Dr Sri Niwas Singh, FIEEE (USA), FNAE, FIET (UK), FIE(I), FIETE(I), FAAIA, FAIIA

Director, Atal Bihari Vajpayee- Indian Institute of Information Technol Management, Gwalior-India (On leave from Professor (HAG), Department of Electrical Engineering, Indian Technology, Kanpur (UP) – 208016) Tel: +91-751-2449801, Email: snsingh@iitk.ac.in, director@iiitm.ac.in



Educational Qualifications

- Ph.D. Electrical (Power Systems), 1995, Indian Institute of Technology, Kanpur (India). *Topic: Voltage Security and Loss Minimization Studies in Electric Power Systems.*
- M. Tech. Electrical (Power Systems), 1989, Indian Institute of Technology, Kanpur (India). Cumulative *Performance* Index (CPI) 10.0/10.0. **Got First Rank in M. Tech. (Power Systems).** *Topic: Performance Study of GTO Inverter in HVDC Link*
- B. Tech. Electrical Engineering, 1987, Kamla Nehru Institute of Technology Sultanpur, India. Marks obtained 82.87 %. Got 2nd rank in the Class of 30.

| Position | Organization | Duration |
|----------------------|---------------------------------------|------------------------------|
| Director | Atal Bihari Vajpayee-Indian | April 08, 2022 to date |
| | Institute of Information Technology | (on leave from IIT Kanpur) |
| | & Management Gwalior, India | |
| Professor (Higher | Indian Institute of Technology, | Aug. 1, 2014 to date |
| Academic Grade) | Kanpur, India | |
| Vice-Chancellor | MMM University of Technology | April 28, 2017 to July 27, |
| | Gorakhpur | 2020 (with leave from IIT K) |
| Professor | IIT, Kanpur, India | Feb 8, 2008 – July 31-2014 |
| Visiting Professor | Denmark Technical University, | July 2, 2009 - June 30, 2010 |
| | Lyngby, Denmark | (on leave from IIT Kanpur) |
| Humboldt Research | University of Duisburg-Essen, | June,05-Dec,05 + Dec 06- |
| Fellow | Germany | June 07 (on leave from IITK) |
| Associate Professor | Indian Institute of Technology (IIT), | April 5, 2002 – Feb. 7, 2008 |
| | Kanpur | |
| Assistant Professor | AIT, Thailand | Jan. 2, 2001 - April 4, 2002 |
| Post-Doctoral Fellow | Asian Institute of Technology (AIT), | May 1997 – Aug. 1997 |
| | Thailand | (On leave from UoR) |
| Research Fellow | H.K. Polytechnic University, Hong | Dec 18, 1998- March 31, |
| | Kong | 2000 (On leave from UoR) |
| Assistant Professor | University of Roorkee (IITR), India | June 14,1996 - Jan. 1, 2001 |
| Assistant Engineer, | U.P. State Electricity Board, | July 1995 – June 13 1996 |
| Operation | Lucknow (UP), India | |
| Assistant Engineer, | U.P. State Electricity Board, | Aug. 8, 1988-July 1995 |
| Planning | Lucknow (UP), India | |

Professional Experiences (See Annexure - A)

Research Interests

- Power System Restructuring /Deregulation
- HVDC Transmission & FACTS Technology
- Wind and Solar Power
- Power System Dynamics, Operation and Control
- Distributed Generation and Smart Grid
- AI Application in Power Systems.

Professional Membership

- * *Fellow*, The Institution of Electrical and Electronics Engineers- (FIEEE)
- * *Fellow*, Indian National Academy of Engineering (FNAE)
- * *Fellow*, The Institution of Engineering and Technology, UK- (FIET)
- * *Fellow*, Asia-Pacific Artificial Intelligence Association (FAAIA)
- * *Fellow*, International Artificial Intelligence Industry Alliance (FAIIA)
- * *Fellow*, The Institution of Engineers (India)- (FIE)
- * *Fellow*, The Institution of Electronics and Telecommunication Engineers -(FIETE)
- * *Honorary Fellow*, Indian Society for Technical Education (ISTE)
- * Life Member of Indian Society of Continuing Education Engineering -(ISCEE)
- * Life Member of Central Board of Irrigation & Power- (LM-CBIP)
- * Fellow, Alexander von Humboldt (AvH), Germany

Patents:

- Catalyst for Oxygen Reduction Reaction for Fuel Cells and Method of Manufacturing Same (Indian Patent No. 472681)
- A Flexible Shape Memory Supercapacitor Device and Fabricating Process Thereof" (Indian Patent Application No. 202311072777)
- An Advanced Supercapacitor Electrode Material from Hair Biomass and a Sustainable Synthesis Method Thereof" (Indian Patent Application No. 202311072750)
- An Advanced Hybrid Composite Material for Enhanced Supercapacitor Electrodes (Indian Patent Application No. 202311077320)
- The Advancement of Technology in Harnessing the Potential Use of Waste Saptaparni Flowers for Supercapacitor Application (under submission)

Publications (See Annexure - B)

| Refereed Journals | : 245 | Conferences/ Seminars etc | : 280 |
|--------------------------|-------|---------------------------|-------|
| Discussions/Short papers | : 12 | Invited Papers/Lectures | : 12 |
| Technical Reports | : 26 | | |

Citation (October 30, 2023)

| Citation indices | All | Since 2019 |
|------------------|-------|------------|
| Citations | 14307 | 5723 |
| h-index | 61 | 37 |
| i10-index | 226 | 127 |

Thesis Supervisions

Ph. D.: 50 (42 completed, and 9 in progress)M. E./ M. Eng.: 42

Books, Book Chapters & Monograph

Text Books:

- 1. *Electric Power Generation, Transmission and Distribution*, Prentice Hall of India, (ISBN-978-81-203-3650-8), (First Edison: 2003, 2nd Edison: 2008).
- 2. Basic Electrical Engineering, PHI Learning Pvt Ltd, India, (ISBN-978-81-203-4188-3), 2011.

Edited Books:

- 1. *Advances in Energy and Power Systems*, Springer Notes in Electrical Engineering, Springer Nature Singapore Pte Ltd, 2018 (ISBN 978-981-13-0662-4)
- 2. Advances in System Optimization and Control, Springer Notes in Electrical Engineering, Springer Nature Singapore Pte Ltd, 2018 (ISBN 978-981-13-0665-5)
- 3. *ICRRM 2019-System reliability, Quality Control, Safety, Maintenance and Management,* Springer Nature Singapore Pte Ltd, 2020 (ISBN 978-981-13-8506-3)
- 4. *Advances in Power and Control Engineering*, Springer Notes in Electrical Engineering, Springer Nature Singapore Pte Ltd, 2019 (ISBN 978-981-15-0313-9)
- 5. *Microgrids for Rural Areas: Research and case studies*, 2020, IET Energy Engineering 160, UK (ISBN 978-1-78561-998-4 (Hardback), ISBN 978-1-78561-999-1 (PDF))
- 6. *Fundamentals and Innovations in Solar Energy*, Springer Nature Singapore Pte Ltd 2021 (ISBN 978-981-336-455-4 (Hardback)), DOI: 10.1007/978-981-33-6456-1.
- 7. *Renewable Energy Towards Smart Grid*, 2022, Springer Nature Singapore Pte Ltd, ISBN 978-981-16-7472-3 (eBook), 978-981-16-7471-6 (hardcover),
- 8. Planning of Hybrid Renewable Energy Systems, Electric Vehicles and Microgrid: Modeling, Control and Optimization, 2022, Springer Verlag Singapore Pte Ltd, ISBN 978-981-19-0978-8.
- 9. *Recent Advances in Power System*, Springer Nature Singapore Pte Ltd 2021, ISBN: 978-981-16-6969-9.
- Proceedings of the NIELIT's International Conference on Communication, Electronics and Digital Technology.(NICE-DT) 2023, Springer Singapore Lecture Notes in Networks and Systems (LNNS, volume 676), ISBN: 978-981-99-1698-6, eBook ISBN978-981-99-1699-3
- 11. Optimal Planning and Operation of Distributed Energy Resources (Energy Systems in Electrical Engineering), Springer UK Pte Ltd 2023, ISBN: 978-981-99-2799-9, (https://doi.org/10.1007/978-981-99-2800-2)
- 12. Decarbonization and Digitization of the Energy System, 2024, Springer Nature Singapore Pte Ltd, ISBN 978-981-99-7629-4

13. Emerging Technologies in Electrical Engineering for Reliable Green Intelligence-Proceedings of ICSTACE 2023), Springer Nature Singapore Pte Ltd 2024.

Book Chapters:

- B. Singh, S.N. Singh and E. Kyriakides, Intelligent Control of Power Electronic Systems for Wind Turbine, in Wind Power Systems: Applications of Computational Intelligence (Eds: L. Wang, C. Singh, and A. Kusiak), Springer Book Series on Green Energy and Technology, Springer-Verlag, 2010, pp. 255-295.
- Bharat Singh, S. N. Singh and Lingfeng Wang. Electric Grid Connections and System Operational Aspects of Wind Power Generation'' in a book entitled "Wind Energy Conversion System: Technology and Trend, Berlin: Springer-Verlag, 1-28, Ed. S. M. Muyeen, January 2012, ISBN 978-1-4471-2200-5.
- 3. R. K. Chauhan, Bharat Singh, S. N. Singh and F. M. Gonzalez-Longatt, *DC Grid Interconnection for Conversion Losses and Cost Optimization* in the book entitled, **Renewable Energy Integration: Challenges and Solutions,** Springer-Verlag (2014), pp. 327-346
- Trapti Jain, Sri Niwas Singh and SC Srivastava, STATCOM Application for Enhancement of Available Power Transfer Capability in Transmission Networks in a book titled "Static Compensators (STATCOM) in Power Systems" Springer Science + Business Media Singapore Pte Ltd (2015). Editors: Farhad Shahnia, Sumedha Rajakaruna and Arindam Ghosh, pp. 505-530.
- 5. P Pavani and SN Singh, *Reliability Evaluation of Distribution System with Network Reconfiguration and Distributed Generations*, in the book entitled, **Reliable and Sustainable Electric Power and Energy Systems Management**, Springer-Verlag (2017). Editors: Ajit Kumar Verma, Rajesh Karki, Jaeseok Choi,
- 6. P Pavani and SN Singh, *Economic Aspect of DG*, in the book entitled Handbook of Distributed Generation, Springer Verlag (2016). Editors: RC Bansal, pp. 731-748.
- 7. Mahesh Kumar, SC Srivastava and SN Singh, Modelling, Design, and Control of Smart DC Microgrid for Integration of Various Non-conventional Distributed Generators, in the book entitled **Handbook of Distributed Generation**, Springer Verlag (2016). Editors: RC Bansal pp. 409-458.
- 8. Sanjeev Kumar Mallik, Saikat Chakrabarti and **SN Singh**, *State estimation in the presence of synchronized measurement*, in the book entitled **Synchronized Phasor Measurements for Smart Grids**, IET POWER AND ENERGY SERIES 97. Editors: M. Jaya Bharata Reddy and Dusmanta Kumar Mohanta.
- 9. Naran Pindoriya, Markus Duchon, Pragya Kirti Gupta, Venkatesh Pampana, S N Singh, Jakob Giza, Bastian Hackenberg, Arvind Kumar Rajput, and Janki Jethi, *Intelligent Hardware-Software Platform for Efficient Coupling of Water-Energy Nexus in Smart Cities: A Conceptual Framework* in the book entitled Mobility Internet of Things 2018, Springer Nature Switzerland, 2020 Editors: Cagáňová, Dagmar, Horňáková, Natália, ISBN 978-3-030-30911-4, pp.217-231
- 10. Aasim, SN Singh, Abheejeet Mohapatra, Active Power Regulation by MPC based Flywheel Energy storage system, in the book entitled Advances in Energy and Power Systems,

Springer Notes in Electrical Engineering, Springer Nature Singapore Pte Ltd, 2018 (ISBN 978-981-13-0662-4), pp. 57-72.

