## Ikbal Ali, Ph.D.

Professor

#### **Department of Electrical Engineering**

Faculty of Engineering & Technology, JMI, New Delhi-110025

E-mail: iali1@jmi.ac.in, Mobile: +919891478481

Organizing Secretary (Proposed), FET Examination Assistant Superintendent

Provost/Dy. Provost,

Elected Member, Executive Council, JTA Elected Member, Academic Council, JMI

Coordinator..... Engg. & Tech. Faculty Coordinator:.... Program Coordinator: .....

Principle Investigator:.... Organizing Secretary,.....

Senior Member: .....

Chair GOLD:

-IEEE Int. Conference DELCON-2025

-Nov-Dec.2024

-ZH Hall of Boys Residence, JMI 2023-24

- Nov 2020-22

- Feb 2019-Feb2022

-AICTE STTP, 7-12 June 2021 -Vigilance AwarenessWeek-2021 -DST- FIST (2016-2021); 2.03 Cr.

-AICTE- RPS

-IEEE INDICON2015

-IEEE USA

-IEEE Delhi Section-2007-08



### **Teaching Experience:** = 24+ years teaching & research

\* Professor, D/o Electrical Engineering, F/o Engg & Technology, JMI, 16 July 2018 till date

\* Lecturer, D/o Electronics & Communication, JSS Academy, NOIDA, 06 August 2001 to 15 July 2002

**Education:** Ph.D. (Electrical Engg.), JMI, New Delhi,

M.Tech. (Control & Guidance), IIT-Roorkee

B.Sc. Engineering (Electrical), ZHCET, AMU Aligarh

### Ph.D. Supervision:

S. No.	Student's Name	Topic of Ph.D. Thesis	Status
1.	Dr. Sunil Gupta	Impact of IEC 61850 Protocol on Substation Performance	Degree Awarded, 2015
2.	Dr. Pawan Kumar	Optimal Operation of Automated Radial and Meshed Distribution System	Degree Awarded, 2015
3.	Dr. Nitin Gupta	Integration, Evaluation and Security Analysis of Smart Metering Infrastructure	Degree Awarded, 2016
4.	Dr. Shaik Muhammad Suhail Hussain	Technology Assessment for Designing Communication Requirements of Microgrid	Degree Awarded, 2018
5.	Dr. Mohd. Asim Aftab	SMART Solutions for Active Distributions Systems	Degree Awarded, July- 2020
6.	Mr. ViveK Kumar	Communication Design for Control and Protection in Microgrid (Under Visvesvaraya Scheme of MHRD GoI)	Admission Cancelled
7.	Mr. Sunil Kumar	Isolated Micro-Grid with Renewable Hybrid Generation	Thesis Submitted 23-12-2024
8.	Mr. Abhishek Kumar Gupta	Small Signal Stability Analysis in Micro-Grids under Distributed Control with Communication Latency	Admission Cancelled
9.	Ms. Swati Sharma	Energy Efficiency Enhancement through Demand Response in Smart Grid	In-progress, Full-Time
10.	Mrs. Shikha Kuchhal	Reliable and Secure Information Communication for Smart Grid	In-progress, Full-Time

## **Research Projects:**

- 1. Principle Investigator for RTDS Technologies Inc., CANADA project on "IEC61850 Communication based Design and Development of Management, Control and Protection Schemes for Microgrid/Smartgrid", Grant = 15000 USD, Apr.-2019.
- 2. Program Coordinator for DST-FIST project on "Real-time Digital Simulation Test bed for studying communication requirements for smart microgrid", Grant = Rs. 1.93 Crores, 2016-2021.
- 3. Principle Investigator for AICTE RPS research project on "Design and Performance Evaluation of Communication Architecture Requirements for Substation Automation System", Rs. 10Lakhs, 2013-15.
- 4. Principle Investigator for Jamia Innovative Research Activities project on "IEC 61850 Standards based Communication Configuration to Integrate Distributed Energy Resources (DER) in Distribution System", **Grant= Rs. 1Lakh, Aug.2014-15**

- **5. Project Mentor,** for IEEE Standards Education Grant for Student Application Papers Implementing Industry Standards bases project titled "IEC 61850 Based Communication Configuration to Integrate DER to Distribution System". **Grant = 800 UDS, Feb. 2015.**
- 6. UGC SAP (DRS-II) Implementation Team Member on "Power System Automation including Substation Automation leading to Distribution Automation". Grant= Rs. 73.5 Lacs.+

### **International Grants/ Fellowships:**

- **DST Travel Fellowship:** DST and JMI together gave international travel fellowship to attend and present a research paper in "*Innovative Smart Grid Technologies, ISGT-2011*" Conference at Anaheim CA, **USA** during 16-19 Jan 2011.
- ICTP Fellowship: The ICTP, Italy fully funded participation to First Regional Workshop during 18 July-2005 to 12 August-2005 on "Distributed Laboratory Instrumentation Systems" held in the University of Indonesia, Jakarta.

### **Keynote/Invited/Expert Lectures:**

- Keynote Lecture during AICTE Sponsored International Conference on "Advanced Computing Techniques in Engineering & Technology (ACTET-2025)" Organized by Swami Keshvanand Institute of Technology, Management & Gramothan, Jaipur on the topic 'Electric Vehicles, Smart Grid and Sustainability-Framework, Challenges & Opportunities', 13 Feb. 2025.
- Keynote Lecture during IEEE International Conference on "Cognitive Computing in Engineering, Communications, Sciences and Biomedical health Informatics", **16-18 Jan 2025** on the Topic titled as 'Smart Grid Communication'.
- Expert Lectures during 03 AICTE Sponsored STTPs on "Power Electronic Applications for Smart Grid, Electric Vehicles and Renewable Energy", JSSATE, NOIDA, 16-21Nov2020, 30Nov-05Dec2020. 16-20 Dec. 2020.
- International Conference on "Smart Grid-Distribution Automation", 8-10 April 2013, Sandton, Johannesburg, South Africa. Fully funded
- International Conference on "Substation Design", 7-8 April 2014, Sandton, Johannesburg, South Africa.
- "Academic Previews of the Educational TV Programmes and e-contents in the subject area of Engineering", CEC UGC, IUAC Campus, Aruna Asaf Ali Marg New Delhi, 2010-2012.
- "Data Acquisition: SCADA Basics" as part of the Load Dispatchers Training & Certification Program for POSOCO (PGCIL) Engineers under an MoU with JMI.
- "PG Diploma Program in Transmission & Distribution", by Central Board of Irrigation & Power (CBIP), Malcha Road, Chanakyapuri, New Delhi.
- "Communication Requirements in Substation Automation Systems- Ethernet in Substation", IEEE
   PES Invited Technical Talk, IEEE Delhi Section, Department of Electrical Engineering, DTU, Delhi
- "Recent Technological Developments in the Field of Electrical Engg", during National Seminar at JSS Academy of Technical Education NOIDA, MTU Noida & Schneider Electrical Infrastructure Ltd. NOIDA.
- "Industrial Automation", Two days (Feb. 15-16, 2014) Workshop, Dept of Electrical Engineering, Z.H. College of Engg. & Tech., AMU Aligarh.

