

Dr. Sheeraz Kirmani, Assistant Professor
Department of Electrical Engineering
Faculty of Engineering and Technology
Jamia Millia Islamia, New Delhi-110025.

Mobile: +91-9953707456

Email: sheerazkirmani@gmail.com, skirmani@jmi.ac.in

1. PROFESSIONAL QUALIFICATION

- Ph. D. 2014, from Department of Electrical Engineering, Jamia Millia Islamia (A Central University), New Delhi.
Title of Ph.D. Thesis: *Techno-Economic Feasibility Analysis of Solar Energy Based Distributed Generation Systems*
- M.Tech (Energy Studies). 2007, from Centre for Energy Studies, Indian Institute of Technology (IIT), Delhi with first division.
- B.Tech (Electrical Engineering), 2005, from Department of Electrical Engineering, AMU Aligarh with first division.

2. SUMMARY OF TEACHING EXPERIENCE

- 25th July 2012 – Till date worked as Assistant Professor in the Department of Electrical Engineering, Jamia Millia Islamia, New Delhi
- 25th July 2011 – 24th July 2012 worked as Lecturer in the Department of Energy and Environment, TERI University, New Delhi
- 13th July 2010- 24th July 2011 worked as Assistant Professor in Department of Electrical and Electronics Engineering, Galgotia's College of Engineering and Technology, Greater Noida.
- 16th July 2009- 12th July, 2010 worked as Assistant Professor in Department of Electrical and Electronics Engineering, Manav Rachna International University, Faridabad.
- 28th September 2007- 15th July 2009, worked as application developer with IBM India Private Limited

3. ADMINISTRATIVE RESPONSIBILITIES

- Training and Placement coordinator of the Department of Electrical Engineering, Jamia Millia Islamia, 2020.
- Warden M M A Jauhar Hall, Jamia Millia Islamia, for the academic session 2016-17 and 2017-18.

4. RESEARCH PUBLICATIONS

International Journal

1. Mohammad Suhail, Iram Akhtar and **Sheeraz Kirmani**, "Objective functions and infrastructure for optimal placement of electrical vehicle charging station: A comprehensive survey", IETE Journal of Research, Taylor and Francis, 2021. (SCI)

2. Mohammad Ahmad and **Sheeraz Kirmani** "Simulation and Analysis of a Grid Integrated Distribution System Based on LMS Algorithm for Hybrid Types of Load" International Journal of Systems Assurance Engineering and Management (IJSA), 2021 (ESCI)
3. Iram Akhtar, **Sheeraz Kirmani**, Mohammad Suhail and Mohammed Jameel "Advanced Fuzzy Based Smart Energy Auditing Scheme for Smart Building Environment With Solar Integrated Systems" IEEE Access, Vol 9, pp. 97718-97728, 2021. (SCI)
4. Mohammad Suhail, Iram Akhtar, **Sheeraz Kirmani** and Mohammed Jameel "Development of Progressive Fuzzy Logic and ANFIS Control for Energy Management of Plug-In Hybrid Electric Vehicle," IEEE Access, vol. 9, pp. 62219-62231, 2021, (SCI)
5. Iram Akhtar, **Sheeraz Kirmani**, Mohammed Jameel, and Faraz Alam, "'Feasibility Analysis of Solar Technology Implementation in Restructured Power Sector With Reduced Carbon Footprints," IEEE Access, vol. 9, pp. 30306-30320, 2021, (SCI)
6. Iram Akhtar, **Sheeraz Kirmani**, Mohammad Ahmed, and Sultan Ahmed, "'Average Monthly Wind Power Forecasting Using Fuzzy Approach," IEEE Access, vol. 9, pp. 30426-30440, 2021 (SCI)
7. Iram Akhtar, **Sheeraz Kirmani**, and Mohammed Jameel, "Reliability Assessment of Power System Considering the Impact of Renewable Energy Sources Integration into Grid with Advanced Intelligent Strategies", IEEE Access journal, vol. 9, pp. 32485-32497, 2021. (SCI)
8. Iram Akhtar, and **Sheeraz Kirmani**, "Design and Implementation of Model Predictive Control for Microgrid Energy System with Power Quality Improvement features" International Journal of Electronics, Taylor and Francis, 2021, DOI: 10.1080/00207217.2020.1870753 (SCI).
9. Anand Kumar Pandey, K S Sujatha and Sheeraz Kirmani "Minimization of Power Loss with Different Types of DGs using CSA, International Journal of Renewable Energy Research, Vol 10, No 4, pp. 1988-1999, 2020 (Scopus)
10. Iram Akhtar and **Sheeraz Kirmani** "Grid-connected advanced energy storage scheme for frequency regulation" accepted for publication in international Journal of SN Applied Sciences, September 2020, Springer. (Scopus)
11. Iram Akhtar and **Sheeraz Kirmani** "An Application of Fuzzy Fault Tree Analysis for Reliability Evaluation of Wind Energy System", IETE Journal of Research, 2020, Taylor & Francis, (SCI)
12. Iram Akhtar and **Sheeraz Kirmani** "Error-Based Wind Power Prediction Technique Based on Generalized Factors Analysis with Improved Power System Reliability" IETE Journal of Research, 2020, Taylor & Francis, (SCI).
13. Anand Kumar Pandey and **Sheeraz Kirmani** "Multi-objective optimal location and sizing of hybrid system using analytical crow search optimization algorithm " Vol 30, No 5, 2020, International Transactions on Electrical Energy Systems (SCI).
14. Iram Akhtar and **Sheeraz Kirmani** "Flexible Hybrid System Power Quality Improvement Using Advanced Control Architecture" Journal of Intelligent and Fuzzy Systems, vol. 37, no. 4, pp. 5335-5350, 2019 (SCI).
15. **Sheeraz Kirmani**, Majid Jamil and Iram Akhtar, "Analysis and Design of a Sustainable Microgrid Primarily Powered by Renewable Energy Sources with Dynamic Performance Improvement", IET Renewable Power Generation, Vol. 13 Issue. 7, pp. 1024-1036, 2019 (SCI).