- Pengcheng Cui, Bing Xu, Fushuan Wen, Zihao Fu, Bingquan Zhu, Qiulong Ni and S. N. Singh, *Post-evaluation Index System and Comprehensive Evaluation Method for Daily Power System Dispatching* in the book entitled Advances in Energy and Power Systems, Springer Notes in Electrical Engineering, Springer Nature Singapore Pte Ltd, 2018 (ISBN 978-981-13-0662-4), pp.73-86.
- R. K. Chauhan, F. M. Gonzalez-Longatt, Bharat Singh and SN Singh, *DC microgrid in residential buildings*, in the book entitled **DC Distribution Systems and Microgrids**, The Institution of Engineering & Technology (IET). Editors: Tomislav Dragicevic, Pat Wheeler and Fred Baabjerg, October 2018.
- 13. Shiv Kumar Singh, Harsh Vikram Singh, Saikat Chakrabarti and SN Singh, Analysis of energy consumption and implementation of R-statistical programming for load forecasting in presence of solar generation, in the book entitled Intelligent Computing Techniques for Smart Energy Systems, Springer Notes in Electrical Engineering Springer Nature Singapore Pte Ltd, 2020, Editors: Akhtar Kalam, Khaleequr Rehman Niazi, Amit Soni, Shahbaz Ahmed Siddiqui, Ankit Mundra (978-981-15-0213-2), pp.227-238.
- Francisco Gonzalez-Longatt, Francisco Sanche, SN Singh, On the topology for a smart direct current microgrid for a cluster of zero-net energy buildings in the book entitles, Distributed Energy Resources in Microgrids: Integration, Challenges and Optimization, Elsevier Academic Press; Editors: RK Chauhan and Kalpana Chauhan; ISBN: 978-0-12-817774-7 (2019), pp. 455-481.
- Rajeev Kumar Chauhan, Kalpana Chauhan, Sri Niwas Singh, Overview of microgrids for rural areas and low-voltage applications in the book entitled Microgrids for Rural Areas: Research and Case Studies, 2020, IET Energy Engineering 160, UK. ISBN 978-1-78561-998-4 (Hardback), ISBN 978-1-78561-999-1 (PDF)
- Rajeev Kumar Chauhan, Kalpana Chauhan, Sri Niwas Singh, Conclusions and Future Scope in the book entitled Microgrids for Rural Areas: Research and Case Studies, 2020, IET Energy Engineering 160, UK. ISBN 978-1-78561-998-4 (Hardback), ISBN 978-1-78561-999-1 (PDF)
- 17. Mahesh Kumar and **SN Singh**, *Control Technique for Integration of Smart DC Microgrid to the Utility Grid*, in the book entitled **Microgrids for Rural Areas: Research and Case Studies**, 2020, IET Energy Engineering 160, UK. Editor, Kalpana Chauhan, Rajeev Chauhan and SN Singh, ISBN 978-1-78561-998-4 (Hardback), ISBN 978-1-78561-999-1 (PDF)
- 18. SN Singh, Power Systems and Power Plant Control (Section 4:Control of FACTS Devices), in the Book entitled Applications of Modern Heuristic Optimization Methods in Power and Energy Systems, John Wiley & Sons (IEEE Press Series on Power Engineering) 2020, Editor: Kwang Y Lee and Zita Vale.
- Chandra Sekar, Asheesh K Singh, Sri Niwas Singh, Vassilios G Agelidis, Front-End Power Converter Topologies for Plug-in Electric Vehicles, in the Book entitled Emerging Power Converters for Renewable Energy and Electric Vehicles Modeling, Design, and Control, CRS press 2021, Editors: Md Rabiul Islam, Md Rakibuzzaman Shah, Mohd. Hasan Ali. ISBN 9780367528034.

- 20. SN Singh, Prabhakar Tiwari and Sumut Tiwari, *Introduction to Solar Energy*, in the Book entitled **Fundamentals and Innovations in Solar Energy**, Springer Nature Singapore Pte Ltd 2021; Editors: SN Singh, Prabhakar Tiwari and Sumit Tiwari. ISBN: 978-981-336-455-4, pp.1-9.
- Umesh Agarwal, Naveen Jain, SN Singh, Manoj Kumawat, Solar PV Generation, in the Book entitled Fundamentals and Innovations in Solar Energy, Springer Nature Singapore Pte Ltd 2021; Editors: SN Singh, Prabhakar Tiwari and Sumit Tiwari. ISBN: 978-981-336-455-4, pp.11-33.
- 22. SK Jain and SN Singh, *Smart Energy System*, in the Book entitled **Fundamentals and Innovations in Solar Energy**, Springer Nature Singapore Pte Ltd 2021; Editors: SN Singh, Prabhakar Tiwari and Sumit Tiwari. ISBN: 978-981-336-455-4, pp. 93-116.
- Naran M. Pindoriya, SN Singh, Solar Energy Forecasting, in the Book entitled Fundamentals and Innovations in Solar Energy, Springer Nature Singapore Pte Ltd 2021; Editors: SN Singh, Prabhakar Tiwari and Sumit Tiwari. ISBN: 978-981-336-455-4, pp.127-140.
- 24. Vipin Das P, Navneet K Singh, Rakesh Maurya, Asheesh K Singh, and Sri Niwas Singh (2021), Advances in Hybrid Solar System, in the book titled "Fundamentals and Innovations in Solar Energy," Springer Nature Singapore Pte Ltd 2021; Editors: SN Singh, Prabhakar Tiwari and Sumit Tiwari., ISBN: 978-981-336-455-4, pp.231-283.
- 25. Saurabh Gosh, Rakesh Maurya, Sri Niwas Singh, Vassilios G Agelidis and Asheesh K Singh (2021), *Charging Stations and Standards*, in the book titled "Cable Based and Wireless Charging Systems for Electric Vehicles: Technology, Control, Management & Grid Integration", IET (UK).
- 26. A Pratap, Prabhakar Tiwari, B Singh, Sumit Tiwari and SN Singh (2021), Energy storage systems: A comprehensive review, in book titles "Energy Conversion Systems: An Overview"; Nova Science Publishers, Editors: Saurabh Mani Tripathi and Sanjeevikumar Padmanaban, ISBN: 978-1-53619-131-8, pp. 275-301.
- Ramendra Kumar Rai, Aashish Kumar Bohre, Pradyumn Chaturvedi, M.L. Kolhe, S.N. Singh, *Planning and Impact of Electric Vehicle Charging Stations in Distribution System using Optimization Technique*, in book titles **Planning of Hybrid Renewable Energy Systems**, **Electric Vehicles and Microgrid: Modeling, Control and Optimization**, Springer Nature Singapore Pte Ltd 2022, ISBN: 978-981-19-0978-8, pp. 177-191.
- Arnab Ari, Aashish Kumar Bohre, Pradyumn Chaturvedi, M.L. Kolhe, S.N. Singh, *Technosocio-economic analysis of hybrid renewable energy systems: A Review with case study*, in book titles Planning of Hybrid Renewable Energy Systems, Electric Vehicles and Microgrid: Modeling, Control and Optimization, Springer Nature Singapore Pte Ltd 2022, ISBN: 978-981-19-0978-8, pp. 227-264.
- Aashish Kumar Bohre, Pradyumn Chaturvedi, M.L. Kolhe, S.N. Singh, *Introduction*, in book title Planning of Hybrid Renewable Energy Systems, Electric Vehicles and Microgrid: Modeling, Control and Optimization, Springer Nature Singapore Pte Ltd 2022, ISBN: 978-981-19-0978-8, pp. 1-7.
- 30. Tapan Prakash, Praveen Prakash Singh, Vinay Pratap Singh³ and Sri Niwas Singh[,] A Novel Brown-bear Optimization Algorithm for Solving Economic Dispatch Problem, , in book titles

Advanced Control & Optimization Paradigms for Energy System Operation and Management - River Publishers, Denmark, 2023, E-ISBN 978-100-33-3700-3, pp 28.

- 31. Umesh Agarwal, Naveen Jain, Manoj Kumawat, Sri Niwas Singh, An Assessment Procedure for Distribution Network Reliability Considering Load Growth, in book entitled Recent Advances in Power Systems, Springer Nature Singapore Pte Ltd 2022, e-ISBN: 978-981-16-6970-5 pp 51-63.
- 32. Ajay Pratap Singh, Sumit Tiwari, Harender Sinhmar, Prabhakar Tiwari and S.N. Singh, *Performance Analysis of Solar Energy Conversion Technology*, in book entitled "**Energy Conversion: Methods, Technology and Future Directions**", Nova Science Publisher, USA, 2023, ISBN: 979-8-88697-424-9 (e-book), pp. 45-72.
- 33. Avinash Kumar, et al, *Distribution system monitoring in presence of Renewable Energy Sources* in Book entitled: **Power System Operation with 100% Renewable Energy Sources**, Springer Nature Singapore Pte Ltd 2023.

<u>Monograms:</u>

- * Power System Operation and Control in Restructured Environment, QIP India, 2003.
- * Electric Power Distribution: Reforms, Automation and Management, CDTE, IITK, 2004.
- * Electric Power System Operation & Control: Modern Trends & Future Challenges, QIP, 2006.
- * Electric Power Quality: Monitoring, Analysis and Mitigation, IITK 2008.
- * Distribution Equipments: Technology and Applications, PFC New Delhi 2012.

NPTEL Courses (Video):

- 1. Power System Operation and Control
- 2. HVDC Transmission

Awards/Prizes

- 1. Got 2nd Rank in Bachelor of Technology (Electrical), KNIT Sultanpur, India, 1987
- 2. Stood First in M. Tech. (Power Systems) and got Cumulative Performance Index (CPI) 10.0 out of 10.0, IIT Kanpur, India, 1989.
- 3. Received Appreciation letter from the Chairman, U.P. State Electricity Board (India), 1990 for two Research Reports
- 4. Certificate of Merit award for a technical paper entitled *Reactive Power Planning for Secure Operation of Power System*, in the Ist International R&D Conference of CBIP, New Delhi, 9-12 October 1995.
- 5. Received C.B.I.P. Young Engineer Award 1996.
- 6. Khosla Research Award (Commendation) of University of Roorkee, India 1998.
- 7. Received INAE Young Engineer Award 2000.
- 8. Khosla Research Award (Gold) of Roorkee University, India, 2000.
- 9. Appreciation letter from Dean, SERD, AIT Bangkok for excellent services to Energy Program, 2002.
- 10. Humboldt Research Fellowship (2005, 2007)
- 11. Listed in Who's Who in Asia (2006) and Who's Who in World (2007)
- 12. Listed in Who's Who in Science & Engineering (2007)
- 13. 21st Century Award for Achievement by IBC Cambridge, England (2007)
- 14. Listed in Leading Engineers of the World 2007, IBC Cambridge, England (2007)
- 15. **First Prize** in a technical paper titled *Short-Term Zonal Load Forecasting in PJM Electricity Market Based on Adaptive Wavelet Neural Network*, in the IEEE Sponsored Student paper Contest and Technical Symposium (SPCTS-2007) at DA-IICT, Gandhinagar, 28-30 Sept 2007.
- 16. **Best Paper ward** of 14th International Conference on Intelligent System Application to Power Systems (ISAP07) held during Nov 4-8, 2007, Kaohsiung, Taiwan.
- 17. Otto Mønsteds Fund Award, Denmark (2009)
- 18. Best paper Award for AWNN based Harmonic Estimation in Renewable Energy Sources, in Recent Advances in Electrical Power and Energy System Management (RAEPESM-2011).
- 19. Best paper Award for *Characterization of Power Quality events with wavelet transform,* in Recent Advances in Electrical Power & Energy System Management (RAEPESM-2011).
- 20. **2010 Clayton Griffin Student Paper Award** for SVM based Scheme to Prevent Distance Relay Mal-operation under Power Swing and Voltage Instability"
- 21. Three PhD Theses got **POSOCO Power System Award**, 2012
- 22. 2013 IEEE Educational Activities Board Meritorious Achievement Award in Continuing Education
- 23. Dr PS Nigam Power Sector Award 2013 and 2014 by IE(I), UP State Center
- 24. The Institution of Engineers (I), Certificate of Appreciation, 2013.
- 25. Two PhD Theses and One M.Tech. thesis got POSOCO Power System Award, 2013
- 26. 2013 IEEE R10 Educational Activities Board Award, 2013
- 27. 2014 IEEE PES Chapter Outstanding Engineer Award.
- 28. Er Hari Mohan Memorial Award 2014 by IE(I), UP State Center
- 29. Emerald Literati Network 2015 Awards for Excellence by Emerald Publication UK.
- 30. **IEEE India Council, M V Chauhan All India Student Paper Award 2015** (Second prize) for Binary Genetic Algorithm Based Reconfiguration of Distribution Systems having Distributed Generations.
- 31. Two PhD Theses got **POSOCO Power System Award**, 2015