### **Recent Research Publications:**

#### **IEEE / IET Transactions** (Available on www.ieeexplore.org):

- Pawan Kumar, Nikolovski S., Ikbal Ali, Mini S. Thomas , Hemant Ahuja, "Impact of Electric Vehicles on Energy Efficiency with Energy Boosters in Coordination for Sustainable Energy in Smart Cities", MDPI Processes 2022, Vol. 10, Issue 8, pp-1593.
- 2. Mohd Asim Aftab, S M Suhail Hussain, Ikbal Ali and Taha Selim Ustun, "IEC 61850-Based Communication Layer Modeling for Electric Vehicles: Electric Vehicle Charging and Discharging Processes Based on the International Electrotechnical Commission 61850 Standard and Its Extension", IEEE Industrial Electronics Magazine, 2020, Vol. 14, Issue 2, pp-4-14, June 2018. (SCI Indexed, I.F.=13.241).

- 3. Mohd Asim Aftab, S M Suhail Hussain, Ikbal Ali and Taha Selim Ustun, "A Novel Scheme for Performance Evaluation of an IEC 61850 based Active Distribution System Substation", Vol. 7, pp. 123893 123902, IEEE Access, 28 August 2019.
- **4.** Taha Selim Ustun, Mohd Asim Aftab, **Ikbal Ali** and S. M. Suhail Hussain. "A Novel Scheme for Performance Evaluation of an IEC 61850 based Active Distribution System Substation", **IEEE Access**, vol. 7, pp. 123893-123902, 2019. (SCI Indexed, I.F.=4.098).
- 5. Vivek Kumar and Ikbal Ali," Fractional Order Sliding Mode Approach for Chattering Free Direct Power Control Of DC/AC Converter", IET Power Electronic, 2019, Vol. 12(13), pp-3600-3610.
- **6.** S.M. Suhail Hussain, Mohd Asim Aftab, Furquan Nadeem, **Ikbal Ali** and Taha Selim Ustun, "Optimal Energy Routing in Microgrids with IEC 61850 based Energy Routers", **IEEE Transactions on Industrial Electronics**, Accepted. June-2019, Published Early Access.
- 7. Mohd Asim Aftab, S M Suhail Hussain, **Ikbal Ali** and Taha Selim Ustun, "A Novel SCL Configuration Method for Modeling Microgrids With IEC 61850", **IEEE Systems Journal**, Vol. 14(2), pp. 1-8, June2020.
- **8.** Mohd. Asim Aftab, S. M. Suhail Hussain, **Ikbal Ali** and Taha Selim Ustun, "*IEC 61850 and XMPP Communication Based Energy Management in Microgrids Considering Electric Vehicles*" **IEEE Acess**, 25 June 2018, Volume: 6, ISSN:2169-3536, **SCI Indexed**, **IF=3.244**
- Paul Nsonga, S. M. Suhail Hussain, Taha Selim Ustun, and Ikbal Ali, "IEEE 1609 WAVE and IEC 61850 Standard Communication Based Integrated EV Charging Management in Smart Grids", IEEE Transactions on Vehicular Technology, Accepted 5 May 2018
- 10. S. M. Suhail Hussain, Asim Aftab, Saeed Rostaee, Ikbal Ali, Mini S. Thomas and Shabana Mehfuz, "
  Performance Evaluation of IEC 61850 GOOSE based inter substation communication for accelerated distance protection scheme", IET Generation, Transmission & Distribution Journal, Accepted May 2018.
- 11. S.M. Suhail Hussain, Mohd Asim Aftab and Ikbal Ali, "IEC 61850 Modeling of DSTATCOM and XMPP Communication for Reactive Power Management in Microgrids" IEEE System Journal, 21 March 2018, Volume: 12, ISSN: 1932-8184, SCI INDEX, IF=3.882
- 12. S.M. Suhail Hussain, Ashok Tak, Taha Selim Ustun and Ikbal Ali, "Communication Modeling of Solar Home System and Smart Meter in Smart Grids" IEEE Acess, Feb 2018, Volume: 6, ISSN: 2169-3536, SCI Indexed Journal with Impact Factor = 0.33
- **13. Ikbal Ali** and S.M. Suhail Hussain, "Communication Modeling for Differential Protection in IEC 61850 Based Substations", IEEE Industry Applications Magazine, 15 August 2017, Volume: 54, Issue: 1, pp. 135-142, IF=1.169
- 14. Pawan Kumar, Ikbal Ali, Mini S. Thomas and Surjit Singh, "Imposing voltage security and network radiality for reconfiguration of distribution systems using efficient heuristic and meta-heuristic approach", IET Generation, Transmission & Distribution Journal, Volume: 11, Issue: 10, pp. 2457-2467, 13 July 2017, IF= 2.213
- **15. Ikbal Ali** and S.M. Suhail Hussain, "Communication Design for Energy Management Automation in Microgrid", **IEEE Transactions on Smart Grid**, Sept. 2016. Volume: 9, Issue: 3, pp. 2055-2064, (SCI indexed IF-6.45)
- **16.** Mini S. Thomas and **Ikbal Ali**, "Reliable, Fast and Deterministic Substation Communication Network Architecture and its Performance Simulation", **IEEE Transactions on Power Delivery,** Volume: 25, Issue: 4, 2010, Page(s): 2364 2370. **SCI Indexed Journal with Impact Factor=3.218**
- 17. Ikbal Ali, Mini S. Thomas and Pawan Kumar, "Energy efficient reconfiguration for practical load combinations in distribution systems", IET Generation, Transmission & Distribution Journal, Vol. 9, Issue 11, p. 1051-1060, Aug. 2015, ISSN: 1751-8687. SCI Indexed Journal with Impact Factor=2.213
- **18. Ikbal Ali**, Mini S. Thomas and Sunil Gupta, "Sampled Values Packet Loss Impact on IEC 61850 Distance Relay Performance", 2013 **IEEE PES Innovative Smart Grid Technologies Conference** (Asia), 1-6, Nov. 2013, Bangalore, India.
- **19. Ikbal Ali**, Mini S. Thomas and Sunil Gupta, "Integration of PSCAD based Power System & IEC 61850 IEDs to test fully Digital Protection Schemes", 2013 **IEEE PES Innovative Smart Grid Technologies** Conference (Asia), 1-6, Nov. 2013, Bangalore, India.
- **20. Ikbal Ali** and Mini S. Thomas, "GOOSE based Implementation & Testing in Laboratory", 2011 **IEEE PES Innovative Smart Grid Technologies** Conference, 16-19 Jan 2011, Anaheim, CA, USA.
- **21.** Mini S. Thomas, **Ikbal Ali**, and Nitin Gupta, "A Secure Way of Exchanging the Secret Keys in Advanced Metering Infrastructure", **POWERCON-2012**, 30 Oct-2 Nov 2012, Auckland, **New Zealand**.
- **22.** Anupama Prakash, **Ikbal Ali** and Mini S. Thomas, "A Substation Automation Laboratory to facilitate the Next Generation Research", **IEEE** International Conference on Power System Protection and Automation, December 2010, New Delhi, India.
- **23. Iqbal Ali** and Mini S. Thomas, "Substation Communication Networks Architecture", Proceedings of the IEEE International Conference: POWERCON-2008, New Delhi.