16. **Sheeraz Kirmani**, Majid Jamil and Iram Akhtar, "Economic feasibility of Hybrid Energy Generation with Reduced Carbon Emission", IET Renewable Power Generation 12 (8), 934-94, 2018 (SCI).
17. Iram Akhtar, **Sheeraz Kirmani**, Shaheen Hasan, and Sabah Khan, "Advanced Control Approach for Solar Assisted Electric Vehicle Drive", Material Today Proceedings- Journal, Elsevier, 2021(SCOPUS).
18. Iram Akhtar and **Sheeraz Kirmani**, "Reliability Assessment of Power Systems Considering Renewable Energy Sources", Material Today Proceedings- Journal, Elsevier, 2021(SCOPUS).
19. Mohammad Suhail, Iram Akhtar and **Sheeraz Kirmani**, "Economic analysis of 26 kW solar powered system for a commercial building in India", Material Today Proceedings- Journal, Elsevier, 2021(SCOPUS).
20. Iram Akhtar and **Sheeraz Kirmani**, "Impact of Sustainable Design on India's Smart Cities Development", Material Today Proceedings- Journal, Elsevier, 2021. (Scopus).
21. Shaheen Hasan, Sabah Khan, Iram Akhtar, and **Sheeraz Kirmani**, "Study of natural insulation materials and compared it with no insulation building", Material Today Proceedings- Journal, Elsevier, 2021(SCOPUS).
22. Muhammad Ahmed and **Sheeraz Kirmani** "Harmonics analysis of a SPV based stand-alone and grid connected multilevel inverter with improved power quality at different load" International Journal of scientific and technology research, 8(10), pp. 152-160 2019 (SCOPUS).
23. Muhammad Ahmed and **Sheeraz Kirmani**, "Performance analysis of LMS based control algorithm for power quality improvement in three phase grid connected system for linear/non-linear load" International Journal of Power Electronics and Drive Systems, 10(4), pp. 1944-1950, 2019 (SCOPUS).
24. Muhammad Ahmed and **Sheeraz Kirmani** " Performance analysis of a solar PV based grid tied multilevel inverter scheme for linear and non linear load",International Journal of Recent Technology and Engineering, 8(3), pp. 400-405, 2019 (SCOPUS).
25. Iram Akhtar, **Sheeraz Kirmani** and Majid Jamil, "State of the Ability in Research on Microgrid Hybrid Energy Systems" Journal of Engineering Science and Technology Review, Volume 12, Issue 5, pp.8-24, 2019 (SCOPUS).
26. Iram Akhtar and **Sheeraz Kirmani** "Effective Harmonic Reduction Technique for an ESTLDC inverter in hybrid Energy Based Application" International Journal of Electronics Letters, Taylor and Francis, 2019 (SCOPUS).
27. Nawaz Ali Warsi, Anwar Shahzad Siddiqui, **Sheeraz Kirmani** and Md. Sarwar "Impact Assessment of Microgrid in Smart Cities: Indian Perspective", Technology and Economics of Smart Grid and Sustainable Energy, Springer, Vol 4 Issue 1, 2019 (SCOPUS).
28. Mohammad Kalimullah and **Sheeraz Kirmani**, "Performance evaluation of Maximum Power generation of a rooftop photovoltaic System" International Journal of Emerging Trends and Technology in Computer Science Vol 6, Issue 5, pp 131-136, 2018(UGC CARE).
29. Mohammad Kalimullah and **Sheeraz Kirmani**, "Optimal Scheduling of a microgrid with a fuzzy logic controlled battery energy storage system" international Journal of Electrical Engineering and Technology, Vol 9, Issue 4, pp 104-114, 2018 (UGC CARE)..