- 32. Gobal Citizen Award 2016 by KNIT Sultanpur.
- 33. **Ranked 4rth in top** researchers in Energy area by DST New Delhi based on the number of publications during 2002- 2014.
- 34. INAE Outstanding Teacher Award 2016
- 35. IEEE Region 10 (Asia-Pacific) Outstanding Volunteer Award 2016
- 36. **IEEE India Council, M V Chauhan All India Student Paper Award 2016** (First prize) for Risk Based Optimal Genco's Self-Scheduling'.
- 37. **IEEE UPCON Best Paper Award 2017** for Modular Multi-level Converter Topologies: Present Status and Key Challenges.
- 38. Outstanding Research Faculty Award for year 2017-18 for Top 10 knowledge producers in *Energy Discipline* by *CAREER360, New Delhi*.
- 39. Life Time Achievement Award 2018 by Global Intellect Award -2018 (JSR Laboratory & Asian Society for Scientific Research), Pune for *Outstanding Contributions to the power* engineering community in Teaching, Training, Research and Industrial Collaboration.
- 40. **Prof GK Dubey Memorial Life Time Achievement Award 2018** by IEEE Uttar Pradesh Section for Outstanding contribution to IEEE UP Section and IEEE R10.
- 41. Amity Global Academic Excellence Award 2018, by Amity University, Greater Noida, India.
- 42. Sangam Shikhar Samman 2018, Gorakhpur
- 43. **IEEE UPCON Best Paper Award 2018** for Development of EMT Model for Circulating Current Control.
- 44. Amity Excellence Award for Outstanding Leadership, Innovation and Contribution in Higher Education, Given by Minister of State (independent Charge) Sri Mahesh Sharma Jee at Amity University, Noida, India on December 19, 2018.
- 45. IEEE Industry Application Society Distinguish Lecturer 2019-2021
- 46. IEEE Power and Energy Society Distinguish Lecturer 2019 to date
- 47. NPSC 2020 Academic Excellence Award, 2020
- 48. IEEE Industry Application Society Outstanding Educator/Mentor Award 2021
- 49. IEEE Member and Geographic Activities (MGA) Achievement Award 2021
- 50. Lifetime Achievement Award 2022" by IEEE GlobConPT 2022.
- 51. Lifetime Achiever Award 2023 by ISTE New Delhi
- 52. IEEE Industrial Electronics Society Distinguish Lecturer 2023

Conference/Seminar/Course/Workshop Organized

A. Workshops

- 1) Coordinator of Quality Improvement Program Course on *Voltage Security and Stability Assessment using Artificial Neural Network* at University of Roorkee, 11-25 June 1998 (*Co-coordinator: Prof ID Sharma*).
- 2) Coordinator of Quality Improvement Program Course on *Electric Power System Operation and Management under Restructured Environment* at IIT Kanpur, 21-25 July 2003 (*Cocoordinator: Prof SC Srivastava*).
- 3) Coordinator of Short-term workshop *Electric Power Distribution: Reforms, Automation and Management* at IIT Kanpur, May 10-14, 2004 (*Co-coordinator: Prof SC Srivastava*).
- 4) Coordinator of Quality Improvement Program Course on *Electric Power System Operation and Control: Modern Trends and Future Challenges* at IIT Kanpur, August 28- September 1, 2006 (*Co-coordinator: Prof SC Srivastava*).
- 5) Coordinator of Short-term Training course On *Recent Practices in Electric Power Distribution* at IIT Kanpur, November 27-29, 2007.
- 6) Coordinator of DST SERC School on *Power Quality: Monitoring, Analysis and Mitigation* at IIT Kanpur, April 7-11, 2008 (*Co-coordinator: Prof SC Srivastava*).
- 7) Coordinator of Quality Improvement Program Course on *Flexible AC Transmission Systems Controllers and Their Applications in Emerging Power Systems* at IIT Kanpur, March 23-27, 2009.
- 8) Coordinator of Quality Improvement Program Course on *Intelligent System Applications to the Smart Electric Grid Solutions* at IIT Kanpur, November 15-19, 2010.
- 9) Coordinator of Quality Improvement Program Course on *Operation and Management of Emerging Power Systems* at IIT Kanpur, November 21-25, 2011.
- 10) Coordinator of Training of Trainers of Partner Institutes on *Distribution Equipments: Technology and Applications* at IIT Kanpur, June 28, 2012.
- 11) Coordinator of Quality Improvement Program Course on *Power Market: Economics and Management*, at IIT Kanpur, October 29- November 2, 2012 (*Co-coordinator: Dr Vimal Kumar*).
- 12) Coordinator, of Quality Improvement Program Course on *Power System Economics* at IIT Kanpur, July 26-30, 2013 (*Co-coordinator: Dr Vimal Kumar*).
- 13) Coordinator, of Course on *Power Market & Economics* at IIT Kanpur, May 15-18, 2014 (*Co-coordinator: Dr Vimal Kumar*).
- 14) Main Resource Person of course on Power generation at Ambhabusi, Johannesburg, South Africa, June 9-13, 2014.
- 15) Coordinator, of Course on *Power Market & Economics* for POSOCO New Delhi at NPTI Faridabad, September 16-20, 2014 (*Co-coordinator: Dr Vimal Kumar*).
- 16) Coordinator of Quality Improvement Program Course on *Power Generation: Present Status* and *Future Directions*, at IIT Kanpur, December 1-5, 2014 (*Co-coordinator: Dr J Ramkumar*).
- 17) Coordinator of National Workshop on Smart Micro-Grids for autonomous Zero-Net Energy Buildings, at IIT Mandi, December 11-12, 2014 (Co-coordinator: Dr Bharat Singh Rajpurohit).
- 18) Coordinator, of Course on *Power System Economics and International Practices in Power Market Operation* for POSOCO New Delhi at PSTI Bangalore, May 11-15, 2015 (*Co-coordinator: Dr Vimal Kumar*).
- 19) Coordinator, of Course on *Ancillary Services and Electricity Markets* for POSOCO New Delhi at IIT Kanpur, September 7-10, 2015.

- 20) Coordinator of International Workshop on Next Generation Active Distribution Networks to Empower Future Low Corabon Indian Society, at IIT Mandi, August 12-14, 2016 (Co-coordinator: Dr Bharat Singh Rajpurohit).
- 21) Mentor, Newton-Bhabha India UK Advanced Training School on Optimal Design and Control of Smart Community: New Ideas for off-grid Communities, Nov. 7-17, 2016 at IIT Gandhinagar.
- 22) Coordinator, Course on Advanced and Modern Electronic and Machine Drive for Training of Electrical Supervisors, Electric training Center, Kanpur during April 25-30, 2017.
- 23) Coordinator of Workshop on National Workshop on A Multi Dimensional Smart Energy Grids Analysis for Indian Scenario, at IIT Mandi, May 8-10, 2017 (Co-coordinator: Dr Bharat Singh Rajpurohit).
- 24) Coordinator, Course on Advanced and Modern Electronic and Machine Drive for Training of Electrical Supervisors, Electric training Center, Kanpur during August 7-11, 2017.
- 25) Coordinator, Course on Power System Economics for POSOCO New Delhi at IIT Kanpur Campus, Noida, December 13-17, 2017. (*Co-coordinator: Dr Vimal Kumar*).
- 26) Patron, Power Quality Analysis and Energy Management in Smart Sustainable Cities, 28 June 2021

B. Seminars/Conferences

- 1. Organizing Secretary of All India Seminar on *Electric Energy System Management Indian Scenario* at IE (I) Roorkee Local Center, 4-5 September 1998.
- 2. General Chair, IEEE International Conference on Energy, Economics & Environment, March 26-28, 2015 at GCET, Greater Noida India (Ist UP CON).
- 3. General Chair, IEEE International Conference on Advances in Computing and Communication Engineering, May1-2, 2015 at Tula's Institute Dehradun.
- 4. General Chair of *International Solar Energy Seminar* 2015, August 21-22, 2015, Galgotias College of Engineering & Technology, Greater Noida, UP
- 5. General Chair, IEEE Uttar Pradesh Section Conference on *Electrical, Computer & Electronics,* December 4-6, 2015 at IIIT Allahabad, India (2nd UP CON 2015).
- 6. General Chair, 'First International Conference on *Computing, Communication and Security* (ICCCS- 2015), Mauritius on Dec 4-5, 2015.
- 7. General Chair, 2nd International Conference on Advances in Computing and Communication Engineering, April 7-9, 2016 at Tula's Institute Dehradun.
- 8. General Chair, 2nd International Conference on Advances in Computing, Communication & Automation (ICACCA 2016), MJP Rohilkhand University Bareilly, Sept 30-Oct 1, 2016.
- General Chair, 2nd International Conference on Control, Computing, communication and Materials (ICCCCM-2016), United College of Engineering & Research, Allahabad, Oct 21-22, 2016.
- 10. General Chair, International Conference on Emerging Trends in Communication Technologies, November 18-19, 2016, Graphic Era Univ., Dehradun.
- 11. General Chair, IEEE Uttar Pradesh Section Conference on *Electrical, Computer & Electronics,* December 9-11, 2016 at IIT BHU, India (3nd UP CON 2016).
- 12. General Chair, 2nd International Conference on Advances in Computing, Communication and Automation, September 15-16, 2017 at Tula's Institute Dehradun.
- 13. General Chair, IEEE Uttar Pradesh Section Conference on *Electrical, Computer & Electronics,* October 26-28 at GLA University, India (4rth UP CON 2017).
- General Chair, 14th IEEE India Council International Conference (INDICON), December 15-17, 2017 at IIT Roorkee, India

- 15. General Chair, 3rd International Conference On Internet of Things: Smart Innovation and Usages (IoT-SIU 2018) 24-25 February, 2018 at Birla Institute of Applied Sciences, Bhimtal, Nainital, Uttarakhand, India.
- 16. General Chair, 2018 IEEE International Conference on Power Energy, Environment and Intelligent Control, April 13-14, 2018, GL Bajaj Institute of Technology & Management, Greater Noida.
- 17. General Chair, International Conference on Computing, Power and Communication Technologies (GUCON), Galgotias University; India, September 28-29, 2018.
- 18. General Chair, International Conference on Advances in Computing, Communication Control and Networking (ICAC3N'18), GCET Greater Noida, October 12-13, 2018
- 19. Patron, IEEE Uttar Pradesh Section Conference on *Electrical, Computer & Electronics,* November 2-4, 2018 at MMM University of Technology Gorakhpur, India (5th UP CON 2018).
- 20. General Chair, Seventh International Conference on System Modelling & Advancement on Research Trends (SMART), 2018, TMU Moradabad, November 23-24, 2018.
- 21. General Chair, 15th IEEE India Council International Conference (INDICON), December 16-18, 2018 at Amrita Vidyapeetham, Coimbatore, India
- 22. General Chair, 2nd International Conference on Entrepreneurship, Innovation and Leadership 2018 (ICEIL2018), Amity University Noida, December 19-21, 2018.
- 23. General Chair, 4rth International Conference On Internet of Things: Smart Innovation and Usages (IoT-SIU 2018) April 18-19, 2019 at KEC Ghaziabad, India.
- 24. General Chair, IEEE Uttar Pradesh Section Conference on *Electrical, Computer & Electronics*, November 8-10, 2019 at Aligarh Muslim University, Aligarh, India (6th UPCON 2019).
- 25. Honorary General Chair, 4th IEEE International Conference on Information Systems and Computer Networks (ISCOM2019), November 21-22, 2019, GLA University Mathura.
- 26. General Chair, International Women Institute of Technology Conference on Electrical and Computer Engineering-2019 (IEEE WITCON ECE-2019) at Women Institute of Technology, Dehradun on 22nd -23rd November 2019.
- 27. General Chair, 16th IEEE India Council International Conference (INDICON), December 13-15, 2019 at Marwadi University, Rajkot, Gujarat, India.
- 28. Patron, International Conference on Energy, Environment and Material Sciences (ICE2M), MMMUT Gorakhpur, December 1-3, 2019.
- 29. Honorary General Chair, International Conference on Power Electronics & IoT Applications in Renewable Energy and its Control (PARC 2020), February 28-29, 2020, GLA Mathura, India.
- 30. Patron, International Conference on Electrical and Electronics Engineering (IC3), MMMUT Gorakhpur, February 14-15, 2020.
- 31. Honorary General Chair, IEEE Women in Engineering (WiE), International Leadership Symposium, Nov 6-8, 2020.
- 32. Honorary General Chair, IEEE Uttar Pradesh Section Conference on *Electrical, Computer & Electronics*, November 27-29, 2020 at MNNIT Allahabad, India (7th UPCON 2020).
- 33. Patron, 17th IEEE India Council International Conference (INDICON 2020), December 11-13, 2020 at NSUT New Delhi.
- 34. General Chair, 21th IEEE National Power Systems Conference (NPSC 2020), December 17-19, 2020, Indian Institute of Technology Gandhinagar, Gandhinagar, Gujarat.
- 35. Patron, 2nd IEEE International Conference on Advances in Computing, Communication Control and Networking –ICACCCN (ICAC3N-20), Galgotias College of Engineering and Technology, Greater Noida, India, December 18-19, 2020.