- **24. Iqbal Ali** and Mini S. Thomas," *Ethernet Enabled Fast and Reliable Monitoring Protection and Control of Electric Power Substation*", IEEE International Conference: PEDES-2006 in New Delhi,
- **25.** Mini S. Thomas, Debajit Nanda, and, **Iqbal Ali**, "*Development of a Data Warehouse for Non-operational Data in Power Utilities*", IEEE International Conference: PIC-2006 in New Delhi,
- **26.** Shabana Mehfuz, **Iqbal Ali** and Mini S. Thomas, "Ad Hoc Based Secure Architecture for Survivable and Reliable Substation Automation System", Proceedings of the IEEE International Conference: POWERCON-2008, New Delhi.
- **27. Ikbal Ali**, Mini S. Thomas and Sunil Kumar, "Methodology & Tools for Performance Evaluation of IEC 61850 GOOSE Based Protection Schemes", IEEE Fifth POWER INDIA International Conference, Murthal, Haryana, India, 19-22 December 2012
- **28. Ikbal Ali**, Mini S. Thomas and Pawan Kumar, "Effect of Loading Pattern on the Performance of Reconfigured Medium Size Distribution System", IEEE Fifth POWER INDIA International Conference, Murthal, Haryana, India, 19-22 December 2012.
- **29.** Mini S. Thomas, **Ikbal Ali**, and Nitin Gupta, "Integration and Security Analysis of Metering Infrastructure", IEEE Fifth POWER INDIA International Conference, Murthal, Haryana, India, 19-22 December 2012.

#### **Elsevier Transactions**

- 1. S. Kumar, I. Ali, and A. S. Siddiqui, "Performance Analysis of Different Solar Models Based on the Solar cell Parameters," *Indian Journal of Pure & Applied Physics*, 2021, doi: 10.56042/ijpap.v59i3.67765.
- 2. S. Kumar, I. Ali, and A. Siddiqui, "Protection of Microgrid Feeders Using Impedance Angle Analysis Assisted by Synchrophasor Units," *Journal of Renewable Energy and Environment*, vol. 11, no. 3, pp. 109–119, 2024, doi: 10.30501/jree.2024.432832.1794.
- 3. S. Kumar, I. Ali, and A. S. Siddiqui, "Energy management in a grid-connected microgrid using hybrid Golden Jackal optimization and gradient descent optimization and the concept of loadability," *e-Prime Advances in Electrical Engineering, Electronics and Energy*, vol. 9, p. 100763, Sep. 2024, doi: 10.1016/j.prime.2024.100763.
- 4. Swati Sharma, Ikbal Ali,"Efficient energy management and cost optimization using multi-objective grey wolf optimization for EV charging/discharging in microgrid, e-Prime Advances in Electrical Engineering, Electronics and Energy, Volume 10, 2024,100804, ISSN 2772-6711, <a href="https://doi.org/10.1016/j.prime.2024.100804">https://doi.org/10.1016/j.prime.2024.100804</a>.
- 5. Mohd. Asim Aftab, S M Suhail Hussain, **Ikbal Ali** and Taha Selim Ustun, "IEC 61850 based substation automation system: A survey", Elesevier IJEPES Vol. 120, Sept. 2020.
- 6. S. M. Suhail Hussain, Mohd Asim Aftab, **Ikbal Ali** and T S Ustun, "*IEC 61850 based energy management system using plug-in electric vehicles and distributed generators during emergencies*", International Journal of Electrical Power and Energy Systems Volume 119, **2020**, 105873. (SCI Indexed, IF=4.418).
- 7. Mohd Asim Aftab, S.M. Suhail Hussain, **Ikbal Ali** and Taha Selim Ustun, "Dynamic protection of power systems with high penetration of renewables: A review of the traveling wave based fault location techniques", International Journal of Electrical Power and Energy Systems, Vol-114, **2020**, 105410. (SCI Indexed, IF=4.418).
- 8. Ikbal Ali and S.M. Suhail Hussain, "Control and Management of Distribution System with High Penetration of DERs via IEC 61850 based Communication", Engineering Science and Technology, an International Journal (Elsevier), November, 2016. DOI: 10.1016/j.jestch.2016.11.017
- 9. S.M. Suhail Hussain, Mohd Asim Aftab and **Ikbal Ali**, "A Novel PRP based Deterministic, Redundant and Resilient IEC 61850 Substation Communication Architecture", Perspectives in Science (Elsevier). *Volume 8*, pp 747-750, June 2016.
- 10. Pawan Kumar, **Ikbal Ali** and Mini S. Thomas, "Energy efficiency analysis of reconfigured distribution system for practical loads". Perspectives in Science (Elsevier). ). *Volume 8, pp 498-501, June 2016.*

#### **MDPI Journal:**

- 1. Shakti Singh, Prachi Chauhan, Mohd Asim Aftab, S M Suhail Hussain, **Ikbal Ali** and Taha Selim Ustun, "Cost Optimization of a Stand-Alone Hybrid Energy System with Fuel Cell and PV", MDPI Energies 2020, 13(5), 1295.
- 2. Furquan Nadeem, Mohd Asim Aftab, S.M. Suhail Hussain, **Ikbal Ali**, Prashant Kumar Tiwari, Arup Kumar Goswami, Taha Selim Ustun," *Virtual Power Plant Management in Smart Grids with XMPP based IEC61850 communication*", **Energies, MDPI**, Vol 12, 2398, pp. 1-20, June 2019.
- S.M. Suhail Hussain, Furquan Nadeem, Mohd Asim Aftab, , Ikbal Ali, Taha Selim Ustun, "The Emerging Energy Internet: Architecture, Benefits, Challenges and Future Prospects", MDPI Electronics 2019, 8, 1037; doi:10.3390/electronics8091037

#### **Taylor & Francis Transactions**

- **1. Ikbal Ali,** Mini S. Thomas, Sunil Gupta and S. M. Suhail Hussain "IEC 61850 Substation Communication Network Architecture for Efficient Energy System Automation", International Journal on Energy Technology & Policy. Vol. 2, Issue 1, 2015, **DOI:** 10.1080/23317000.2015.1043475
- 2. Mini S. Thomas, Ikbal Ali and Nitin Gupta, "Interoperable Framework for IEC61850 Compliant IEDs and Non-compliant Energy Meters with SCADA". International Journal on Energy Technology & Policy. Vol. 2, Issue 1, 2015, DOI: 10.1080/23317000.2015.1022841.

#### **Springer US Transactions**

- 1. **Ikbal Ali,** Mohd Asim Aftab and S.M. Suhail Hussain, "Performance Comparison of IEC 61850-90-5 and IEEE C37.118.2 based Wide Area PMU Communication Networks", Journal of modern power system and clean energy (Springer), Vol.4, Issue 3, pages 487 495, 2016. DOI: 10.1007/s40565-016-0210-y (SCI indexed IF-1.207).
- 2. Mini S. Thomas, **Ikbal Ali** and Nitin Gupta, "A Mathematical Model for Evaluating the Delay Performance of a Metering Infrastructure in a Shared Medium", Journal of Control, Automation and Electrical Systems, Vol. 26, Issue 6, pp. 642-650, Sept 2015, ISSN(Print): 2195-3880, DOI: 10.1007/s40313-015-0209-z
- 3. Pawan Kumar, **Ikbal Ali** and M.S. Thomas, "A Coordinated Framework of DG Allocation and Operating Strategy in Distribution System for Configuration Management under Varying Loading Patterns", Springer Journal of Electric Power Components and Systems, Vol. 48 (1-2), pp. 12-29, 2020, SCI Indexed Journal with Impact Factor =2.123.