30. **Sheeraz Kirmani**, Majid Jamil and Iram Akhter, “Bi-directional Power Control Mechanism for a Microgrid Hybrid Energy System with Power Quality Enhancement Capabilities” International Journal of Renewable Energy Research, Vol 07, No. 04, pp. 1962-1969, 2017 (SCOPUS).
31. **Sheeraz Kirmani**, Mohammad Kalimullah,” Estimation of Energy Pay-Back Time and Air Pollution Mitigation Potential of a 25-kWp Grid Connected Rooftop Photovoltaic System. International Journal of Electrical Engineering and Technology, Volume 8, Issue 6, pp. 1-8, Nov-Dec 2017(UGC CARE)
32. **Sheeraz Kirmani**, Mohammad Kalimullah, “Impact of Climatic Parameters on Power Generation of A Grid Connected Solar Photo Voltaic System in India” International Journal of Emerging Trends & Technology in Computer Science (IJETTCS), Volume 6, Issue 4, July- August 2017 (UGC CARE)
33. Anand K Pandey, **Sheeraz Kirmani**, “A Metaheuristic Approach to Find the Best Position and Size of a Photovoltaic System in Distribution Networks” International Journal of Engineering Science and Technology, Vol. 9 No.07, pp. 722-726, Jul 2017 (UGC CARE)
34. **Sheeraz Kirmani**, Majid Jamil and Iram Akhter “Effective low cost Grid-Connected Solar Photovoltaic System to Electrify the Small Scale industry/Commercial Building” International Journal of Renewable Energy Research, Vol 07 No. 02, pp. 797-806, 2017 (SCOPUS).
35. **Sheeraz Kirmani**, Mohammad Kalimullah, “Degradation Analysis of a Rooftop Solar Photovoltaic System—A Case Study” Smart Grid and Renewable Energy, Vol. 8, pp. 212-219, 2017 (UGC CARE)
36. Mohammad Kalimullah, **Sheeraz Kirmani**, “Optimal operating strategies for the integration of distributed power generation with microgrid-A Review” International Journal of Advanced Research in Electrical, Electronics and Instrumentation Engineering, Vol. 6, Issue 1, pp 65-73, January 2017 (UGC CARE)
37. **Sheeraz Kirmani**, Majid Jamil and M Rizwan “Empirical correlation of estimating global solar radiation using metrological parameters,” Sustainable energy, Taylor and Francis. 34:5, 327-339. 2015 (SCOPUS)
38. **Sheeraz Kirmani**, Mohd Shadab. “Techno-Economic Feasibility Analysis of Hybrid Systems for Decentralized Power Generation in India” International Journal of Energy and Power Engineering. Vol. 4, No. 2, pp. 103-117, 2015 (UGC CARE)
39. **Sheeraz Kirmani**, “A User Friendly Approach for Design and Economic Analysis of Standalone SPV System, Smart Grid and Renewable Energy”, Vol(6), pp. 67-74, 2015 (UGC CARE)
40. **Sheeraz Kirmani**, H Chatterjee and Majid Jamil “Techno-Economic Viability of Three Different Energy Supplying Options for Remote Area Electrification in India” sustainable energy, Taylor and Francis, Vol. 33, No. 2, pp. 470–482, 2014 (SCOPUS)
41. **Sheeraz Kirmani**, M Rizwan, Majid Jamil and D P Kothari “Fuzzy Logic Based Modeling and Estimation of Global Solar Energy using Meteorological Parameters” Energy, Vol 70 (2014), pp. 685-691, Elsevier (SCI)
42. **Sheeraz Kirmani**, Majid Jamil and M Rizwan “Techno- Economic Feasibility Analysis of Solar Photovoltaic Power Generation: A Review” Smart grid and Renewable Energy(Journal of Scientific Research), Vol. 3 (4), pp. 266-273, 2012 (UGC CARE)

43. **Sheeraz Kirmani**, Majid Jamil, K M Rafi “A Hybrid Model for Energy Generation in Faridabad India” Global Sci-Tech, AF’s Journal of Science and Technology. Vol. 3(2) April- June 2011. 83-86 (UGC CARE).
44. **Sheeraz Kirmani**, Amit Kumar, “Generalized Methodology for the Prediction of Wind Power: A Fuzzy Logic Based Approach”, International Journal of Engineering Science and Research, vol. 2, 2011, pp. 57-60 (UGC CARE).
45. **Sheeraz Kirmani**, Majid Jamil, Chakresh Kumar, M Jamil Ahmed “Techno Economic Feasibility Analysis of Solar Energy Based Distributed generation System to Electrify a rural Area Household in India”. International Journal of Engineering Science and Technology. Vol 2(10), 5231-37, 2010 (UGC CARE).
46. **Sheeraz Kirmani**, Md. Farrukh Rahman, Chakresh Kumar “Loss Reduction in Distribution Systems using Fuzzy Techniques” International Journal of Advanced Computer Science and Applications. Vol. 1 No. 3, pp 15-19 September 2010 (SCOPUS).

International Conferences

1. Iram Akhtar and **Sheeraz Kirmani** “Fuzzy logic based Cycloconverter for Cement Mill Drives” in Proceedings of International conference on Renewable Power 13-14 July 2020 BGBU, Jammu, India
2. Iram Akhtar, Wardul Hijaz Paul, **Sheeraz Kirmani** and Mohammed Asim “Cost Analysis of 18 kW Solar Photovoltaic System for Smart Cities Growth in India” in Proceedings of International conference on Renewable Power 13-14 July 2020 BGBU, Jammu, India.
3. Wardul Hijaz Paul, Mudasir Bashir Baht, **Sheeraz Kirmani**, Shahkar Ahmad Nahvi, “Data Based Controller Design for PMDC Motor Setup using System Identification” in proceedings of JTA Multidisciplinary international conference (JTACON-2020), held during 16-18 February 2020 in Jamia Millia Islamia, New Delhi.
4. **Sheeraz Kirmani**, Ankesh Kumar and Anand Kumar Pandey, "DG Placements in Distribution Network using exhaustive search approach," in proceedings of IEEE international conference on Electrical, Electronics and Computer engineering, UPCON 2019 held on 08-10 November 2019 in AMU Aligarh, India
5. Anand Kumar Pandey and **Sheeraz Kirmani**, "Placement of distributed generator in distribution systems using crow search algorithm," in proceedings of IEEE international conference on Electrical, Electronics and Computer engineering, UPCON 2019 held on 08-10 November 2019 in AMU Aligarh, India
6. Iram Akhtar, Mohammad Asim, Raj Kumar Yadav, Pyush Aggarwal and **Sheeraz Kirmani**, “Design of Effective Grid Connected Solar System” in proceedings of 4th international conference on inventive computation technologies, ICICT 2019 August
7. Iram Akhtar, **Sheeraz Kirmani** and Majid Jamil, “Effective Grid-Connected Solar home –based System for Smart Cities in India” in proceedings of international conference on smart cities held on 13-15 March 2019 in New Delhi
8. **Sheeraz Kirmani**, Anand Kumar Pandey, “Efficient Approach for DG placement and size in medium voltage distribution system” in proceedings of 2nd IEEE International conference on power Electronics, Intelligent Control and Energy systems held on Oct.22-24, 2018, Delhi Technological University, India.