- 36. Patron, IEEE International Conference on Advance Computing and Innovative Technologies in Engineering Conference, 4th and 5th March, 2021, GCET Greater Noida.
- 37. Patron, 4rth Recent Developments in Control Automation and Power Engineering (RDCAPE), October 7-8, 2021, Amity University Noida.
- 38. Honorary General Chair, IEEE 5th International Conference on Information Systems and Computer Networks (ISCON), 22nd 23rd October 2021, GLA Mathura.
- 39. Patron, IEEE Uttar Pradesh Section Conference on *Electrical, Computer & Electronics,* November 13-15, 2021 at Tulas Institute Dehradun, India (8th UPCON 2021).
- 40. General Chair, 10th IEEE Scopus Indexed International Conference on System Modelling & Advancement on Research Trends (SMART-2021), TMU Moradabad, Dec 10-11, 2021.
- 41. General Chair, First IEEE International Conference on "Advances in Computing and Future Communication Technologies (ICACFCT-2021)" Meerut Institute of Engineering and Technology, Meerut India, 16-17 December 2021.
- 42. Honorary General Chair, 9th IEEE International Conference on Power Systems (ICPS) 2021, December 16 18, 2021, IIT Kharagpur, India
- 43. Patron, 3rd IEEE International Conference on Advances in Computing, Communication Control and Networking (ICAC3N-21)", GCET Greater Noida, 17–18 December 2021.
- 44. General Chair, 18th IEEE India Council International Conference (INDICON 2021), December 19-21, 2021, IIT Guwahati.
- 45. Patron, International Conference on Advance computing and Ingenious Technology in Engineering Science, GCET Greater Noida, December 30-31, 2021, GCET Greater Noida.
- 46. Patron, 2nd International Conference on Advanced Computing and Innovative Technologies in Engineering, GCET Greater Noida, June 9-10, 2022.
- 47. Honorary General Chair, 3rd Electric Power and Renewable Energy Conference (EPREC-2022), NIT Jamshedpur, May 27-29, 2022.
- 48. Honorary General Chair, 4th International Conference on Energy, Power and Environment (ICEPE-2022), NIT Meghalaya, April 29-May 1, 2022.
- 49. Chief Patron, 9th IEEE Uttar Pradesh Section Conference on *Electrical, Computer & Electronics (UPCON)*, IIIT Allahabad, December 2-4, 2022.
- 50. Patron, 4th International Conference on Advances in Computing, Communication Control and Networking (ICAC3N-22), GCET, Gr Noida, Dec 16-17, 2022.
- Patron, IEEE International Conference on Interdisciplinary Approaches in Technology and Management for Social Innovation (IATMSI-2024), ABV-IIITM Gwalior, December 21-23, 2022
- 52. Patron, 1st International Conference on Communication, Security and Artificial Intelligence (ICCSAI-2022), SCEE, Galgotias University; December 23-24, 2022.
- 53. General Chair, International Conference on Disruptive Technologies (ICDT-2023), GL Bajaj ITM, Gr Noida, May 11-12, 2023.
- 54. Patron, 3rd International Conference on Advance Computing and Innovative Technologies in Engineering Conference, GCET Gr Noida, 12th and 13th May 2023.
- 55. Co-patron, Ist International Conference on Computer, Electronics & Electrical Engineering and their Applications (IC2E3-2023), NIT Uttarakhand, Srinagar Garhwal, Uttarakhand, June 8th- 9th, 2023.
- 56. Patron and General Chair, International Conference on Sustainable Emerging Innovations in Engineering and Technology (CSEIT-23), ABESEC Ghaziabad, 14-15, Sept 2023.
- 57. Patron, 6th International Conference on Contemporary Computing and Informatics (IC3I), Amity University, Greater Noida, September 14-16, 2023.
- 58. Co-patron, Upcycling of Solid Waste into Carbon Nanomaterials and Their Characterization for Various Applications, October 6-7, 2023, Kumaon University, Nainital.

- 59. Honorary Chair, 5th International on Sustainable and Innovative Solutions for Current Challenges in Engineering & Technology (ICSISCET 2023), MITS Gwalior, Oct. 21-22 2023.
- 60. Patron, 2nd International Conference on Communication, Security and Artificial Intelligence (ICCSAI-2023), SCEE, Galgotias University; November 23-25, 2023.
- 61. Chief Patron, 10th IEEE Uttar Pradesh Section Conference on Electrical, Computer & Electronics (UPCON), Amity Univ Gr Noida, December 1-3, 2023.
- 62. Patron, 2nd International Conference on Computer Vision and Machine Intelligence (CVMI-2023), ABV-IIITM Gwalior, Dec 10-11, 2023.
- 63. Core Steering Committee Chair, 10th International Conference on Power Systems (ICPS) 2023, Cox Bazar, Bangladesh, December 13-15, 2023.
- 64. Patron, 5th IEEE International Conference on Advances in Computing, Communication Control and Networking (ICAC3N-21)", GCET Greater Noida, 15–16 December 2023.
- 65. Co-Patron,5th International Conference on Computing, Power, and Communication Technologies (IC2PCT) earlier known as GUCON, Galgotias University in Greater Noida, India, February 9-10, 2024.
- 66. Honorary General Chair, 3rd International Conference on Power Electronics & IoT Applications in Renewable Energy and its Control (PARC 2024 during 23-24 February 2024 at GLA University, Mathura.
- 67. Patron, 2nd IEEE International Conference on Interdisciplinary Approaches in Technology and Management for Social Innovation (IATMSI-2024), ABV-IIITM Gwalior, March 14-16, 2024.
- 68. Patron, 4th International Conference on Advance Computing and Innovative Technologies in Engineering (ICACITE), GCET Gr Noida, April 18-19, 2024.
- 69. Patron, International Conference on Advance Cognitive Innovation Trends and Emerging Engineering Conference (ICACITEE), GCET Gr Noida, August 29-30, 2024.
- 70. Honorary Chair, 3rd International conference on Information Systems and Computer Networks (ISCON2024) on Sept. 6-7, 2024 at GLA University, Mathura.

Personal Information

| Father's Name (Late Shri) | : Janak Raj Singh |
|---------------------------|---|
| Sex (Status) | : Male (Married) |
| Nationality | : Indian |
| Permanent Address | S/o Sri Janak Raj Singh Vill & P.O Kurmauta - Manjharia Distt Kushinagar (UP) - 274402, India |

Name & Address of Referees

* Prof. S.C. Srivastava, Department of Electrical Engineering Indian Institute of Technology, Kanpur – 208 016, India Email: <u>scs@iitk.ac.in</u> Tel: +91 512 597625 (O)/591259, Fax: +91 512 590063/590007

* Dr. D. P. Kothari, FNAE, FNASc, Fellow-IEEE, Hon Fellow - ISTE Director – Research, MVSR Engineering College, Hyderabad Nadergul (P.O), Hyderabad - 501510
Ph.no:-919885920361/7207457011/9993546078
Email to: <u>dpk0710@yahoo.com</u> <u>dpkvits@gmail.com</u>

* Prof F.S. Wen

Professor, School of Electrical Engineering

Director, Zhejiang University-Insigma Joint Research Center for Smart Grids Director, Institute of Power Economics and Information

Zhejiang University, Hangzhou, 310027, China

Emails: wenfs@hotmail.com; fushuan.wen@gmail.com

Annexure-A

Work Experience

* <u>RESEARCH EXPERIENCE</u>

Worked as **Research Fellow** in the *Department of Electrical Engineering* at **Hong Kong Polytechnic University, Hong Kong** from 20.12.98 to 31.3.2000 on the problem of Dynamic security constrained congestion management of open access transmission systems in competitive power market. This is one the current area of Power Systems. Suitable location of FACTS devices in open power market has also been developed for congestion management.

Worked as **Post Doctoral Fellow** in Energy Program at *Asian Institute of Technology, Thailand* from *May 1997 to August 1997* on the problem of Assessment of Energy Efficient Options for Mitigating Emissions of Greenhouse Gases from Electricity Sectors funded by Swedish International Development Agency (SIDA). The Special objective of the research was to assess the Supply- and Demand-side options for greenhouse gases mitigation from electricity sectors with Integrated Resource Planning (IRP) Perspective.

Worked as **Humboldt Fellow** at University of Duisburg-Essen, Germany from June 2005 to December 2005 and December 2006 to June 2007 on the problem of impact of wind energy on power system operation and control. The effect of FACTS controllers on Power system loadability is also investigated.

Worked at **Visiting Professor** at Denmark Technical University, Denmark from July 2009 to June 2010 on the problem of real time balancing market in the Denmark with wind power trading and demand response sponsored by EcoGrid-EU and Engerginet.dk.

* <u>TEACHING EXPERIENCE</u>

Working as **Professor** in the Department of Electrical Engineering, *Indian Institute of Technology, Kanpur (UP), India* from **08.02.2008 to date (On leave).**

Worked as **Associate Professor** in the Department of Electrical Engineering, *Indian Institute of Technology, Kanpur (UP), India* from **05.04.2002 to 07.02.2008.** Received several appreciation letters from Director, IIT Kanpur for the best teaching in various courses.

Worked as **Assistant Professor** in Electric Power System Management (Energy Program) at *Asian Institute of Technology, Bangkok, Thailand* from **02.01.2001 to 04.04.2002.** Received appreciation letter from President, AIT for the significant contribution in Energy Program

Worked as Assistant Professor in the Department of Electrical Engineering, University of Roorkee (UP), India from 14.06.96 to 01.01.2001. Received Kosala Research Award (Gold, 2000 & Commendation, 1996)

I. Theses Supervision

Ph. D.