#### **International Journals / Transactions:**

- S. Sharma, Ikbal Ali," Dynamic pricing strategy for efficient electric vehicle charging and discharging in microgrids using multi-objective jaya algorithm", Eng. Res. Express, 6 (2024), Article 035315, 10.1088/2631-8695/ad6394
- Ikbal Ali, Mini S. Thomas and Nitin Gupta, "IEC 61850 Source Code Implementation for Accessing IED Data", International Journal of Advanced Research in Electrical, Electronics and Instrumentation Engineering (IJAREEIE), Vol. 2, Special Issue 1, December 2013. ISSN (Online): 2278-8875, ISSN(Print): 2320-3765, IF=5.621
- 3. **Ikbal Ali**, Mini S. Thomas and Pawan Kumar, "Distributed Resource Planning for improved Stability of Radial Distributed System", International Journal of Advanced Research in Electrical, Electronics and Instrumentation Engineering (IJAREEIE), Vol. 2, Special Issue 1, December 2013. ISSN (Online): 2278-8875, ISSN(Print): 2320-3765, IF=5.621
- 4. **Ikbal Ali**, "High-speed Peer-to-peer Based Protection Scheme Implementation and Testing in Laboratory", International Journal of Computer Applications (0975-8887), Vol. 38, No. 4, January-2012. Indexed Journal with Impact Factor=0.752
- 5. **Ikbal Ali**, Mini S. Thomas and Sunil Gupta, "Substation Communication Architecture to Realize the Future Smart Grid", International Journal of Energy Technologies & Policies, ISSN 2224-3232 (Paper), Vol. 1, No. 4, 2011. Indexed Journal with Impact Factor=5.54
- 6. Mini S. Thomas, **Ikbal Ali** and Nitin Gupta, "*Interoperability Framework for Data Exchange between Legacy and Advanced Metering Infrastructure*", International Journal of Energy Technologies & Policies, ISSN 2224-3232 (Paper), Vol. 2, No. 1, 2012. Indexed Journal with Impact Factor=5.54
- 7. **Ikbal Ali**, Mini S. Thomas and Pawan Kumar, "Optimal Capacitor Placement in Smart Distribution Systems to Improve its Maximum Loadability and Energy Efficiency", International Journal of Engineering, Science and Technology (IJEST), Vol. 3, No. 8, June 2012. Indexed Journal.

#### **International Conference Proceedings:**

- 1. S. Kumar, I. Ali, and A. S. Siddiqui, "Control of Wind Energy Connected Single Phase Grid with MPPT for Domestic Purposes," in 2022 2nd International Conference on Intelligent Technologies (CONIT), IEEE, Jun. 2022, pp. 1–6. doi: 10.1109/CONIT55038.2022.9847854.
- 2. F. Rasool, M. Anas, S. Kumar, and I. Ali, "Fault Detection Analysis of Active Distribution Network Based on Rate of Change of Frequency using RTDS and PMUs," in 2023 9th IEEE India International Conference on Power Electronics (IICPE), IEEE, Nov. 2023, pp. 1–5. doi: 10.1109/IICPE60303.2023.10475116.

- 3. S. Sharma and I. Ali, "Optimized Electric vehicle Charging and discharging with sporadic Renewable energy source," 2023 International Conference on Power, Instrumentation, Energy and Control (PIECON), Aligarh, India, 2023, pp. 1-6, doi: 10.1109/PIECON56912.2023.10085780.
- 4. S. Sharma, I. Ali and M. A. Aftab, "Demand Response Mechanism in User-Centric Markets Integrated with Electric Vehicles," 2022 IEEE Delhi Section Conference (DELCON), New Delhi, India, 2022, pp. 1-6, doi: 10.1109/DELCON54057.2022.9753579.
- 5. Ali, I., Sharma, S. (2022). Design and Implementation of Energy Efficiency Augmentation Using Renewable Energy Source for Small-Scaled Residential Micro-grid. In: Bansal, R.C., Agarwal, A., Jadoun, V.K. (eds) Advances in Energy Technology. Lecture Notes in Electrical Engineering, vol 766. Springer, Singapore. https://doi.org/10.1007/978-981-16-1476-7\_62
- 6. **Ikbal Ali**, Mini S. Thomas and Pawan Kumar, "Distributed Resource Planning for improved Stability of Radial Distributed System", ICETES-2013, Kothamangalam, Kerala, India.
- 7. **Ikbal Ali**, Mini S. Thomas and Nitin Gupta, "IEC 61850 Source Code Implementation for Accessing IED Data", ICETES-2013, Kothamangalam, Kerala, India
- 8. **Ikbal Ali,** Suhail Hussain and Asim Aftab, "Communication Modeling of Phasor Measurement Unit based on IEC 61850-90-5", IEEE INDICON 2015, 17-20 Dec. 2015.
- 9. **Ikbal Ali**, Mini S. Thomas, Sunil Gupta and Suhail Hussain, "Information Modeling for Distributed Energy Resource Integration in IEC 61850 based Substations", IEEE INDICON 2015, New Delhi, India.
- 10. **Ikbal Ali** and Kaynat Siddiqui, "Evaluation of Dynamic Performance of Phasor Measurement Unit using FIR Filter, IEEE INDICON 2015, 17-20 Dec. 2015, New Delhi, India.
- 11. **Ikbal Ali**, Mini S. Thomas and Pawan Kumar, "Synchronizing Solar Cell, Battery and Grid Supply for Development of Smart Power System for Home", IEEE INDICON 2015, 17-20 Dec. 2015, New Delhi, India.
- 12. **Ikbal Ali,** Suhail Hussain, Ashok Tak and Taha Ustun, "Design and Simulation of Communication Architecture for Differential Protection in IEC 61850 Based", IEEE INDICON 2015, 17-20 Dec. 2015, New Delhi, India.

#### **National Conference Proceedings:**

- 1. **Ikbal Ali**, Mini S. Thomas and Pawan Kumar, "Load Models Effect on Energy Efficiency in Smart Distribution Systems", Proc. of NEEC-2011 (Paper ID-195), Delhi Technological University, December 16-17, 2011.
- 2. **Ikbal Ali**, Mini S. Thomas and Sunil Gupta, "Features and Scope of IEC 61850", Proc. of NEEC-2011 (Paper ID-328), Delhi Technological University, December 16-17, 201.
- 3. Mini S. Thomas, **Ikbal Ali** and Nitin Gupta, "AMI Integration in Smart Grid for Empowering Customer Satisfaction", Proc. of NEEC-2011 (Paper ID-553), Delhi Technological University, December 16-17, 2011.
- **4. Iqbal Ali** and Mini S. Thomas, "*The Ethernet Communication Roadmap from Office to Substation Automation Systems*", Proc. National Conference on Emerging Trends in Signal Processing and Communication, ETSPC, Dec. 27-29, 2007, MAE, Alandi, Pune, India, p. 42-45.
- **5. Iqbal Ali**, Ibraheem and Shahida Khatoon, "A Reduced-order Observer and it's Convergence Analysis", National Conference on 'Recent Trends in Power Management' 16-17 August 2003. [Won the "Best Paper Award"]
- 6. **Ikbal Ali**, Mini S. Thomas and Pawan Kumar, "Computer Based Approach: New Algorithm for Energy Efficiency in Power Distribution Systems", Proc. National Conference on Emerging Trends in Intelligent Computing and Communications, April 13-14, **2012**.
- 7. Ikbal Ali, Mini S. Thomas and Pawan Kumar, "Computer Based Approach: New Algorithm for Energy Efficiency in Power Distribution Systems Proc. National Conference on Recent Trends in Electrical Engineering, 21-22 April 2012.