9. **Sheeraz Kirmani**, Iram Akhtar and Majid Jamil, “Economic Scheduling of Hybrid Microgrid using planned management scheme ” in proceedings of 2nd IEEE International conference on power Electronics, Intelligent Control and Energy systems held on Oct.22-24, 2018, Delhi Technological University, India
10. **Sheeraz Kirmani**, Brijesh Kumar “Power Quality Improvement Using STATCOM control Scheme in Wind Energy Conversion System Interfaced to Grid” in proceedings of 2017 international conference on Power and Energy Engineering, held on 13-15 sep 2017 in Ottawa Canada.
11. **Sheeraz Kirmani**, Majid Jamil, Iram Akhtar, “Development of Effective Technique for Integration of Hybrid Energy System to Microgrid” in proceedings of 1st International Conference on Smart System, Innovation and Computing held during 14-16 April 2017 in Jaipur India.
12. **Sheeraz Kirmani**, Anand K Pandey “Implementation of Genetic Algorithm to find the optimal timing of Overcurrent relays” in proceedings of 17th IEEE Power Electronics and Motion Control Conference held on 25th-30th September 2016 in Varna Bulgaria
13. **Sheeraz Kirmani**, Md. Irfan and Siddique Ahmed, “Performance enhancement methodologies for Grid Connected Photovoltaic Systems” in proceedings of IEEE international conference INDICON December 2015.
14. **Sheeraz Kirmani**, Majid Jamil “Optimal Allocation of SPV based DG System for Loss reduction and Voltage Improvement in Radial Distribution Systems Using Approximate Reasoning” in proceedings of IEEE India international conference on Power Electronics, held in Delhi Technological University, Delhi, India in December, 2012.
15. **Sheeraz Kirmani**, Majid Jamil and M Rizwan, “Optimal Placement of SPV based DG System for Loss Reduction in Radial Distribution Network Using Heuristic Search Strategies” in proceedings of IEEE International Conference Energy, Automation and Signal held in Bhubhaneshwar, 28-30 December 2011.
16. **Sheeraz Kirmani**, Md. Farrukh Rahman, Anwar Shahzad Siddiqui, “Optimal Capacitor Placement in Distribution System using Fuzzy Techniques” Proc. Of. Int. Conf. on AME 2010. pp. 28-33.

National Conferences

1. Anand Kumar Pandey and Sheeraz Kirmani,”Multiobjective Optimal location and sizing of solar PV considering time varying nature of solar irradiance and load model in commercial distribution system” in proceedings of national conference on smart energy systems (NCSES-2019) organized by JSS Noida)
2. Ankesh Kumar, Anand Kumar Pandey and Sheeraz Kirmani,”Optimal location and sizing of Photovoltaic DG system using Direct Load Flow method” in proceedings of national conference on smart energy systems (NCSES-2019) organized by JSS Noida.
3. Sheeraz Kirmani and Mohammad Kalimullah “Performance Analysis of Solar Photovoltaic System under Different Radiant Flux – A Simulation Case” in proceeding of national conference on emerging trends in Electrical and Electronics Engineering, 2-3 Feb 2015 in Jamia Millia Islamia, New Delhi
4. **Sheeraz Kirmani**, Majid Jamil and Iram Akhtar “Overvoltage Protection of Transmission Lines: A Comprehensive Survey” in proceeding of national conference

- on emerging trends in Electrical and Electronics Engineering, 2-3 Feb 2015 in Jamia Millia Islamia, New Delhi
5. **Sheeraz Kirmani**, Majid Jamil and Iram Akhter “Analysis and Design of Multiple Boost Converter based on Wind Energy Conversion System with Power Quality Improvement Features” in proceeding of national conference on emerging trends in Electrical and Electronics Engineering, 2-3 Feb 2015 in Jamia Millia Islamia, New Delhi.
 6. Md Shamim Alam, Md Irfan, **Sheeraz Kirmani** and Majid Jamil, Performance Analysis of Solar Photovoltaic Module, in proceedings of national conference on emerging trends in Electrical and Electronics Engineering, 2-3 Feb 2015 in Jamia Millia Islamia, New Delhi.
 7. **Sheeraz Kirmani** and Ahmed Sharique Anees, “Challenges and Solutions of the Distributed Generation insertion in Distribution Systems” in Proceedings of IEEE sponsored National Conference on Energy, Power and Intelligent Control Systems, 28-29 March 2014 in GCET, Greater Noida.
 8. **Sheeraz Kirmani**, M Rizwan, Majid Jamil “Design and Economic Analysis of SPV System for Domestic Load Demand: A Case Study”. In proceedings of National Conference on Micro Solar Energy Generation and Utilization held in Indian Institute of Technology Kanpur 3-4, pp. 27-31, September 2011
 9. **Sheeraz Kirmani** “Issues in DG Placement in distribution Systems” in national Electrical Engineering Conference during December 16-17, 2011, Delhi Technological University Delhi
 10. **Sheeraz Kirmani**, Pavan Sharma, T S Bhatti “Optimal Placement of Capacitors for radial Distribution systems using Heuristic Search Strategies” pp.3-7 Proceedings of the National Conference on Recent Advances in Electrical and Electronics Engineering 09 held on 23-24 December 2009 in National Institute of Technology Hamirpur.

Patent

1. Filed a Patent “Teleoperating Defense Robot” patent No. 201911020846, 2019.

5. BOOK CHAPTER

1. Nawaz Ali Warsi, Anwar Shahzad Siddiqui, **Sheeraz Kirmani**, and Md Sarwar, “Impact Analysis of Microgrid in minimization of Distribution System Losses” pp.283-288, vol 756, 2021, Innovations in Electrical and Electronic Engineering. Lecture Notes in Electrical Engineering Springer, 978-981-16-0749-3
2. Iram Akhtar, **Sheeraz Kirmani**, “Effective Control Architecture for Microgrid Hybrid Energy System”, accepted in Book Control of Standalone Microgrid, Elsevier, 2021. ISBN 978-0-12-823022-0
3. Iram Akhtar, **Sheeraz Kirmani** and Majid Jamil, “Feasibility analysis of the net metering execution in hybrid energy system” accepted in book titled “Smart Energy Management Systems and Renewable Energy Resources, AIP, USA, 2021, ISBN : 9780735421684 (online).
4. Published a book Titled “Solar Power Distribution Techno Economic Feasibility” Lambert Academic Publishing USA ISBN: 978-620-2-68200-8.