- 1. ANN Approach to Voltage Security Assessment (**Dr Laxmi Srivastava**, *MITS Gwalior*, 1998)
- 2. Design of electricity utility restructuring model for Indian power system (**Dr KG Upadhyay**, *MMMUT Gorakhpur*, 2003)
- 3. ATC and Congestion Management in deregulated environment (**Dr Ashwani Kumar**, *NIT Kurukshetra*, 2003)
- 4. Development of Nonlinear Adaptive Damping Controllers for Improving Power System Stability (**Dr B Kalyan Kumar**, *IIT Madrad*, 2007).
- 5. Development of Market Monitoring System and Swarm Particle Intelligence Based Bidding Strategies in Electricity Market (**Dr Prabodh Bajpai**, *IIT Kharagpur*, 2007)
- 6. Enhancement of Power System Performance Using Advanced Unified Power Flow Controllers (**Dr Sudhir K. Srivastava**, *MMMUT Gorakhpur*, 2007)
- 7. Loading Sensitivity and Pricing based Indices for Placement of FACTS Controller to enhance Power System Performance (**Dr JG Singh**, *AIT Bangkok*, 2008)
- 8. Fast Available Transfer Capability Determination and Its Enhancement using FACTS Controllers (*Dr Trapti Jain, IIT Indore, 2008*)
- 9. Detection and Localization of Power Quality Events in Noisy Environment and Classification using Support Vector Machines (**Dr U D Dwivedi**, *RGIPT Raibareilly*, 2008)
- 10. Frequency Regulation Service and Reactive Power Management in Electricity Markets (**Dr Sanjoy K. Parida**, *IIT Patna*, 2009)
- Reactive Power Capability and Performance Analysis of Grid Connected Unified DFIG for Wind Power Applications (*Dr Bharat Singh Rajpurohit*, *IIT Jodhpur*, 2009)
- 12. Forecasting of Short-Term Load, Operating Reserve & Price and Optimal Generation Portfolio Management in Electricity Markets (**Dr N. M. Pindoriya**, *IIT Gandhinagar*, 2009)
- 13. Application of Artificial Intelligence (AI) Tools for Load, Price and Bid Forecasting in Power System (**Dr MM Tripathi**, *DTU Delhi*, 2010)
- Development of Adaptive Load Shedding and Distance relaying Scheme utilizing Synchophasor Technology (Dr Seethalekshmi K., IET Lucknow, 2011, Thesis received POSOCO Award 2013)
- 15. Synchrophasor Assisted State Estimation and Voltage Stability Monitoring including Optimal PMU Placement (**Dr Ranjana Sodhi**, *IIT Ropar*, 2011)
- 16. Real Time Power System Stability and Prediction using Synchrophasor Based Wide Area Monitoring System (**Dr Praveen Tripathy**, *IIT Gowahati*, 2011).
- 17. Estimation of Stationary and Time-Varying Harmonics in Emerging Power Systems (**Dr** Sachin K Jain, *IIITDM Jabalpur. 2012, Thesis received POSOCO award 2013*).
- Monitoring and Classifications of Power Quality Events in Emerging Power System (Dr Dipti Saxena, MNIT Jaipur, 2012, Thesis received POSOCO award 2014)
- 19. Swarm Intelligence Based DG and Capacitor Planning in Distribution Networks (**Dr** Naveen Jain, *COE Udaipur. 2013, Thesis received POSOCO award 2013*)
- 20. Development of Strategic Bidding of Supplier and Buyer in Electricity Markets (Dr Arvind K Jain, NIT Agartala, 2014, Thesis received POSOCO award 2014)

- 21. Wind Power Forecasting & Its Applications in Optimal Bidding and Optimal Reactive Power Dispatch of Wind Farms (**Dr Kanna Bhaskar**, *JNTU Hyderabad*, 2014, *Thesis received* **POSOCO award 2015**)
- 22. Generation Companies' Strategic Bidding In Day-Ahead Electricity Markets (**Dr Prerna Jain**, *MNIT Jaipur*, 2014)
- Development of Control Schemes for Power Management and Operation of DC Microgrids (Dr Mahesh Kumar, 2015, Amity Univ, Faridabad, *Thesis received POSOCO award* 2015)
- 24. Economic and Stability Analysis of Optimally Placed Distributed Generations in Distribution Systems (**Dr P Pavani**, Alborg Univ. Denmark, **2015**, *Thesis got the Appreciation letter from UPCON*15)
- Performance Analysis and Power Forecasting of Single-Stage Utility Scale Grid Connected PV System (Dr Vivek Nandan Lal, IIT BHU, 2015, Thesis received POSOCO award 2016)
- 26. Hybrid State Estimation and Enhanced Monitoring of Power Systems Using Synchrophasors (**Dr SK Mallik**, NIT Patna, **2016**, *Thesis received POSOCO award 2016*)
- 27. Evolutionary Technique Based Solution to the Unit Commitment Problem including Renewable Energy Sources (**Dr Anup Shukla**, IIT Jammu, 2016, *Thesis received POSOCO award 2017*)
- 28. Development of Distributed Control Scheme for Energy Storage Systems Using Distribution System Load Pattern (**Dr DD Sharma**, MJP Ruhelkhand Univ Bareilly, 2016)
- 29. Efficient Risk Management of Power Producers in Short Term Electricity Market Using Probabilistic Techniques (**Dr Debasmita Panda**, *NIT Warangal*, 2017)
- 30. Improvements and Performance Analysis of PMSM Drive (**Dr Sweta Singh**, *MSET*, *Maharshi Univ. Lucknow*, 2020)
- 31. Multi-objective Distribution Network Reconfiguration and Optimal Allocation of Renewable Energy Sources (**Dr Priyanka Gangwar**, *Smart Helio Pvt Ltd.*, 2020)
- 32. Decentralized Active Power Management and Control of a Microgrid using Multi Agent Based Approach (**Dr KK Singh Tomar**, *KESCO Kanpur*, *August 2021*).
- 33. Repeated Wavelet Transform based Forecasting of Wind-PV for Energy Storage System Management (Submitted: **Dr Aasim**, *NIT Patna*, 2021)
- 34. Improved Islanding Detection Methods for Inverter Interfaced Distributed Generators in Microgrid (**Dr Avinash Kumar**, *University of Massachusetts*, *Lowell USA*, 2021)
- 35. Congestion Management in Hybrid Electricity Markets Using Different Techniques (**Dr Aisvarya Narain**, *UCER Allahabdd*, 2021)
- 36. Active and Reactive Power Flow Control in Grid-Connected Permanent Magnet Synchronous Generator Based Wind Energy Conversion System (Dr Puneet K Srivastava, ITM Gorakhpur 2022)
- 37. Investigations on Harmonics/Inter-harmonics Estimation Techniques in Modern Power System (**Dr Ankit K Srivastava**, *IIT Jodhpur*, 2022)
- 38. Solar Power Forecasting and Incentive Schemes for Voltage Control and Residential Demand Response (**Dr Chaman Lal Dewangan**, *VIT Vellore*, 2022)
- 39. Detection and Mitigation Strategies for False Data Injection (Dr Gaurav Khare, MITS Gwalior, 2022)
- 40. Design and Analysis of controllers for MMC Based HVDC Transmission (Dr Ankit Yadav, Iowa State Univ. USA, 2022)

- 41. Aggregated Equivalent Models of Utility-Scale Wind Farm Integrated in the Power Network (**Dr A K Gupta**, *Eaton Pune*, **2022**)
- 42. Optimal Operation of Active Distribution Networks using Voltage Control, Topology Variations, and Load Flexibility (**Dr V Vineet**, *Tennessee Tech University USA*, 2023)

Under progress

- 1. Under progress: (Samarendra P Singh, MMMUT Gorakhpur)
- 2. Under Progress (Atul Kumar Soni, IIT Kanpur)
- 3. Under Progress (Nivedita Singh, IIT Kanpur)
- 4. Under progress (Swastik Sharma, IIT Kanpur)
- 5. Under progress (Mritunjay Singh, AKTU Lucknow)
- 6. Under progress (Rahul, IIT Kanpur)
- 7. Under progress (Rajan Chaudhary, ABV-IIITM Gwalior)
- 8. Under progress (Ankita Singh, IIT Roorkee)
- 9. Under progress (Pranav Prakash Singh, NIT Patna)

M. Tech.

- 1. Multi-Objective Generation Dispatch (RK Srivastava, 1998)
- 2. Determination of Degree of Insecurity of Power System using FLN (HK Katwani, 1998)
- 3. Unit Commitment Using Fuzzy Dynamic Programming (Daya Kishan, 1999)
- 4. Environmental Constrained Generation Expansion Planning (VP Singh, 1999)
- 5. Error Identification and State Estimation in Power Systems (Bijendra Kumar, 2000)
- 6. Green House Gas mitigation from Indian Power Sector (Priya Ranjan, 2003)
- 7. Integration of GPS/GIS in Electric Power Distribution Automation (M Rajender, 2005)
- 8. Design and tuning of power system stabilizer for Kaiga nuclear power plant (S.P Panda, 2005)
- 9. Voltage stability assessment & enhancement of Nepal power system (Bishnu P Sapkota, 2006)
- 10. Angular stability enhancement of Nepal power system using Stabilizing controllers (Mahendra AC, 2006)
- 11. Optimal placement & operation of distributed generators in power systems (G. C. Sethi, 2006)
- 12. Optimal bidding strategies in a competitive electricity market using a particle swarm optimization (Punna Shiv Kumar, 2006)
- 13. Application of self-organizing map and extended relation function method for power transformer fault diagnosis (Ch. Subhash Chandra, 2006)
- 14. Development of Adaptive Supplementary Feedback Controller for GUPFC (Praveen Tripathy, 2006)
- 15. Neuro-Fuzzy Based Automatic generation Control in Deregulated Power Systems (K Sudheer, 2007)
- 16. Classification of Power Quality Events Using Support Vector Machine (Robin Gupta, 2008)
- 17. Recursive DFT and Kalman Filter Application for Fast & Robust Detection and Estimation of Harmonics and Voltage Variations (Chirag Vrshney, 2008)

- 18. Dynamic Performance Evaluation of Unified DFIG Architecture for Wind Power Generation (V. Emmoji, 2008)
- 19. Compensation of Delay in Networked Control System in Deregulated Automatic Generation Control (Kamala Kant, 2008)
- 20. Artificial Intelligence Based Location and Classification of Power Quality Events (Deepti Shakya, 2008)
- 21. Wind, Thermal and Hydro Unit Commitment Using Advanced Particle Swarm Optimization (J. Yadagiri, 2009)
- 22. Transmission Cost Allocation Using Power Flow Tracing Method (Pratibha Gupta, 2009)
- 23. Loss Minimization in Electrical Distribution Systems Through Optimal Network Reconfiguration and Allocation of Distributed Generation (K. Uday Chandrika, 2009)
- 24. Modeling and Control of Grid Connected Photovoltaic System Using PSCAD/EMTDC (S Jayachandra Naidu, 2009)
- 25. Performance Study of Hybrid Wind-Fuel Cell System Connected to High Voltage Grid (N Nagraj, 2009)
- 26. Development of Optimal PMU Placement Strategy and Support Vector Machine based Fault Detection, Classification and Location (P Pavani, 2010)
- 27. Distribution System Reconfiguration considering Reliability and Power Loss (Amunah, 2011)
- 28. An application of Average and Marginal Participation Methods for Transmission Pricing (Najmul Islam Usmani, 2011)
- 29. Identification of Harmonic Sources and Optimal Placement of Filter for Harmonic Mitigation (S Bhowmik, 2012)
- 30. Cellular Neural Networks: Applications in Power Systems (Manesh K Meena, 2012)
- 31. Low Voltage Ride through Solutions for DFIG Wind Turbine (Amrendra Edpuganti, 2012)
- 32. Performance Study on the Techniques for Monitoring the Power System Oscillations (Sriniwas Chaturi, 2013)
- 33. Controller Design and Dynamic Analysis of PV System (M Sidhardha, 2013, *Thesis received POSOCO award 2014*)
- 34. Coherency Based Dynamic Equivalencing of Electric Power System (Shikha Chitora, 2014, *Thesis received POSOCO award 2015*)
- 35. Output Power Leveling of DFIG Using Battery Energy Storage System (Satakshi, , 2014)
- 36. Zero Net Energy House Clusters: Protection and Energy Management (Gaurav Pandey, 2015)
- 37. Design and Modeling of VSC-HVDC Transmission System having Wind Farm (Nirjhar Roy, 2015)
- 38. Control Strategies for Output Power Smoothening of DFIG with SVC in Wind Energy Conversion System (Ankit Jain, 2016)
- 39. Power Procurement Cost Analysis for Electrical Utilities in Uttar Pradesh (Praveen Kumar Nair, 2016)
- 40. Impact of Regulation Ancillary Service in Indian Electricity Market (Sitanshu Mishra, 2016)
- 41. Adaptive Protection Schemes for Distribution and Transmission Systems with Renewable Energy Sources (Varsha Shukla, 2017)
- 42. Design and Control of DC Microgrid with Energy Storage (Anmol Sharma, 2018)