## **Book Chapters / Course Material:**

- Author of the **8 numbers of chapters/research articles** in the Proceedings of National Conference on Emerging Trends in Electrical and Electronics Engineering (ETEEE)-2014, **ISBN 987-93-84869-20-5**
- Author of the chapter on "*Electrical Substations*" for "Diploma in Electrical Engg" under Distance and Open Learning Program offered by JMI, New Delhi 2011-12.
- Author of the chapter on "Substations Earthing Systems and Auxilliaries" for "Diploma in Electrical Engg" under Distance and Open Learning Program offered by JMI, New Delhi 2011-12.
- Author of the course of "Computer Organization and Operating System" for "Advance Diploma in Computer Hardware & Network Technology" under Distance and Open Learning Program by JMI, New Delhi.
- Author of the course of "*Emerging Technologies*" for "Certificate in Computers and Information Technologies (CCIT)" under Distance and Open Learning Program by JMI, New Delhi.
- Author of the course of "Demand side Management: Energy Efficiency and Demand Response" Handbook of Research on Power and Energy System Optimization, IGI Global, USA
- Dr. Ikbal Ali, Professor in Electrical Engg., JMI, New Delhi. M# 9891478481, iali1@jmi.ac.in

 Author of the course of "Synchronized Operation of Grid Power, Solar Power and Battery for Smart Energy Management" Handbook of Research on Power and Energy System Optimization, IGI Global, USA.

### **Scholarships:**

- GATE Scholarship for M.Tech. from IIT-Roorkee.
- Minority Scholarship by UP State Government for B.Sc. Engineering from AMU.

### **Professional Membership:**

- Senior Member (41591539) IEEE, USA
- Member (GM57175) ISTE, India
- Life Member System Society of India
- Chair , GOLD Affinity Group of IEEE Delhi Section,2008
- Member, Executive Committee, IEEE Delhi Section, 2009
- Member, IEEE Power & Energy Society-2012

### **Edited Book**

 Handbook of Research on Power and Energy System Optimization Publisher: IGI Global, http://www.igi-global.com/publish/call-for-papers/call-details/2577

#### **Editors:**

Dr. Pawan Kumar, School of Electronics & Electrical Engg., Lovely Professional University, Phagwara, Punjab, India **Dr. Ikbal Ali,** Department of Electrical Engineering, Jamia Millia Islamia, New Delhi, India. Dr. Taha Selim Ustun, Department of Computer and Electrical Engineering, CMU, USA Surjit Singh, Dept of Computer Engg., NIT Kurukshetra, India

 Optimization Techniques in Engineering: Advances and Applications (Sustainable Computing and Optimization)

#### **Editors:**

**Dr. Anita Khosla**, Professor- EEE Dept, FET, Manav Rachna International Institute of Research & Studies at MRIIRS Faridabad, Haryana, India

Prasenjit Chatterjee,

Dr. Ikbal Ali, Department of Electrical Engineering, Jamia Millia Islamia, New Delhi, India

Dr. Dheeraj Joshi, Department of Electrical Engineering, DTU, New Delhi, India

■ Guest Editor, "Special Issue on Innovative Technologies for Micro-grid and Smart-grid Systems", ELSEVIER Journal of Electrical and Computer Engineering, ISSN: 0045-7906, I.F.=2.189, SCImagorank

**Consultancy:** 

S. No.	Title of Research Project	Funding Agency	Period	Grant/ Amount Mobilized (Rs. Lakhs)	Main /co-consultant
1.	POSOCO Load Dispatchers Training & Certification	POSOCO Ltd.	09-13 Aug. 2010	4.0	Co-consultant
2.	POSOCO Load Dispatchers Training & Certification	POSOCO Ltd.	12-16 April2011	4.0	Co-consultant
3.	POSOCO Load Dispatchers Training & Certification	POSOCO Ltd.	05-09 Sept. 2011	4.0	Co-consultant
4.	POSOCO Load Dispatchers Training & Certification	POSOCO Ltd.	26—30 Nov. 2012	4.0	Co-consultant
5.	POSOCO Load Dispatchers Training & Certification	POSOCO Ltd.	23—27 Feb. 2016	5.0	Co-consultant
6.	POSOCO Load Dispatchers Training & Certification	POSOCO Ltd.	29 Jan. – 2 <sup>nd</sup> Feb. 2018	5.7	Consultant

## **Patent:**

S. No.	Title	National / International	Date of Filing	Status:	Patent file No.
1.	A METHOD AND A SYSTEM FOR PROVIDING INTEROPERABILITY AMONG METERING INFRASTRUCTURES	National	2013	Published	2815/DEL/2013

Awards/ Fellowships:

	ar as/ r chowships			
S.	Title of the Fellowships/	Date of award	Awarding Agency	International/
No.	Awards		0 0 .	National
1.	Best Paper Award	16-17 Aug 2003	Dept of Electrical Engg, JMI	National
2.	Senior Member IEEE	11 Sep. 2011	IEEE USA	International
3.	DST Travel Fellowship	16-19 Jan 2011	DST GoI & JMI	International
4.	ICTP Fellowship	18 July-12 Aug- 2005 at University of Indonesia, Jakarta	ICTP Italy	International
5.	Organizing Secretary, IEEE INDICON-2015	17-20 Dec. 2015	IEEE Delhi Section & Department of Electrical Engineering, JMI	National
6.	Best Paper Award	2015	IEEE & Dept of Electrical Engg, JMI	International
7.	Mentor, IEEE Standards Education Grant	3 Feb 2015	IEEE-USA	International
8.	Certificate of Outstanding Contribution in Reviewing	April 2018	ELSEVIER International Journal of Electrical Power and Energy Systems	International
9.	<b>Excellent Teacher Award</b>	15 August 2018	Al-Falah Humanity Council, New Delhi	National
10.	POSOCO Training Coordinator	Feb. 2018	Prof. Talat Ahmad, VC JMI New Delh	National
11.	Award & Certificate of Reviewing	May 2019	ELSEVIER International Journal of Internet of Things	International
12.	Award & Certificate of Exceptional Contribution	24 June 2019	Elsevier Computers and Electrical Engineering	International

Contribution to Corporate Life and Management of the department and institution through participation in academic and administrative committees and responsibilities:

	Vice-chancellor Nominated Member, BoS, Dept. of Civil Engg. F/o Engg. & Technology, JMI.		
1.	Faculty Coordinator, Vigilance Awareness Week(VAW)-2021 (27 Oct.2021).		
2.	Member, Auction Committee, 27-08-2021.		
3	<b>Co-coordinator</b> , AICTE STTP on "Role of Energy Management Systems in Smart grid", 7-12		
	June 2021.		
4	<b>Polling Officer,</b> SRK Association Election, 29-07-2021.		
5	Member, Faculty of Engg. & Technology Consultancy Committee, June 16, 2021.		
6	Member, Dean's Committee to Assess the cause of decline in NIRF Ranking, F/o Engg &		
	Technology, JMI. September 2021.		