5. Published a book Titled “Solar Advances in Photovoltaic System” ” Lambert Academic Publishing USA ISBN: 978-620-2-68361-6.
6. Iram Akhtar and **Sheeraz Kirmani** “Fuzzy logic based Cycloconverter for Cement Mill Drives” AI and Machine Learning Paradigms for Health Monitoring System: Intelligent Data Analytics pp. 394-396, Vol 86, 2021, lecture notes Electrical Engineering Springer.(Scopus), ISBN 987-981-33-4412-9,
7. Iram Akhtar, Wardul Hijaz Paul, **Sheeraz Kirmani** and Mohammed Asim “Cost Analysis of 18 kW Solar Photovoltaic System for Smart Cities Growth in India” Renewable Power for sustainable growth, lecture notes in Electrical Engineering, Springer, 13-14 July 2020, (Scopus), ISBN 978-981-334-080-0,
8. Iram Akhtar, Mohammad Asim, Raj Kumar Yadav, Pyush Aggarwal and **Sheeraz Kirmani**, “Design of Effective Grid Connected Solar System Inventive Computing Technologies, Lecture Notes in Network and Systems, pp. 606-614, Vol 98,2019, Springer (Scopus), ISBN 978-3-030-33846-6
9. Iram Akhtar, **Sheeraz Kirmani** and Majid Jamil, “Effective Grid-Connected Solar home –based System for Smart Cities in India” in lecture notes in Springer , lecture notes in civil Engineering, Springer, Vol 58,pp. 607-614, 2020, Smart Cities—Opportunities and Challenges, ISBN 978-981-15-2545-2, India.(Scopus)
10. **Sheeraz Kirmani**, Majid Jamil, Iram Akhtar, “Development of Effective Technique for Integration of Hybrid Energy System to Microgrid” Smart Innovation, Systems and Technologies, Vol 79, pp. 51-61, January 2018 Lecture Notes in Smart Innovation, Systems and Technologies, Springer. (Scopus), ISBN 978-981-10-5828-8
11. Published a book Chapter titled “Distribution Systems and Reactive Power Control: An Introduction” in the Book Entitled Advances in Electrical Power Engineering ISBN: 978-1-329-06197-2 in 2015.
12. Published a book titled “Methodologies for Performance Enhancement of Grid-Connected Photovoltaic System” Lambert Academic Publishing USA ISBN: 978-3-659-95572-3.

6. INVITED LECTURES

- Delivered an expert lecture on Micro grid Concept and Energy Storage Systems in Faculty Development Program on "Power Electronics applications in Micro grid and Electric Vehicle Systems" sponsored by AICTE and organized by Department of Electrical Engineering, JC Bose University of Science and Technology, YMCA Faridabad during 01-06 March 2021 dated 4th March 2021.
- in STTP on Advanced Power Electronic Convertors for Electric Vehicle Power train and smart Grid sponsored by AICTE and organized by QIS College of Engineering and Technology, 14th -19th December, 2020, dated 14.12.2020.
- Delivered an expert lecture on Smart Grid and Integration of Renewable Energy Sources in STTP sponsored by AICTE and organized by JSS Academy of Technical Education, Noida on 14th December 2020.
- Delivered an expert lecture on Renewable Energy Global Status in STTP on Solar PV and storage systems sponsored by AICTE and organized by JSS Academy of Technical Education, Noida on 10th December 2020.

- Delivered an expert lecture on Smart Grid and Integration of Renewable Energy Sources in STTP on Solar PV and Storage Systems sponsored by AICTE and organized by JSS Academy of Technical Education, Noida on 09th December 2020.
- Delivered an expert lecture on Future Scope of Electrical Engineers in Switchgear and Protection on Sep 25, 2020 in JIMS Engineering Management Technical Campus, Greater Noida.
- Delivered an expert lecture on Energy conservation and Control in National workshop during 27th -28th August 2020 organized by Mewat Engineering College, Haryana.
- Delivered an expert lecture in a one day **MNRE sponsored** national seminar Retopia held at TERI University, New Delhi on 18th November 2011
- Delivered an expert lecture on Grid Integration of Renewable Energy Sources in a one day **MNRE sponsored** national seminar RETopia held at TERI University, New Delhi 11th October 2012
- Delivered an expert lecture on Renewable Energy Sources in National conference on Biodiversity and Climate Change in Brownhills College of Engineering and Technology, Faridabad on 25th January 2013.
- Delivered an expert lecture on Solar Energy Systems and its Effect on Earth on Earth Day Celebration, Brown Hills College of Engineering and Technology during 22-26 April 2013.
- Delivered an expert lecture on Advances in Distributed Solar Power generation in SECAB institute of Engineering and Technology, Karnataka in 2015

7. Ph.D. THESIS SUPERVISED

Student Name	Title of the Ph.D. Thesis	Status
Mohammad Kalimullah	Optimal Operating Strategies for integration of Distributed Power Generation in Micro grids	Awarded April 2019
Iram Akhtar	Integration of Renewable Energy in Micro grids with power quality improvement features	Awarded March 2020
Anand Kumar Pandey	Multiobjective Allocation of Distributed Generation in Distribution Networks	Awarded November 2020
Muhammad Ahmed	Development of an Enhanced Power Quality inverter for standalone and grid connected PV system	Awarded June 2021
Wardul Hijaz Paul	Optimal Allocation of Energy Storage Systems in Hybrid Energy Generation	Ongoing
Nawaz Ali Warsi	Investigation of techno commercial, economic and environmental issues in Microgrids	Ongoing
Jahid	Performance Enhancement Methodologies of Hybrid AC/DC microgrids for optimum Energy Management	Ongoing
Sita Ram Jana	Control strategies for Renewable Energy based Microgrids	Ongoing
Abdul Mazid	IoT application in Smart Grid Development and Energy Management	Ongoing