Teaching & Research Activities

(a) Sponsored Research Projects

| S1. | Name of the project | From /To | Spons. | Amount | Other |
|-----|--|--------------------------|----------------|---------------------|---|
| No | 1 5 | | Agency | | investigators |
| 1. | Demand Side Management & Distribution Automation System | completed | AICTE | Rs 900000 | Dr MP Dave Sri B. Gupta Dr NP Padhy |
| 2. | Optimal location of FACTS devices in competitive power market | completed | AIT | Baht 50000/- | |
| 3 | Electricity supply industry reform in Thailand | completed | EGAT | Baht 12 millions | Prof Surapong and others |
| 4 | ImprovementofOperationperformanceofintegratedAC/DCsystemthroughmultiplecontrollabledevices | 30/4/2001 29/10/2004 | MHRD | Rs13.0 lakh | |
| 5 | Technology Development Mission – Contribution from Industry (DA) | completed | IITK | Rs 28.0 lakhs | Prof SC Srivastava and others |
| 6 | Strategies for Promotion of Energy Efficient and Cleaner Technologies in the Power Sector | completed | AIT | Rs.10.0 lakhs | Prof SC Srivastava and others |
| 7 | Enhancement of Power Systems' performance using FACTS in competitive power market. | 21/11/2002 31/03/2006 | CPRI/ MoP | Rs. 18.4 lakhs | Prof SC Srivastava |
| 8 | Assessment and Analysis of Electric Power Quality Problems using AI and Advanced Digital Signal Processing Techniques | 15/02/2005 14/2/2008 | DST | Rs 10.22 lakhs | Prof SC Srivastava |
| 9. | Performance Analysis and Trading of Wind power Generation in Emerging Power System | 26/7/2007 21/1/2010 | CPRI/ MoP | Rs 21.60 lakhs | |
| 10 | EHV/UHV Transmission system planning for UPPTCL | 13/7/2011 12/7/2016 | UP PTCL | Rs 50.0 Lakhs | Prof SC Srivastava & Dr N Gupta |
| 11 | Setting up Real-Time Digital Simulation Facility for Advance Research in Power and Control | 22/7/2011 21/7/2016 | DST | 7.5 Crores | Prof SC Srivastava & Others |
| 12 | Smart Multi-Terminal DC micro- grid for autonomous zero-net energy buildings | 23/4/2014 29/8/2016 | DST- UKIERI | 27.208 lakhs | Dr Bharat Singh & Others |
| 13 | A Multi-dimensional Smart Energy Grids Analysis of Indian Scenario | 3/11/2014 2/11/2017 | DST- SERI | 134.961 lakhs | YN Singh & IIT Mandi |

| 1.4 | A dontino Chustonin a fan | 3/7/2014 | DST- | 71.32 | |
|-----|--------------------------------------|------------|---------|--------|--------------|
| 14 | Adaptive Clustering for | 2/7/2014 | . – | | Dr A. |
| | Decentralized Resilient Energy | 2/7/2014 | NWO | Lakhs | Mohaptra |
| | Management | | | | |
| 15 | Stabiliz-Energy | 30/9/2014 | DST-EU | 29.936 | Dr Saikat C |
| | | 31/3/2018 | | lakhs | & others |
| 16 | Development of Control Strategies | 24/6/2016 | CPRI | 31.25 | Dr Saikat |
| | for Grid-connected PV System | 31/3/2019 | | lakhs | Chakraborti |
| | utilizing MPPT and Reactive Power | | | | |
| | Capability | | | | |
| 17 | Data-Driven Intelligent Energy | 01/06/2017 | DST- | 30.77 | Dr Narnan |
| | Management for Environmentally | 31/12/2020 | UKIERI | Lakhs | Pindoriya |
| | Sustainable Energy Access | | | | and others |
| 18 | Stochastic Charging of Electrical | 1.12.2019 | TEQIP/ | 11.67 | MJPRU |
| | Vehicles in Distribution Grid | 31.3.2021 | AICTE | lakhs | Bareilly |
| 19 | U.SIndia collAborative for smart | 29/09/2017 | US- | 50 | Prof SC |
| | diStribution System wIth Storage | 28/09/2023 | IUSSTF | Crores | Srivastava & |
| | (UI-ASSIST) | | Forum | | other |
| 20 | Efficient Coupling of Water and | 01/04/2018 | IGSTC | 25.35 | Dr AN |
| | Energy Technologies for smart | 31/07/2022 | | lakhs | Tiwari |
| | sustainable cities (ECO-WET) | | | | |
| 21 | Integrated Renewable Energy | 07/11/2019 | Indo- | 47.00 | MNNIT |
| | Sources: Operation & Management | 06/11/2023 | Norway | | Allahabad |
| 22 | E-Mobility: An Electricity Grid | 25/06/2019 | Indo- | 63.38 | MNNIT |
| | Perspective | 30/09/2023 | Denmark | Lakhs | Allahabad |
| 23 | Intelligent Approaches for Incipient | Approved | SERB- | | Bharat S |
| | Fault Detection and Remaining Life | | CRG | | Rajpurohit, |
| | Estimation of PMSM | | | | IIT Jodhpur |
| L | | 1 | | 1 | |

(b) Consultancy Projects:

| S1. | Name of the project | From /To | Spons. | Amount | Other invest. |
|-----|---|-------------------------|---------|----------|---------------|
| No. | | | Agency | (Rs) | |
| 1. | Technical report of MDI & low | 11/7/2008 | DVVNL | 28060 | - |
| | power factor of m/s Guatam | 10/7/2009 | Banda | | |
| | Cement, Hamirpur. | | | | |
| 2. | Study on demand & energy charges | 8/8/2008 | UP Sug. | 210675.0 | |
| | against import of power during | 7/9/2008 | Mills | | |
| | peak hours without drawl of active | | Cogen | | |
| | power | | Asso. | | |
| 3 | Third Party Quality checking of works of UPSIDC | 15/4/2009 14/10/2009 | UPSIDC | 112360.0 | - |
| 4 | Development of Transmission | 9/1/2009 | OERC | 294945.0 | Dr Anoop |
| | pricing scheme for Orissa Grid | 30/6/2011 | | | Singh |
| 5 | EHV/UHV Transmission system | 13/7/2011 | UP | 40.0 | Prof SC |
| | planning for UPPTCL- Study cell | 31/12/2012 | PTCL | Lakhs | Srivastava & |
| | IIT Kanpur. | | | | Dr N Gupta |

| 6 | DCEC Daidhani Davyan Mary Dallai | 12/10/2010 | DCEC | 10.0 | Prof SC |
|-----|-----------------------------------|------------------------|---------------------|------------|---------------------|
| 0 | BSES Rajdhani Power, New Delhi | 11/10/2013 | BSES | 10.0 | |
| _ | | | DEGN | lakhs | Srivastava |
| 7 | Course on Development of | 1/4/2012 31/3/2014 | PFC New | 6.7416 | |
| | Distribution Equipments | | Delhi | lakhs | |
| 8 | 33 kV substation design and | 1/4/2013 | Sagar | 21.067 | Er Rajeev |
| | estimation of cost | 31/7/2014 | Univ. | lakhs | Garg |
| 9 | Studies on Voltage stability and | 15/11/2012 | GE, | 10.3933 | Dr Saikat |
| | small signal stability | 31/12/2013 | Bangalore | lakhs | Chakraborti |
| 10 | Vetting of Estimate for | 16/9/2015 | UPSIDC | 69.07 | - |
| | Illumination at IA Trans Ganga | 15/9/2016 | | lakh | |
| | Unnao | | | | |
| 11 | Consultancy work on upgradation, | 15/12/2015 | IIIT | 7.89 | |
| | expansion and redesigning of | 14/12/2016 | Allahab | lakhs | |
| | 33/11/0.4 kV substations/network | | ad | | |
| 12 | Vetting of Estimate for Power and | 25/4/2016 | UPSIDC | 57.25 | - |
| | Lighting Network at IA Trans | 24/4/2017 | | lakh | |
| | Ganga Unnao | | | iuni | |
| 13 | Technical Vetting of Alknanda | 18/6/2016 | AVPL | 3.00 | |
| 15 | Enklave, Avadh Vihar, Avash | 15/6/2017 | TITL | lakhs | |
| | Vikas, Lucknow | | | lakiis | |
| 14 | Course on Advanced and Modern | 10/4/2017 | ETC | 2.76 lakh | Dr A. |
| 14 | Electronics and Machine Drive | 9/10/2017 | Kanpur | 2.70 lakii | Mohapatra |
| 15 | | 1/9/2015 | LDA | 29.07 | Dr Sudhir |
| 15 | Third Party Quality Inspection of | 31/3/2020 | Lucknow | | Dr Sudnir Mishra |
| | JP Narayan International Center, | 51/5/2020 | Luciniow | lakhs | Mishra |
| 1.6 | Gomati Nagar | 1/10/2017 | DOGOGO | 10.00 | |
| 16 | Course on Power System | 1/12/2017 31/3/2018 | POSOCO New Delhi | 10.99 | Dr Vimal |
| | Economics | | | lakh | Kumar |
| 17 | Technical Advice/Vetting of | 24/12/2020 | UPSIDA | 57.20 | Dr |
| | Estimates and Tenders for | 30/12/2023 | | Lakh | Abheejeet |
| | UPSIDA, Kanpur | | | | Mohapatra |

(c) Courses Taught

(At IIT Roorkee, 1996 to 2000)

- o Power System Operation and Control (UG and PG)
- o Extra High Voltage transmission (PG)
- o Power Systems-I (UG)
- o High Voltage Laboratory (UG)
- Power System Protection Laboratory/Tutorial (UG)
- Electrical Science (UG)
- o Electro Magnetic Theory Tutorial (UG)

(At AIT Bangkok, 2001-2002)

- Power System Design and Operation (PG)
- o Power System Dynamics and Stability (PG)
- o Power Sector Management under Deregulation (PG)
- o Rural Electrification and Distributed Generation (PG)

(At IIT Kanpur, 2002 onward)

- Economic Operation and Control of Power System (PG)
- o Power Systems Lecture, tutorial (UG)
- o Introduction to Electrical Engineering Lecture, Laboratory & Tutorial (UG)
- HVDC Transmission Systems (PG)
- o Power System Operation & Management Under Restructured Environment (PG)
- o Electric Machines and Energy Conversion-I & II, Lab & Lectures (UG)
- o HVDC Transmission and FACTS (PG)
- o Simulation of Modern Power Systems (PG)

(At DTU Denmark, 2010)

• Electric Power Network (PG)

(d) Invited Lectures Delivered in Workshops, Courses etc.