	<b>Nesume</b> (Updated Jan. 2025)
7	Member, University Committee for AMC/CMC and maintenance of equipment. 2018-2020.
8	Member, Screening Committee, Assistant Professor (Contractual), Electrical Engg.,
	17/07/2019
9	Member, Moderation Committee
10	Permanent Member, Board of Studies:
	Electrical Engineering Department, Faculty of Engineering & Technology.
11	Member, Faculty Committee-2017-18, Re-inducted for 1-02-2019 to 09-02-2022.
	Faculty of Engineering & Technology, JMI, New Delhi
12	<b>Deputy Coordinator</b> , Load Dispatchers 5 days Training & Certification Program: part of MoU
	signed between POSOCO (Power Grid) and JMI. since 2010
12	[08 successful training programs completed] Last held during 29Jan-02Feb2018
13	Member, Departmental Research Committee for 2017-18 to 2019-2020
14	Lab. Development:
	Implemented UGC SAP Project on Substation Automation in the department
	Helped developing Substation Automation Lab. in the department, which has now become the
	backbone of M.Tech. course running in the department and the research and training activities.
15	Course Curriculum Development:
	Developed syllabus for
	(1) Restructuring & Deregulation of Power System for M.Tech.
	(2) Digital Protection of Power System for M.Tech.
	(3) Communication Protocols for M.Tech course.
	(4) Smart Grid Technologies, for B.Tech.(Electrical) & M.Tech course
	(4) Designed and developed experiments on SCADA/EMS and Substation Automation System for B. Tech. and M. Tech. course.
16	Teacher-In-Charge for Computer Networking and website update of the Deptt., Developed
10	Vision & Mission Statements for the Department, Organized Educational Tours and Industrial
	Visits.
17	Superintendent: Jamia B. Tech. Entrance Tests, Academic Years 2014-2015
18	Teacher Coordinator, Student's Council of F/o Engg. & Technology, JMI, 2017
10	
19	Organizing Secretary, INDICON-2015
	[Successfully dispensed the responsibility of overall Management, Revenue Generation,
	Reviewing papers, Events Planning & Organization, Publishing etc. where about 1000
	research papers were presented]
20	Coordinator, SCADA & Smart Grid Research Lab., Nov. 2016 Onward
21	Coordinator, Load Dispatchers 5 days Training & Certification Program: part of MoU signed
	between POSOCO (Power Grid) and JMI. since Nov. 2016
	[Training conducted during $29^{th}$ Jan – $02^{nd}$ Feb 2018]
22	Coordinator, DST FIST Programme, 5 year project, 2015-2021, Awarded Grant of Rs. 2.03 Cr.
	For Research and Development in the area of Real-time Digital Simulation of Smart Grid
	Technologies.
23	Coordinator, B.E.(Electrical)-2017

# 1. Research Papers in International Conferences:

S.	Title of publication	Journal/ Conference	ISSN/
No.		Proceeding	ISBN No
1.	Communication based predictive dynamic stability scheme in microgrid with high penetration of Distributed Energy Resources, <b>DOI:</b> 10.1109/PEDES49360.2020.9379521	PEDES-2020 MNIT- Jaipur	ISBN:978-1-7281- 5672-9

2.	Real Time Microgrid State Estimation using Phasor Measurement Unit	ICPECA, New Delhi, India, 2019, pp. 1-6.	DOI:10.1109/ICPEC A47973.2019.8975 460
3.	Design and Implementation of energy efficiency augmentation using renewable energy source for small scaled Residential Microgrid.	EMSME – 2020, NIT Delhi	Presentation Certificate
4.	Real-Time Microgrid Synchronization using Phasor Measurement Units DOI: 10.1109/ICISGT44072.2019.00019	<b>IEEE</b> ICISGT. 29-30 June 2019.	Presentation Certificate
5.	Performance Evaluation of an IEC 61850 based Active Distribution System Substation	IEEE ICISGT 29-30 June 2019.	Presentation Certificate
6.	IEC 61850 Communication Assisted Synchronization Strategy for Microgrids	ICIIS-2018 1-2 Dec. 2018, IIT Ropar	978-1-5386-8492-4
7.	Performance evaluation of electric vehicle ad-hoc network technologies for charging management	IEEE PES APPEEC- 2017, <b>08 March 2018</b>	978-1-5386-1379-5
8.	Biogeography based Optimization for Energy Management in Microgrid	IEEE NanoFim-2017 16-17 Nov 2017	Presentation Certificate
9.	Performance evaluation of electric vehicle ad-hoc network technologies for charging management	IEEE APPEEC 2017	978-1-5386-1379-5
10.	Using IEC 61850 and IEEE WAVE Standards in AdHoc Networks for Electric Vehicle Charging Management	OnlineGreenComm 2016, IEEE	978-1-5090-2753-8

# 1. Research Papers in International Conferences:

S. No.	Title with page Nos	Journal/ Conference Proceeding	ISSN/ ISBN No
1.	Design and Cost Analysis of Grid Connected Hybrid Microgrid System Pratiksha Gupta (GBU);M A Ansari (GBU); Ikbal Ali (JMI)	UPCON2021 at Tula's Institute, Dhoolkot, Dehradun, Uttarakhand.	Nov. 11-13, 2021,
2.	Methodology & Tools for Performance Evaluation of IEC 61850 GOOSE Based Protection Schemes	Fifth POWER INDIA International Conference, Murthal, Haryana, India, 19- 22 December 2012	978-1-4673- 0766-6
3.	Effect of Loading Pattern on the Performance of Reconfigured Medium Size Distribution System	IEEE Fifth POWER INDIA International Conference, Murthal, Haryana, India, 19- 22 December 2012	978-1-4673- 0766-6
4.	Integration and Security Analysis of Metering Infrastructure	IEEE Fifth POWER INDIA International Conference, Murthal, Haryana, India, 19- 22 December 2012	978-1-4673- 0766-6
5.	Sampled Values Packet Loss Impact on IEC 61850 Distance Relay Performance	IEEE PES ISGT, 1-6, Nov. 2013, Bangalore, India.	ISSN: 2378-8534
6.	Integration of PSCAD based Power System & IEC 61850 IEDs to test fully Digital Protection Schemes	IEEE PES ISGT, 1-6, Nov. 2013, Bangalore, India.	ISSN: 2378-8534
7.	Distributed Resource Planning for improved Stability of Radial Distributed System	ICETES-2013, Kothamangalam, Kerala, India.	Certificate & Digital Proceedings
8.	IEC 61850 Source Code Implementation for Accessing IED Data	ICETES-2013, Kothamangalam, Kerala, India	Certificate & Digital Proceedings
9.	A Secure Way of Exchanging the Secret Keys in Advanced Metering Infrastructure	POWERCON-2012, 30Oct-2Nov2012, Auckland, New Zealand.	978-1-4673- 2868-5

# 1. Research Papers in International Conferences::

S.	Title with page Nos	Details of Conference	ISSN/
No.	Title with page Nos	Publication	ISBN No
	A Reduced-order Observer and it's Convergence Analysis <b>Best Paper Award</b> (Certificate Attached)	Conference Proceeding , ANAMAYA Publishers	81-88342-24-6
10.	Development of a Data Warehouse for Non- operational Data in Power Utilities	IEEE PIC-2006, New Delhi.	0-7803-9525-5
11.	Ethernet Enabled Fast and Reliable Monitoring Protection and Control of Electric Power Substation	IEEE PEDES-2006, New Delhi.	0-7803-9771-1
12.	Substation Communication Networks Architecture	IEEE POWERCON-2008, New Delhi.	978-1-4244- 1763-6
13	The Ethernet Communication Roadmap from Office to Substation Automation Systems	Proc. National Conference, ETSPC, Dec. 27-29, <b>2007</b> , MAE, Alandi, Pune, India, p. 42-45	
14	Ad Hoc Based Secure Architecture for Survivable and Reliable Substation Automation System	IEEE POWERCON-2008, New Delhi	978-1-4244- 1763-6
15	GOOSE based Implementation & Testing in Laboratory	IEEE PES ISGT, 16-19 Jan 2011, Anaheim, CA, USA	978-1-61284- 220-2
16	Load Model Effects on Energy Efficiency in Smart Distribution Systems	National Conference-Power and Energy Systems for Tomorrow, 16-17 Dec. <b>2011,</b> DTU, Delhi	Proceedings of the Conference, Paper ID-195
17	Features and Scope of IEC61850	National Conference-Power and Energy Systems for Tomorrow, , 16-17 Dec. <b>2011,</b> DTU, Delhi	Proceedings of the Conference, Paper ID-328
18	AMI Integration in Smart Grid for Empowering Customer Satisfaction	National Conference-Power and Energy Systems for Tomorrow, 16-17 Dec. <b>2011</b> ,DTU, Delhi	Proceedings of the Conference, Paper ID-553
19	Computer Based Approach: New Algorithm for Energy Efficiency in Power Distribution Systems	National Conference on Emerging Trends in Intelligent Computing and Communications, April 13-14, 2012	Proceedings of the Conference, Paper ID-EICC- P342
20	Enhancement of Energy Efficiency in SDS by DSM and MDC	National Conference on Recent Trends in Electrical Engineering, 21-22 April <b>2012</b>	Proceedings of the Conference, Paper ID-EICC- P342
21.	A Substation Automation Laboratory to facilitate the Next Generation Research	IEEE International Conference on Power System Protection and Automation, 2010	