8. M.TECH THESIS SUPERVISED

S.No.	Name of the Student	Title of Thesis	Year of Award
1	Anayatul Islam	A MPPT-CPG Hybrid Power Control Method For Grid Connected PV Inverter	2020
2	Obaid Siddiqui	Voltage and Frequency Control in a Microgrid	2020
3	Mudasir Basheer Bhat	Optimal Allocation of V2G Stations in a Microgrid using PSO Technique	2020
4	Vivek Kumar Singh	Fuzzy logic based sliding mode controller of Wind Energy Conversion System for MPPT	2020
5	Wardul Hijaz Paul	Hybrid BPSO-PSO Algorithm for Solving Duck Curve Problem	2019
6	Amjad Hussain Ansari	Frequency Regulation in a Power System by Using Energy Storage devices	2018
7	Jesmina Khatoon	Adaptive Overcurrent Protection Methods in Microgrid	2018
8	Mohd Shoeb	Power Loss Comparison of Single and two Stage Grid Connected Photovoltaic Systems Along with Harmonic Analysis	2018
9	Masiha Aijaz	Enhancement of Voltage stability of Wind Power integrated Grid Using Sen Transformer	2018
10	Ranjan Kumar	Optimal Scheduling of a Microgrid with a Fuzzy logic Controlled Storage System	2017
11	Brijesh Kumar	Power Quality Improvement by using STATCOM control scheme in wind energy generation scheme interface to grid	2017
12	Muhammad Irfan	Performance Enhancement Methodologies for Grid Connected Photovoltaic Systems.	2015
13	Muhammad Shadab	Techno-Economic Feasibility Analysis of Hybrid Systems for Decentralized Power Generation in India	2014
14	Ahmed M Khalid	Performance Ratio Analysis of Grid Connected PV Plants: Relevance to Indian Condition.	2012
15	Jalaj Garg	Feasibility study of Wind Diesel and Wind Solar Hybrid Systems for rural Electrification.	2012
16	Divyajot Singh	Grid Stability using large Energy storage	2012

	Jendu		
17	Naga Raju Thotha	Financial and Business model preparation for Solar PV application.	2012
18	Md. Jafar Khan	Designing of 250 kW Solar PV Power Project at Kolayat Bikaner	2012
19.	Ashish Kumar	Project Management of Large Scale Grid Tied SPV Power Plants	2012

9. PARTICULARS OF VISITS ABROAD

1. Visited Open University Milton Keynes United Kingdom under UKIERI grant in June 2012.
2. Visited Varna, Republic of Bulgaria during 25th -30th September 2016 to participate and present the paper in IEEE international conference on Power Electronics and Motion Control.
3. Visited, Ottawa, Canada during 13-15 September 2017 to participate and present the paper in 2017 international conference on Power and Energy Engineering.

10. AREA OF RESEARCH

Solar and Wind Energy Estimation, Intelligent Techniques, Renewable Energy Sources, Integration of Renewable Energy Sources to Electric Grid, Smart Grid, Micro Grid, Distributed Power Generation, Reactive Power Compensation

11. WORKSHOP/ PROFESSIONAL TRAININGS / SHORT TERM COURSES ATTENDED

- Attended one week AICTE/ISTE Sponsored online one week Orientation/Refresher program on use of ICT in Engineering Education during 15th -20th March 2021 organized by Maharaja Surajmal Institute of Technology, Janakpuri, New Delhi
- Attended one week AICTE Sponsored online one week short term course on Empowering the moral values, ethics and behavioral attitude in teaching skills among teachers (phase-II) during 18th -23rd January 2021 organized by Department of Electronics and Communication Engineering, Dr.N.G.P.Institute of Technology, Coimbatore
- Attended one week TEQIP-III Sponsored online short term course on Recent Trends in Renewable Energy Systems and their Control during 14th -18th September 2020 organized Dr B R Ambedkar National Institute of Technology, Jalandhar, Punjab
- Attended one week TEQIP Sponsored faculty development program on “Green Energy: The Energy of future” during 07th-11th September 2020 organized by Rajasthan Technical University Kota.
- Attended one week faculty development program on “Emerging Trends in Power Electronics and Power Systems” during 24th-29th August 2020 organized by Department of Electrical Engineering, O P Jindal University Raigarh, Chattisgarh.

- Attended one Week MHRD sponsored GIAN course on “Role of smart building Energy Management Systems in the Development of Smart City” during 06th March 2018 to 10th March 2018 at Jamia Millia Islamia, New Delhi.
- Attended a **UGC sponsored** 1st 3 week refresher course in climate change (interdisciplinary) from 20th February 2017-14th March 2017 at UGC-HRDC, Jamia Millia Islamia, New Delhi.
- Attended a MHRD sponsored one week GIAN course on Advances in Power Electronics and Renewable Energy Sources during Feb 06-10 2017 at Department of Electrical Engineering, Jamia Millia Islamia, New Delhi
- Attended a **UGC sponsored** 3 week special summer school (interdisciplinary) from 06th May-26th May 2015 at UGC-HRDC, Jamia Millia Islamia, New Delhi.
- Attended a **UGC sponsored** 4 week orientation program at UGC Academic Staff College, Jamia Millia Islamia during 09th April 2014 to 09th May 2014.
- **AICTE Sponsored** Staff Development Program (Two Week) on **Recent Advances in Electrical power and Energy Systems**” organized by Department of Electrical Engineering, Jamia Millia Islamia, New Delhi during Dec 09- Dec 22, 2011
- **AICTE Sponsored** Staff Development Program (Two Week) on Flexible AC Transmission Systems and Power System Voltage Stability Recent Advances” organized by Department of Electrical Engineering, Delhi Technological University, Delhi during July 11- July 22, 2011
- Attended two day National Workshop held on 25-26 March 2011 on **Solar Photovoltaic Components, System and Design** at ITS Engineering College, Greater Noida
- Attended Two Day Training held on 28th and 29th April 2011 on INSIGHT SLOAR photovoltaic Installation and Maintenance Training Program by Eco-Sense at GCET, Greater Noida
- Attended **IEEE Sponsored** one day Workshop on **Recent Advances in Electrical Electronics and Instrumentation Engineering held on 9th May 2011** at GCET, Greater Noida
- Attended a brainstorming workshop on 2-4 May, 2012, for the development of activity chart for national Children science congress. 2012. A program of NCSCT network, **Department of science & technology, Government of India**