| Sl. | Name of workshops, courses etc | Topic of Lectures | Hours |
|-----|---|--|-------------|
| 1 | Industrial Energy Audit, April 23-May 11, 2001, AIT Thailand | Transmission and Distribution | 4.30 |
| 2 | Power System Transient Simulation & Its Applications, 11-14 December 2001, AIT | 1. Fundamentals of Digital Simulation Techniques. | 1.30 |
| | Thailand. | 2. Subsynchrounous Resonance | 1.0 |
| 3 | Organization of the electric supply industry to enhance development, Feb. 8-9, 2002, AIT Thailand. | Competitive power market: International experiences | 1.0 |
| 4 | Power System Operation and Control, May 13-17, 2002, AIT Thailand | Active power and frequency control, Power System Security and Contingency Analysis | 5.45 |
| 5 | Power System Planning, Operation and Management, July 1-19, 2002, AIT Thailand. | Several topics on Power Systems Operation and Management under deregulation. | 20.0 |
| 6 | Rural electrification and Distributed generation, Aug.21-23, 2002, AIT Thailand. | Rural electrification | 5.30 |
| 7 | Advanced Management Program, IIM Lucknow, September 2-21, 2002. | Recent Trends in Transmission Technology | 3.00 |
| 8 | HVDC Transmission and FACTS Technology, December 11-13, 2002, AIT, Thailand | Evolution of HVDC, Converter configuation, Analysis, Faults and Protection, FACTS Role | 6.00 |
| 9 | Rural electrification and Distributed generation, July 9-11, 2003, AIT Thailand. | Rural electrification etc | 5.45 |
| 10 | Invited Lectures in Seq. MTech of UPTU during June/July 2003, 2006 | Neural Networks, Power System restructuring | 2x45, 60 |
| 11 | Electric Power System Operation and Management under Restructured Environment, 21-25 July 2003, IIT Kanpur. | Deregulation, Review, Models, Market power, FACTS | 6.30 |
| 12 | National Power System Conference at IIT Chennai during Dec 27-29 2004 | Power System Restructuring in Indian Context | 1:30 |

| 13 | Democritus Univ. Xanthi, Greece during May 9-13, 2005 | Electric PS operation & dynamics in restructured environment | 24:00 |
|----|--|--|-------|
| 14 | Democritus Univ. Xanthi, Greece during June 4-8, 2007 | Voltage, Frequency and Power flow Control in Electric Power Systems | 24:00 |
| 15 | Asian Institute of Technology Thailand during March 28-April 3, 2011 | Power System Restructuring | 11:00 |
| 16 | Asian Institute of Technology Thailand during May 15-18, 2012 | Power System Management | 20:00 |
| 17 | Power System Operation Corporation, New Delhi, June 15, 2012 | Ancillary Services | 3:00 |
| 18 | DCR Murthal, December 19, 2012 | Emerging Trends in Power Systems | 3:00 |
| 19 | MPEC, Mandhana, Kanpur, Oct., 2013 | Fundamentals of Power Systems | 2:00 |
| 20 | IMS Ghaziabad, October 25, 2013 | Education and Ethics | 1.30 |
| 21 | Anna University, Chennai, May 21, 2015 | Smart Grid Implementation | 1:30 |
| 22 | NIT Hamirpur, HP May 29-30, 2015 | Smart Grid Technology: Present & Future; Advances in Power Systems | 3:00 |
| 23 | United College of Engg & Technology, Allahabad, July 13, 2015 | Emerging Trends in Power Systems | 2:00 |
| 24 | Institution of Engineers (I), Kanpur Local Center, Kanpur, August 9, 2015. | Smart Village | 1:00 |
| 25 | Mechanical Engineering Deptt., IIT Kanpur, August 17, 2015 | Intelligent System Applications in Solving Engineering Problems | 1:00 |
| 26 | Tulas Institute of technology, Deharadun, September 4, 2015 | Smart Grid Solutions | 1:00 |
| 27 | 9 th Workshop for Forum of Regulators, November 22, 2015, IIT Kanpur | Forecasting of Renewable Energy Sources | 1:30 |
| 28 | Faculty Development program , CIT Abu Road, November 27, 2015 | Enhancing Teaching and Research Capabilities | 2:00 |
| 29 | Rajkeeya Engineering College, Ambedkar Nagar, Feb 1, 2016 | Improving the fundamental | 2:00 |
| 30 | ABES Ghaziabad, Feb 13, 2016 | Smart Gird Issues and Challenges | 1:00 |
| 31 | A Three Day Residential Course on Power Market In India - Way Forward March 1, 2016 | Ancillary Services in Electricity Market | 1:30 |
| 32 | Technical Symposium on Publication Ethics, Energy and Environment and Award Ceremony of MTT-S Student Branch Chapter on 23.9.2016 | Understanding Electrical Engineering | 1:30 |
| 33 | Research Paper writing and Publication Ethics, GLA Mathura, 24.09.2016 | Effective writing and publishing Research paper | 1:30 |
| 34 | Newton-Bhabha India-UK advanced training school (IUATS)- Nov 7-17, 2016 | Challenges in smart grid implementation Smart distribution systems- Smart Communities: An Indian Case | 4:50 |

| | | • Smart distribution systems- | |
|----|---|---|------|
| | | Indian Power System beyond 2020 | |
| 34 | Sagar Institute of Engineering & Research, Bhopal, Nov 22, 2016 | Emerging Trends in Electrical Engineering | 1:30 |
| 35 | National University of Singapore | Role of Forecasting in Power System Operation | 1:00 |
| 36 | "Smartgrid: Cyber Physical Energy Systems. IIT Patna, 2-8 Dec 2016 | Estimation of Grid Harmonics in the Presence of Renewable Energy Sources Smart Multi-Terminal DC µ- Grid Control and Operation | 3:00 |
| 37 | Guest Lecture, GL Bajaj, Gr Noida, Feb 9, 2017. | Smart Grid Challenges | 1:30 |
| 38 | IEEE R10 mini-POCO Forum, Bangladesh | Challenges and Issues in R10 Conferences | 2.00 |
| 39 | IEEE workshop on Research Paper Writing and Intellectual Property Rights on 25th March 2017 | Writing effective paper and publishing it | 1:00 |
| 40 | International IEEE Women Symposium on Empowering Women to Develop Confidence and Leadership Quality to Bring Revolution in Society , 25 th March 2017 | Women Empowerment in India: Issues and Challenges | 1:00 |
| 41 | ATAL FDP on Artificial Intelligence and Green Power Technology, KNIT Sultanpur, 4-18 June 2021. | ANN based Wind and Solar Power Forecasting | 2:00 |
| 42 | Challenges and Opportunities in Distribution Network and Microgrid in the Context of Carbon Neutrality, 15 th June 2022, IET China | Smart Multi-terminal DC micro- grid Control | 1:00 |

PRACTICAL EXPERIENCE

Worked as **Assistant Engineer** in U.P. State Electricity Board, at I.I.T. Kanpur Study Cell, India (A State Government Enterprise) from **08.08.88** to **03.07.95** and was responsible for R & D activities relating to Computer Application in Power Systems Planning, Operational & Control. The work was to carry out Power System Studies (i.e. Load Flow, Short Circuit, Stability studies etc.) of U.P. Power System, India where more than 20 research reports were compiled with other officers of Computer Study Cell, IIT Kanpur, India. The old Dec-Version programs were modified to make compatible with PC and user friendly. The Chairman, UP State Electricity Board, India had issued the **appreciation letter** for the work carried there.

Worked as **Assistant Engineer** in Control and Instrumentation Maintenance Division of U.P. State Electricity Board, Obra Thermal Power House, Sonebhadra (UP), India (A State Government Enterprise) from **10.07.95 to 13.06.96**. The main work was to look after the control and instruments of 2x200 MW units during operation shift-C. Since the control and instruments are the heart of any power plant and any trouble/problem may cause tripping of unit, the duty was very important from proper operation of the plant.

* <u>ADMINISTRATIVE EXPERIENCE</u>

- <u>Working as Director, Atal Bihari Vajapayee-Indian Institute of Information</u> <u>Technology & Management, Gwalior -474015 (08.04.2022 to date)</u>
- Worked as Vice-Chancellor, Madan Mohan Malaviya University of Technology Gorakhpur-273010 (28.4.2017 to 27.07.2020)
- Worked as Head of the Department, Electrical Engineering, IIT Kanpur (01.02.2017 to 27.04.20217)

(At IIT Roorkee, 1996-2001)

- 1. Member Post Graduate Academic Program Committee (From Dec. 1996 to Dec. 1998)
- 2. Officer in Charge Power System Protection Laboratory (Dec. 1996 to Oct. 1997)
- 3. Officer in Charge M.E. (Power System Engg.) Class (From Dec. 1996 to Dec. 1998)
- 4. Member Post Graduate Admission Committee (From Dec. 1996 to Dec. 98 & From April 2000 to Dec. 2000)
- 5. Member Planning Committee of EE Department (From Nov. 1997 to Dec. 1998)
- 6. Officer in Charge UG Training Program (From Nov. 1997 to Dec. 1998)

(At AIT Bangkok, 2001-2002)

7. Member, IT Committee (From May 2001 to March 2002) in AIT, Bangkok

(At IIT Kanpur, April 2002 to April 2017 & August 2020 to date)

- 8. Member, DPGC (From May 2002 to 2005, 2010 to 2016)
- 9. Convener, PhD Admission 2003

- 10. Convener M. Tech. admission, 2002
- 11. Member, Institute Works Advisory Committee (From March 2005 to June 2009)
- 12. Warden-in-charge, Hall VIII (From May 2006 to July 2009)
- 13. Member, Advisory committee for Energy Management (From August 2007 to June 2009)
- 14. Vice-Chairman, Council of Wardens, IITK (September 2010 to August 2011)
- 15. Member, CEMMC, IIT Kanpur (September 2010 to December 2012)
- 16. Chairman, Council of Wardens, IITK (July 2011 to December 2012)
- 17. Member, DFAC (07.03.2010 to 31.12.2012 & 01.01.2021 to 07.04.2022)
- 18. Member, Board of Governors, IIT Kanpur (January 2012 to December 2013)
- 19. Member, Green Cell, IIT Kanpur (2014 to Dec 2015)
- 20. Professor-in-Charge, Electrical Works, IIT Kanpur (January 2013 to Dec 2015)
- 21. Member, Environmental Advisory Committee, IIT Kanpur (2014 to Dec 2015)
- 22. Chairman, JEE (Advance) 2016
- 23. Head, Electrical Engineering Department (Feb 2017 to April 2017)

Professional and other Experiences

Current Positions (Others):

- Chairman, Advisory/Expert Committee for UP CST Lucknow, R&D projects (Jan 29, 2022 to date)
- Member, Board of Governors, Graphic Era Hill University (30 July 2018 to date).
- Member, Board of Management, Quantum University, Roorkee (25.06.2021 to date)
- Member, Management of Centre for Green and Renewable Energy, AMU Aligarh (03.09.2021 to date)
- Member, Board of Faculty, TMU Moradabad (07.04.2021 to date)
- IEEE R-10 (West) PES chapters' Coordinator 2023
- Executive Committee Member, IEEE UP Section, IITK Kanpur (2003-to date)
- Council Member, Intelligent System Applications to Power Systems (ISAP).
- Vice-Chairman, Steering Committee, International Conference on Power Systems (ICPS)
- Steering Committee Member, National Power System Conference (NPSC)
- Editor, Transactions of INAE (January 2022 to date)
- Deputy Editor in Chief, Smart Power & Energy Security, Elsevier (Nov 2023 to date)
- Associate Editor, IET Energy Conversion and Economics, UK (Sept 2020 to date)
- Associate Editor, Journal of Modern Power and Clean Energy (2015 to date).
- Editorial Board member, International Journal of Electricity Sector Management, UK
- Editorial Board member, International Journal of Electrical and Power Engineering
- Editor Board member, International J. of Systems Signal Control & Engg Application
- Honorary Editorial Board Member, Int. Journal of Bio-Sciences and Technology.
- Associate Editor (Electrical), Int. Journal of Engineering, Sciences & Technology (Dec 2009 to date)
- Visiting Professor, Universiti Tenaga Nasional (UNITEN), Malaysia.