# 2. Chapters published in Books / Edited Books

S. No.	Title with page Nos. and date of publication	Book/ Title editor & publisher	ISSN/ ISBN No
1.	Recent advancements in substation automation systems based on information and communication technologies  15 Feb 2017  Authors: S. Gupta, Ikbal Ali, M.S. Thomas & S.M. Suhail Hussain	CRC Press Communication and Computing Systems, Edition:1,  Editors: B.M.K. Prasad, Krishna Kant Singh, Neelam Ruhil, Karan Singh, Richard O'Kennedy, pp.1019–1024	Print ISBN: 978-1-138- 02952-1 eBook ISBN: 978-1-315- 31944-5
2.	ICT Technologies, standards and protocols for Active Distribution Network Automation and Management <b>Authors:</b> Mohd Asim Aftab, S. M. Suhail Hussain and Ikbal Ali	IntechOpen Advanced Communication and Control Methods for Future Smartgrids	978-1-78984- 106-0

# 3. Chapters published in Books / Edited Books

S. No.	Title with page Nos	Title editor & publisher	ISSN/ ISBN No Publisher
1	Evaluation of Energy Efficiency of Reconfigured Radial Distribution System	Emerging Trends in Electrical and Electronics Engineering (ETEEE)-2014.	ISBN : 987-93-84869-20-5
	Page(s):182-189, Vol. I	Publisher: Excel Publishers	367-33-04603-20-3
2.	IEC 61850 Information Models for Autonomous Management of Power Converter based DER systems. Page(s):117-124, Vol. I	do	ISBN: 987-93-84869-20-5
3.	Implementation of Switched Ethernet based Substation Communication Network Page(s):443449, Vol. I	do	ISBN : 987-93-84869-20-5
4.	A Review of Optimal Phasor Measurement Unit placement techniques and their implications	do	ISBN 987-93-84869-20-5
5.	Optimal PMU Placement Using Linearized Programming. Page(s):294-299, Vol. II	do	ISBN 987-93-84869-20-5
6.	PMU Simulation in MATLAB/Simulink and Evaluation of PMU Performance During Transients Page(s):379-384, Vol. II	do	ISBN 987-93-84869-20-5
7.	Performance Evaluation of IEC 61850-9-2 Process Bus based Numerical Protection Application Using OPNET. Page(s):385-394, Vol. II	do	ISBN 987-93-84869-20-5

# 2. Chapters published in Books / Edited Books

S. No.	Title with page Nos	Book Title Editor & Publisher	ISSN / ISBN No. Publisher
1.	One Chapter on Electrical Substations	Diploma in Electrical Engineering	CDOL, JMI December, 2011
2	One Chapter on Substations Earthing Systems and Auxiliaries	Diploma in Electrical Engineering	CDOL, JMI December, 2011
3.	<b>5 Chapters</b> of the course on Computer Organization and Operating System	Advance Diploma in Computer Hardware & Network Technology	CDOL, JMI <b>April, 2011</b>
4.	3 Chapters of the course on Emerging Technologies	Diploma in Computers and Information Technologies (CCIT)	CDOL, JMI <b>April, 2011</b>
5.	5 Chapters on Power System-I	Diploma in Electrical Engineering	CDOL, JMI <b>2010-11</b>

# 2. Editor of Book

S. No.	Title with page No and date of publication	Name of Publisher	Whether National/ International Publisher	ISSN/ ISBN No
1.	Handbook of Research on Power and Energy System Optimization  http://www.igi-global.com/publish/call-for-papers/call-details/2577	IGI Global Editors:  Dr. Pawan Kumar Thapar Institute, Patiala Punjab, India Dr. Ikbal Ali, Dept. of Electrical Engineering, JMI, New Delhi, India. Dr. Taha Selim Ustun, Department of Computer and Electrical Engineering, CMU, USA Surjit Singh, Dept of Computer Engg., NIT Kurukshetra, India	International	ISBN 13: 97815225 39353 SCOPUS Index
2.	Special Issue on Innovative Technologies for Micro-grid and Smart-grid Systems	ELSEVIER Journal of Electrical and Computer Engineering	International I.F.=2.189 SCImagoran k	ISSN: 0045-7906

## 3. Invited Lectures/ Resource Person:

S. No.	Title of Lecture / Academic Session	Programme	Agency
1.	Expert Lecture on SCADA Basics 29 Jan- 02 Feb. 2018	Load Dispatchers Training & Certification Program for POSOCO Engineers	PGCIL & JMI

2.	Expert Lecture on RTU and Master Station Basics 29 Jan- 02 Feb. 2018	Load Dispatchers Training & Certification Program for POSOCO Engineers	PGCIL & JMI
3.	Expert Lecture on Substation Automations with IEC61850 & Smart Grid 29 Jan- 02 Feb. 2018	Load Dispatchers Training & Certification Program for POSOCO Engineers	PGCIL & JMI
4.	Expert Lecture on T-101 protocol 29 Jan- 02 Feb. 2018	Load Dispatchers Training & Certification Program for POSOCO Engineers	PGCIL & JMI
5.	Hands-on-Training session on Building SCADA Project_I 29 Jan- 02 Feb. 2018	Load Dispatchers Training & Certification Program for POSOCO Engineers	PGCIL & JMI
6.	Hands-on-Training session on Building SCADA Project_II 29 Jan- 02 Feb. 2018	Load Dispatchers Training & Certification Program for POSOCO Engineers	PGCIL & JMI

S. No.	Title of Lecture/ Academic Session	Title of Conference / Seminar	Agency
	Expert Lecture	EMSME-2020, 30 <sup>th</sup> Oct-1 <sup>st</sup> Nov.2020	NIT, Delhi
	Session Chair	ICRTE-2021	Faculty of Engg. & Technology, MRIIRS, Faridabad. 15-16 Apr 2021
1	Session Chair	National Conference ETEEE- 2015	D/o Electrical Engg., F/o Engg. & Technology, JMI, New Delhi, 2-3 Feb. 2015
2	Session Chair &	International Conference on ICETES-2013	Mar Athanesius College of Engg. & Tech., Kerala, 12-13 Dec. 2013
3.	12 Expert Lectures Digital Protection of Power System	Digital Protection of Power System	Al-Falah School of Engg. & Technology, Faridabad, Haryana, <b>2011</b>
4.	4 Expert Lectures on Data Acquisition: SCADA 3 Training Programmes	Load Dispatchers Training & Certification Program for POSOCO (PGCIL) Engineers	PGCIL & JMI 09-13 Aug. 2010 12-16 April 2011 05-09 September 2011
5.	3 Hands-on-Training Sessions on SCADA Laboratory during 5 days of each of the three trainings	Load Dispatchers Training & Certification Program for POSOCO (PGCIL) Engineers	PGCIL & JMI 09-13 Aug. 2010 12-16 April 2011 05-09 September 2011
	Smart Grid and Energy Efficiency	Invited Technical Talk	Galgotias College of Engineering & Technology, Greater NOIDA

