An Expert Lecture delivered on "Power Quality issues and its Improvement through Multilevel converters under different operating conditions" on September 11, 2018 in One-week short term course on "Recent Advances in Electrical Engineering during September 10-14, 2018, organized by Department of Electrical Engineering, Rajkiya Engineering College, Ambedkar Nagar sponsored by TEQIP-III.
- [15] An Expert Lecture delivered on "Performance Comparison of Perturbed 7 Observed and Fuzzy logic based MPPT Technique for Photo-voltaic Energy Conversion System" on September 06, 2018 under Twinning Activities of TEQIP-III at YMCA University of Science & Technology, Faridabad.
- [16] An Expert Lecture delivered on "Power Quality and its Improvement" on July 13, 2018 in One Week Faculty Development Program on "Recent Advances in Power Electronics & Drives during July 10-14, 2018, organized by Department of Electrical & Electronics Engineering, Sri Ram Murti Smarak College of Engineering & Technology, Bareilly sponsored by TEQIP-III of Dr. A.P.J. Abdul Kalam Technical University, Lucknow.
- [17] An Expert Lecture delivered on "Power Quality Improvement through NPC Multilevel Converter" on April 5, 2018 in One Week Faculty Development Program on "Recent Advances in Distributed Generation Systems and Management (RADGSM-18)" during April 2-6, 2018, organized by Department of Electrical Engineering, under the aegis of World Bank TEQIP-III Project, of Kamla Nehru Institute of Technology, Sultanpur.
- [18] An Expert Lecture delivered on "Power Quality Improvement using Multilevel Converter" on March 1, 2017 in One Week Faculty Development Program on "Simulation Techniques of Power Electronics Converters (STPEC)" during February 27, 2017-March 04, 2017, organized by Department of Electrical Engineering, School of Engineering under the aegis of World Bank TEQIP-II Project, Harcourt Butler Technical University, Kanpur.
- [19] An Expert Lecture delivered on "Simulation of NPC Converter" on March 1, 2017 in One Week Faculty Development Program on "Simulation Techniques of Power Electronics Converters (STPEC)" during February 27, 2017-March 04, 2017, organized by Department of Electrical Engineering, School of Engineering under the aegis of World Bank TEQIP-II Project, Harcourt Butler Technical University, Kanpur.
- [20] An Expert Lecture delivered on "Trends and future outlook of Thermal Power Plants" on February 22, 2017, in One Week short term course on Thermal Power Plants: Past and Present during February 20-25, 2017, organized by Department of Mechanical Engineering, Kamla Nehru Institute of Technology, Sultanpur.
- [21] An Expert Lecture delivered on "Super-capacitor: A State of the Art Energy Storage Device" on September 14, 2016, in One Week Faculty Development Program on Recent Advances in Renewable Energy Technologies and Smart Micro-grids during

- September 13-17, 2016, organized by Department of Electrical Engineering, Kamla Nehru Institute of Technology, Sultanpur.
- [22] An Expert Lecture delivered on "Application of MATLAB in Power Electronics" on November 22, 2015, in Workshop on Applications of MATLAB in Electrical Engineering, November 21-23, 2015, organized by Department of Electrical Engineering, Rajkiya Engineering College, Ambedkar Nagar (U. P.)
- [23] An Expert Lecture delivered on "Fundamental of MATLAB Programming & Simulation for Electrical Engineering" on September 20, 2013, organized by Department of Electrical Engineering, SRMCEM, Lucknow (U. P.)
- [24] An Expert Lecture delivered on "Renewable Energy Potential of India: A State of the Art Survey" in National Conference on "Recent Trends in Energy Systems (NCRTES-2013)" during April 05-06, 2013, organized by Department of Electrical Engineering, Kamla Nehru Institute of Technology, Sultanpur (U. P.)-228 118
- [25] An Expert Lecture delivered on "Power Quality & Reliability of Distribution System" in National Seminar on "Utilization & Reliability of Electric Power: An Indian Scenario" on January 16, 2010 at Shambhunath Institute of Engg. & Technology (SIET), Allahabad (U. P.)-211 001.