12. CONFERENCES ATTENDED

- Attended and presented the paper titled “Impact of Sustainable Design on India’s Smart Cities Development” in International Conference on Technological Advancements in Materials Science and Manufacturing, ICTAMSM 2021, organized by Mechanical Engineering Department, Graphic Era (Deemed to be University), Dehradun, Uttarakhand during 19th - 20th February 2021.
- Attended and chaired a session in the National Conference Recent Trends in Renewable Energy and Advancement in Engineering and Technology 2020 held 01-02 September 2020 in Mewat Engineering College, Haryana.
- Attended and presented a paper in JTA international conference held on Feb 16-18, 2020 in Jamia Millia Islamia

- Attended and chaired a session in JTA international conference held on Feb 16-18, 2020 in Jamia Millia Islamia
- Attended and presented a paper in IEEE International conference on Electrical, Electronics and Computer Engineering UPCON 2019 held on November 8-9 2019, AMU Aligarh, India.
- Attended and chaired a session in IEEE International conference on Electrical, Electronics and Computer Engineering UPCON 2019 held on November 8-9 2019, AMU Aligarh, India.
- Attended and presented a paper in 2nd IEEE International conference on power Electronics, Intelligent Control and Energy systems held on Oct.22-24, 2018, Delhi Technological University, India.
- Attended and presented the paper in 2017 international conference on Power and Energy engineering held on 13-15 Sep 2017 in **Ottawa Canada.**
- Attended and presented the paper in 17th **IEEE Power Electronics and motion control** conference from 25th -30th September 2016 in Varna Bulgaria.
- **Attended and chaired a session** at the IEEE international conference INDICON, New Delhi, India, December 2015.
- **Attended and chaired a session** at the international conference on Advanced Developments in Engineering and Technology, 21st & 22nd February 2015 in Ghaziabad
- **Attended and Chaired a session in** national conference on emerging trends in Electrical and Electronics Engineering, 2-3 Feb 2015 in Jamia Millia Islamia, New Delhi
- **Attended and chaired a session** at the international conference on Advanced Developments in Engineering and Technology, 15th & 16th February 2014 in Ghaziabad.
- Attended and presented a paper **IEEE international conference on** Power Electronics, held in Delhi Technological University, Delhi, India in December, 2012.
- Attended and presented a paper **IEEE international conference** Energy, Automation and Signal Dec 2011 in Bhubaneswar.
- Attended and presented a paper National Electrical engineering conference Dec 16-Dec17 2011 in Delhi Technological University, Delhi
- Attended a National Conference on Micro Solar Energy Generation and Utilization held in **Indian Institute of Technology Kanpur** 3-4 September 2011.
- Attended and presented two papers in National conference on **Recent Advances in Electrical and Electronics Engineering** 2009 held at National Institute of Technology, Hamirpur, Himachal Pradesh held on 23-24 December 2009.
- Attended International Conference and exhibition on **Nanotechnology and Solar Photovoltaics** in Manav Rachna International University, Faridabad held on 16-17 April 2010.
- Attended a **DST sponsored** National Conference on **Climate Change and Environment** held on 22nd April 2011 at AFSET Faridabad.
- Attended a **IEEE sponsored** national conference on Energy, Power and Intelligent control Systems, 28th & 29th March 2014 in GCET Greater Noida.

13. SUBJECTS TAUGHT/LABORATORY HANDLED/ ESTABLISHED

Subjects Taught at Undergraduate Level

Basic Electrical Engineering, Electrical Measurements and Measuring Instruments, Power System Protection and Switchgear, Power System Analysis, Elements of Power System, Power System Operation and Control, Circuit Synthesis, Power System 2, Electrical Machines, HVDC and FACTS Devices.

Subjects Taught at Postgraduate Level

Restructuring and Deregulation of Power System, Advanced Power System Analysis, EHVAC and HVDC Transmission, Power System Operation and Control, Power System Generation, Transmission and Distribution, Grid Integration of Renewable Energy Sources, Power System Planning & Reliability.

Laboratory Handled

Basic Electrical Engineering, Electrical Measurements, Numerical Techniques lab, Power System Lab, Switchgear and protection Lab, Electrical Machine Lab, Networks lab

Laboratory Established

Setup the complete Solar Photovoltaic laboratory in TERI University

List of Experiments

1. I-V characteristics of Single PV module
2. I-V characteristics of PV modules in series and parallel
3. Demonstration of Stand-alone system with DC load.
4. Demonstration of stand-alone system with AC load.
5. Demonstration of stand-alone system with AC and DC load.
6. Harmonics and Reactive power measurement in AC output.
7. Power factor evaluation using different load.
8. Battery charging and discharging characteristics

Set up various laboratories of Electrical Engineering including the Power System Lab and Switchgear and Protection lab in Galgotia's College of Engineering and Technology, Greater Noida.