6.	Resource Person for Moderating the Question Bank of ADPDM (Advance Certificate in Power Distribution and Management) Programme for On- demand Examination, 15-16 April 2010	ADPDM (Advance Certificate in Power Distribution and Management)	NCIDE of IGNOU, <b>2010</b>
7.	[2 Days]  Invited Lectures at CEC UGC	Academic Previews of the Educational TV Programmes and e- contents in the subject area of Engineering	CEC UGC IUAC Campus, Aruna Asaf Ali Marg New Delhi, 2010-2012
8.	Subject Expert for workshop on Moderating the Question Bank of ADPDM(Advance Certificate in Power Distribution and Management) Programme, 22-24 April 2009	of ADPDM Programme for On-demand Examination	NCIDE of IGNOU, 2009
9.	Special Invitee	UGC National Workshop on Understanding Educational Programmes: Problems & Prospects (December 17, 2009)	Consortium for Educational Communication, IUAC Campus, Aruna Asaf Ali Marg, New Delhi, <b>2009</b>
10.	Communication Requirements in Substation Automation	IEEE PES Invited Technical Talk, IEEE Delhi Section	Department of Electrical Engineering, DTU, Delhi
11.	Substation Automation and Smart Grid for Energy Efficiency	Invited Technical Talk	Maharaja Surajmal Institute of Technology, Janakpuri, Delhi
12.	Electrical Engineering & Power System Operation	<b>6 Invited Lectures</b> during Post Graduate Diploma Certificate in Transmission	Central Board of Irrigation & Power (CBIP), Chanakyapuri, New Delhi
13.	Substation Automation Trends and Future Challenges (3 lectures)	Advances in Substation Design, 30July-03Aug 2012 at the Hilton Hotel, Sandton-Johannesburg, South Africa	ABC All Sectors Business Communication www.allsectors.co.za
14	Industrial Automation	Two days (Feb. 15-16, 2014) Workshop	Dept of Electrical Engineering, Z.H. College of Engg. & Tech., AMU Aligarh
15	National Seminar	Recent Technological Developments in the Field of Electrical Engg	JSS Academy of Technical Education NOIDA, MTU Noida & Schneider Electrical Infrastructure Ltd. Noida

16	Substation Automation Trends and Future Challenges.	Advances in Substation Design", <b>7-8 April 2014</b> , at The Micheal Angelo Hotel, Sandton, SOUTH AFRICA	ABC All Sectors Business Communication www.allsectors.co.za
17	Energy Efficient Operation of Distribution Systems	Advances in Substation Design", 7-8 April 2014, at The Micheal Angelo Hotel, Sandton, SOUTH AFRICA	ABC All Sectors Business Communication www.allsectors.co.za
18	Advance Metering Infrastructure (AMI) with Demand Response	Advances in Substation Design", <b>7-8 April 2014</b> , at The Micheal Angelo Hotel, Sandton, SOUTH AFRICA	ABC All Sectors Business Communication www.allsectors.co.za
19	Two Expert Lecture on Data Acquisition	Load Dispatchers Training & Certification Program for POSOCO (PGCIL) Engineers	PGCIL & JMI 26—30 Nov. 2012
20.	Hands-on-Training Sessions on SCADA Laboratory during 5 days of the trainings	Load Dispatchers Training & Certification Program for POSOCO (PGCIL) Engineers	PGCIL & JMI 26—30 Nov. 2012

## Papers presented in Conferences, Seminars, Workshops, Symposia

S. No.	Title of the Paper presented	Title of Conference / Seminar	Organized by	Level (International / National)
1.	Energy efficiency analysis of reconfigured distribution system for practical loads	ICEMS-2016	JNU, Jaipur March 15-17, 2016	International
2.	A Novel PRP based Deterministic, Redundant and Resilient IEC 61850 Substation Communication Architecture	ICEMS-2016	JNU, Jaipur March 15-17, 2016	International
3.	Green Energy Integration and its SMART Management	Research Showcase-2015	IIIT Delhi	National
4.	Ethernet Based Communication Network Architecture for Electric Power Substations	81 <sup>st</sup> Orientation Program, <b>2007</b>	ASC, JMI, New Delhi	National

#### 4. Student related Extensions and Co-curricular & field based activities:

- 1. Placement / Summer Internship Coordination: Voluntary help to the Sixth Semester students belonging to the Department of Electrical Engineering, Faculty of Engineering & Technology, to get Internship at POSOCO Ltd. during June-July 2018.
- 2. **Mentor** for B.Tech. (Electrical) & MTech. (EPSM) students.
- 3. Mentor for Summer/Winter Research Internship for External Students
  - (i) Mr. Md Faizan Nomani, BVCOE, New Delhi (2 months), 2017
  - (ii) Mr. Kartik Bhatia, BVCOE, New Delhi, (2 months), 2017
  - (iii) Mr. Ashoh Tak, IIT Roorkee, (1 Month), 2015
  - (iv) Mr. Sk. Abdul Aleem, JNTU Anantpur, AP, (06 Months), 2018-19
  - (v) Mr. Aditya Chaudhary, GBU, Greater NOIDA, (02 Months), 2019
  - (vi) Mr. Mohit Bhatnagar, NPTI Faridabad, (03 Months), 2015
  - (vii) Mr. Furgan Nadeem, JNTU Anantpur, AP, (02 Months), 2017
  - (viii) Mr. Shaik Nabirasool, JNTU Anantpur, AP, (02 Months), 2017

5. Pr	ofessional Development Activities:
	Certificate of Participation:  *MEITY, GoI sponsored One Week Webinar, "Cyber Security Techniques with Applications", by Dept. of Computer Science & Engg., IIT Dhanbad. 05-09 <sup>th</sup> October 2020.
1.	<ul> <li>Professional Societies Membership:</li> <li>Senior Member (41591539) IEEE, USA, [Sept. 2011 Onward]</li> <li>Member (GM57175) ISTE, India</li> <li>Life Member System Society of India</li> </ul>
2.	■ UGC NET Observer, 2015, 2016, 2017, 2018
3	■ External Examiner  ✓ Control Lab.(EE-495), 22-05-2019, Electrical Engg., AMU Aligarh.  ✓ IET Accreditation at Amity School of Engineering & Technology, NOIDA, 15-16 March 2018
4	■ Track Chair, IEEE NANOfIM-2017, 16-17 Nov. 2017
5	■ Invited Guest to attend Fourth Higher Education Growth and Research Summit, Organized by CEGR at Hotel Le Marridient, New Delhi, 18 <sup>th</sup> April 2018
6	■ Expert for Interview at NIT-Srinagar for JRF to SRF, 26-28 April 2018
7	• One Week Course under MHRD GIAN Scheme on "Role of Smart Building Energy Management Systems in the Development of Smart City" at Department of Electrical Engineering, JMI, New Delhi during, 6-10 March 2018
8	• Guest Editor for Special Issue on Innovative Technologies for Micro-grid and Smart-grid Systems, Elsevier's Journal of "Computer and Electrical Engineering" an SCI-indexed journal having IF of 1.57.
9	■ One Day Author Workshop on "How to Write and Publish Scholarly Articles" organized by Sringer NATURE, 24 <sup>TH</sup> August 2017