14. DEPARTMENTAL RESPONSIBILITIES

- Departmental Coordinator for NBA Accreditation of B.Tech program 2021 in Department of Electrical Engineering, AMU Aligarh.
- Member Document verification committee for M.Tech admissions 2020, department of Electrical Engineering, AMU Aligarh
- CBCS coordinator of B.Tech, Electrical Engineering for the session 2020-21, Jamia Millia Islamia.
- Member of interview committee constituted by the Vice Chancellor, Jamia Millia Islamia for hostel allotment in academic session 2017-18, 2018-19, 2019-20.
- Acted as Co-Coordinator in MHRD sponsored one week GIAN course during 06th March 2018 to 10th March 2018 on the topic “Role of smart building energy management systems in the development of smart city” held in Jamia Millia Islamia, New Delhi
- Verifying Officer Ph.D. admissions Electrical Engineering 2017.
- Coordinator, Power System Group in Course revision workshop for NBA preparation held in Department of Electrical Engineering, JMI Feb 7-8 2017.
- CBCS coordinator M.Tech (EPSM) , 2015, 2016 and 2017.
- In-charge Attendance M.Tech and Ph.D. 2014-2017
- Member of the verification committee, Faculty of Engineering and Technology, JMI, for the Admission in B.Tech. & M.Tech. 2014, 2015, 2016 and 2019.
- International technical committee member in international Conference on Computational Intelligence & Engineering System Design (CIESD-2021), 22-23 October 2021, Kanpur, India.
- International technical committee member in eight international conference on Electrical and Electronics Engineering (ICEEE 2021), Antalya Turkey, during April 9-11 2021.
- International technical committee member 2020 seventh international conference on Power and Energy Systems Engineering (CPESE 2020) was held Fukuoka, Japan, during September 26-20, 2020.

- Member of the organizing committee/technical committee 2020 seventh international conference on Electrical and Electronics engineering (ICEEE 2020) was held online during April 14-16, 2020, Turkey.
- International Technical Program committee member CPESE 2019: The 6th International Conference on Power and Energy Systems Engineering, Japan
- Technical program committee member in international conference on signals, machines and automation (SIGMA -2018) organized by NSIT, Delhi during 23-25 February 2018.
- International program committee member in IEEE 7th international conference on information, electronics and vision held on 25-28th June 2018 in Fukuaka Japan.
- International program committee member in IEEE 5th international conference on infomatics, Electronics and Vision, 13-14 May 2016 Dhaka Bangladesh.
- Member of the organizing committee, IEEE international conference INDICON December 2015 held in New Delhi India.
- Member of the organizing committee, National conference on Emerging Trends in Electrical and Electronics Engineering (ETEEE-2015), Department of Electrical Engineering, JMI, 2015.
- Member, Gown distribution committee for Annual Convocation, 2014 and 2016.
- Member Advisory board in the international conference on Advanced Developments in Engineering and Technology, 21st & 22nd February 2015 in Ghaziabad
- Member Advisory board in the international conference on Advanced Developments in Engineering and Technology, 15th & 16th February 2014 in Ghaziabad.
- Assistant Superintendent, B. Tech. Entrance Exam 2012, 2013 and 2014.
- Placement coordinator B.Tech 2012-2014.
- Member of the organizing committee and subject group expert Machines and Power Electronics in Curriculum Revision Workshop of B.Tech and M.Tech courses December 3-4 2012, Department of Electrical Engineering, JMI.
- Reviewer, IEEE Access.
- Reviewer, International Transaction on Electrical Energy System
- Reviewer, Solar Energy, Elsevier.
- Reviewer, IEEE Transactions on Smart Grid, USA.

- Reviewer, International Journal of Sustainable Energy, (Taylor & Francis), UK.
- Reviewer, International Journal of Energy and Power Engineering (IJEPE), USA.
- Reviewer, IEEE India International Conference on Power Electronics (IICPE-2012).
- Reviewer, International Journal on Smart Grid and Renewable Energy (Scientific Research), USA.
- Reviewer, IEEE India International Conference INDICON 2015.
- Reviewer of the book “Electrical Power Planning”, TMH
- Performed duties in various entrance examinations of Aligarh Muslim University for the session 2021-22.
- External Examiner at Mewat Engineering College, Nuh, Mewat, Haryana
- External Examiner for M.Tech Thesis evaluation February 2021, at Department of Electrical Engineering, Jamia Millia Islamia, New Delhi.
- External examiner and paper setter Bababadshah Gulam Shah University Jammu and Kashmir.
- External examiner and paper setter integral university Lucknow.
- External examiner and Paper setter Aligarh Muslim University Aligarh UP
- External examiner G L Bajaj institute of Technology and Management, UPTU Greater Noida.
- External examiner Lingayas University Faridabad.
- External examiner and paper setter Al Falah University, Faridabad
- External examiner and paper setter MD University Rohtak
- External examiner and paper setter University of Kashmir.
- External examiner and paper setter Muhammad Ali Jauhar University Rampur
- External examiner in Delhi Institute of Tool Engineering, New Delhi
- External examiner Guru Gobind Singh Indraprastha University Delhi.

14. PERSONAL DETAILS

Father's Name: Mr. Shaheen Parvez
 Mother's Name: Mrs. Hamida Farzana
 Date of Birth: 22-03-1984
 Place of Birth: Aligarh, U.P.

Sex: Male
Marital Status: Married
Nationality: Indian
Languages Known: English, Hindi & Urdu
Blood Group: B +

Address for Correspondence: H-No- D-66/1, Aman Appartment, Flat -202, Second Floor, Lane No 8, Shaheen Bagh, Abul Fazal Road, Jamia Nagar, Okhla, New Delhi-110025.

Declaration: I hereby declare that the information furnished above is true and correct to the best of my knowledge and belief.

Place: *New Delhi.*

Date: 05th November 2021

(Dr. Sheeraz Kirmani)