Past Positions:

• Chairman, Board of Governors, Institute of Engineering &Technology, DRML Avadh University, Ayodhya (Nov 5, 2020 to Nov 4, 2022)

- Chairman, Board of Governors, Faculty of Engineering &Technology, MJP Ruhelkhand University, Bareilly (July 2018 to September 2021)
- Chairman, IEEE India Council 2019 -2020; Immediate Past Chairman, IEEE India Council 2021-2022; IEEE IC Chair-Elect 2017-2018.
- Vice-Chair, IEEE Region 10 Technical Activities 2019-2020
- Member, Board of Governors, IIT Kanpur (Jan. 2014-Dec 2015 & June 2017-July 2020), IMS Engg College Ghaziabad (Oct 2014–Oct 2016); MMMEC Gorakhpur (Dec 2012 to Dec 2013); KNIT Sultanpur (30July 2018 29July 2021), GB Pant Engg College, Pauri (Dec 2016 to July 2022).
- Member, Board of Management, Quantum University, Roorkee (25.06.2021 to 24.06.2023)
- Academic Council members: Graphic Era Hill Univ, Dehardun (Jan. 2011 to July 2018), NSIT Delhi (25Sept. 2017 to 16Oct 2018), KNIT Sultanpur (Oct 2012 to Oct 2014), HBTU Kanpur (Dec 2016 to December 2019), GBTU Lucknow (Oct 2012- Dec 2013)
- Member Senate: MNNIT Allahabad (March 2013 to Nov 8, 2020), MANIT Bhopal (June 2012 to June 2014), IIT Mandi (January 2013 to December 2016), Sant Longowal Institute of Engg & Tech, Longowal (Nov 2016 to 2019), Board of Studies (BoS) Thapar University (Jan 2008 to Dec 2009); Invertis University (Feb 2011 to Feb 2013); GBTU Lucknow (March 2012-March 2014); MMMEC Gorakhpur (August 2013- Dec 2013);
- Member, Board of Studies, NIT Jamshedpur (06.07.2021 to 05.07.2023)
- Member, Institute Quality Assurance Committee, MITS Gwalior (Jan 2017 to Feb 2019)
- RDC Convener (Electrical) GBTU Lucknow (Dec 2010- Dec 2013)
- Member, Advisory committee of UPSERC Lucknow (April 2009- March 2011)
- Chair-Elect 2017-2018, IEEE India Council
- Executive Committee Member, IETE, Kanpur Center (2014-2024)
- Coordinator, IEEE R10 Conference and Technical Seminar (2015 to 2018)
- Executive Committee Member, IE (India), Kanpur Local Center (2006-to 2018)
- Chairman, Institution of Electronics & Telecommunication Engineers, Kanpur Center (2016-2018)
- Chairman, IEEE UP Section, IITK Kanpur (2013-2014)
- Chairman, IEEE PES/IAS Chapter, IEEE UP Section (2012-2013)
- Chairman, Institution of Engineers (India), Kanpur Local Center (2010-2012)
- Vice-Chairman, IEEE UP Section, IITK Kanpur (2011-2012)
- Executive Committee Member, IE (India), UP State Center (2008-2014)
- Treasurer, IEEE UP Section, IITK Kanpur (2005)
- Administrator, IEEE Online Communities (January 2006 to 2016)
- Moderator, IEEE Online Communities (April 2003 to 2016)
- Associate Editor, IEEE Potential (2017 to 2019)
- Associate Editor, International Journal of Electrical Energy Systems
- Editorial Board Editor, International Journal of Renewable Energy Technology
- Editor-in-Chief, Annual Conference on Power, Energy and Electrical Engg (2013)
- Co-Guest Editor, Int. J. of Engineering, Sciences and Technology (2009/10, 2010/11)
- Co-Guest Editor, International Journal of Electricity Sector Management (2009-10)
- Co-Guest Editor, International Journal of Energy Technology and Policy (2005-06, 2007)
- Proof Editor, Asian Journal of Geo-informatics (from Jan 2001 to Sept 2002).

Annexure-B

LIST OF PUBLICATIONS

Publications in Journals:

- SN Singh and SC Srivastava, *Improved Voltage and Reactive Power Distribution Factors* for Outage Studies, IEEE Trans. of Power Systems, Vol.- PWRS-12, No.3, pp. 1085-1093, August 1997. This paper received the Khosla Research Award of University of Roorkee, India (1998).
- 2. SN Singh and SC Srivastava, *Corrective Action Planning to Achieve Feasible Optimal Load Flow Solution*, IEE Proc., Part-C, Generation, Transmission and Distribution, Vol. 142, No.6, pp. 576-582, November 1995.
- 3. SN Singh, PK Kalra and SC Srivastava, *Novel Non-Iterative Load Flow for Voltage Contingency Analysis*, International Journal of Electrical Power & Energy System, Vol. 16, No. 1, pp. 11-16, 1994.
- 4. JK Malhotra, AK Mitra and **SN Singh**, *Analysis of Distribution Losses of Lucknow City*, **published in Journal of The Society of Power Engineers (INDIA)**, Vol. 40 No. 3 & 4, pp. 10-15, July/Oct. 1992.
- 5. **SN Singh** and SC Srivastava, *Improved Contingency Selection Algorithm for Voltage Security Analysis*, **Journal of Electrical Machines and Power Systems**, Vol. 26, No.8, 1998, pp. 855-871.
- 6. L Srivastava, **SN Singh** and J Sharma, *Parallel Self-Organizing Hierarchical Neural Network Based Fast Voltage Estimation*, **IEE Proc. Part -C**, Vol. 145, No. 1 1998, pp. 98-104.
- L Srivastava, SN Singh and J Sharma, *Knowledge Based Neural Network for Voltage Contingency Selection and Ranking*, IEE Proc. Part-C, Vol. 146, No. 6, November 1999, pp. 649-656. This paper received the Khosla Research Award (Gold Medal) from University of Roorkee (2000).
- L Srivastava, SN Singh and J Sharma, *Modular Neural Network Based Fast Voltage Contingency Selection*, the Journal of Institution of Engineers (India), Electrical Engg. Division, Vol. 80, No.-EL-3, pp. November 1999, pp.118-125.
- 8. L Srivastava, SN Singh and J Sharma, *A hybrid Neural Network Model for Fast Voltage Contingency Screening and Ranking*, International Journal of Electric Power and Energy Systems, Vol. 22, No.1, January 2000, pp. 35-42.
- 9. L Srivastava, **SN Singh** and J Sharma, *Estimation of Loadability Margin using Parallel Self Organizing Hierarchical Neural Network*, **International Journal of Computer and Electrical Engineering**, Vol. 26, No. 2, February 2000, pp. 151-167.
- 10. KN Srivastava, **SN Singh** and SC Srivastava, *Effect of Multiple Equilibria on Power System Stability*, **Electric Power Systems Research**, Vol. 55, No. 3, September 2000, pp. 165-172.

- 11. L Srivastava, **SN Singh** and J Sharma, *Comparison of Feature Selection Techniques for ANN Based Voltage Estimation*, **Electric Power Systems Research**, Volume 53, No. 3, March 2000, pp. 187-195.
- 12. SN Singh, L Srivastava and J Sharma, *Fast Voltage Contingency Screening and ranking using Cascade Neural Network*, Electric Power Systems Research, Volume 53, No. 3, March 2000, pp. 197-205.
- 13. SN Singh and AK David, *Towards Dynamic Security Constrained Congestion Management in Open Power Market*, IEEE Power Engineering Review, August 2000, pp.45-47.
- SN Singh and AK David, Optimal Transmission Dispatch with Optimizing FACTS Device Locations in Open Power Market, Journal of Automation of Electric Power Systems (China), Vol. 25, No.4, February 2001, pp. 20-25.
- 15. SN Singh and AK David, *Optimal Location of FACTS Devices for Congestion Management*, Electric Power Systems Research, Vol. 58, No.2, July 2001, pp. 71-79.
- 16. **SN Singh** and KN Srivastava, *Evolving Artificial Neural Network Models for Voltage Contingency Ranking*, **European Transaction on Electric Power (ETEP)**, Vol. 12, No.2, March/April, 2002, pp. 127-133.
- SN Singh, Estimation of Degree of Insecurity of Power System Using Functional Link Network, Science and Engineering Journal (Brazil), Vol. 9, No.2, July/December 2000, pp. 10-15.
- 18. SN Singh, *Challenges and Initiatives in Power Engineering Education*, IEEE Computer Applications in Power, Vol. 14, No. 2, April 2001, pp. 36-41.
- 19. KS Verma, SN Singh and HO Gupta, *Optimal Location of UPFC for Congestion Management*, Electric Power Systems Research, Vol. 58, No.2, July 2001, pp. 89-96.
- 20. SN Singh and NK Triptahi, *Writing and Publishing a Research Paper in Professional Journals: A Systematic Approach*, Asian Journal of Geoinformatics, Vol. 1, No. 3, March 2001, pp. 87-90.
- 21. L Srivastava, SN Singh and J Sharma, *Parallel Self-Organising Hierarchical Neural Network Based* Fast Real Power Flow Estimation" Journal of the Institution of Engineers (India), Vol. 82, May 2001, pp. 16-20.
- 22. SN Singh and AK David, A New Approach for Placement of FACTS Devices in Open Power Market, IEEE Power Engineering Review, Vol. 21, No. 9, September 2001, pp. 58-60.
- 23. SN Singh and KN Srivastava, *Degree of Insecurity Estimation of Power System Using Functional Link Network*, European Transaction on Electric Power, Vol. 12, No. 5, September/October 2002, pp. 353-360.
- 24. SN Singh and AK David, *Dynamic Security in Open Power Market Dispatch*, Electric Power Components and Systems, Vol. 30, No.3, 2002, pp 315-330.
- SN Singh and AK David, Optimal Dispatch in Dynamic Security Constrained Open Power Market, International Journal of Electrical Power and Energy Systems, Vol. 24, No. 5, August 2002, pp. 363-369.

- 26. **SN Singh** and GK Singh, *Graph Theory Based Dynamic Simulation of HVDC Link with GTO Inverter*, **the Science and Engineering Journal**, Vol. 10, No.2, July/December 2001, pp. 29-38.
- 27. SN Singh, "Emerging Issues and New Challenges in Electric Power Systems", International Energy Journal, Vol. 2, No.2, December 2001, pp.53-66.
- 28. SN Singh, KG Upadhyay and DS Chuahan, *Investigation into Generation Excitation Effect on Electricity Pricing in Open Power Market*, the Science and Engineering Journal, Vol. 11, No.1, January/June 2002, pp. 111-116.
- 29. SN Singh and AK David, *Congestion Management in Dynamic Security Constrained Open Power Markets*, International Journal of Computer and Electrical Engineering, Vol. 29, No. 5, July 2003, pp. 575-588.
- L Srivastava, SN Singh and J Sharma, Parallel Self-Organising Hierarchical Neural Network based Estimation of Degree of Voltage Insecurity, International Journal of Computer and Electrical Engineering, Vol. 29, No. 5, July 2003, pp. 589-602.
- SN Singh, A Practical Approach to Teach Power System Transients into the Electrical Engineering Curriculum, International Journal of Electrical Engineering Education, UK, Vol. 40, No.2, April 2003, pp. 144-157.
- 32. T Jain, L Srivastava and **SN Singh**, *Fast Voltage Contingency Screening using Radial Basis Function Neural Network*, **IEEE Trans. on Power Systems**, Vol. 18, No. 4, November 2003, pp. 1359-1366.
- 33. Ashwani Kumar, SC Srivastava and **SN Singh**, *A Zonal Congestion Management Approach Using Real and Reactive Power Scheduling*, **IEEE Trans. on Power Systems**, Vol. 19, No. 1, February 2004, pp. 554-562.
- 34. Ashwani Kumar, SC Srivastava and SN Singh, *Available Transfer Capability Assessment in a Competitive Electricity Market using Bifurcation Approach*, IEE Proc. on Generation, Transmission and Distribution, Vol. 151, No. 2, March 2004, pp. 131-140.
- 35. Ashwani Kumar, SC Srivastava and SN Singh, *Available Transfer Capability (ATC)* Determination in a Competitive Electricity Market using Distribution Factors, Electric Power Components and Systems, Vol. 32, No.1, September 2004, pp. 927-939.
- Ashwani Kumar, SC Srivastava and SN Singh, A Zonal Congestion Management Approach Using AC Transmission Congestion Distribution Factors, Electric Power System Research, Vol. 72, No. 1, December 2004, pp. 85-93.
- JG Singh, V Pant and SN Singh, Modeling of Generalized UPFC for Suitable Location and Power Flow Control, Iranian Journal of Electrical and Computer Engineering, Vol. 3, No.2, pp.103-110, 2004.
- 38. **SN Singh** and SC Srivastava, *Status and Future Directions of Electric Power Industry Restructuring in India*, **CPRI R&D Journal**, Vol. II, No.1, 2005.
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- 509. D Saxena, SN Singh and KS Verma, *Denoising of Power Quality Events Using Wavelets*, National Seminar in Recent Advances in Electrical Power and Energy System Management (RAEPESM-2011), March 25-26, 2011, MMMEC Gorakhpur.
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- 517. Shikha Chittora and SN Singh, Coherency Based Dynamic Equivalencing of Electric Power System, 18th National Power Systems Conference, IIT Guwahati, December 18-20, 2014.
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- 526. SC Srivastava, PK Kalra and SN Singh, 'Discussion to the paper by M. Norooziaan and G. Anderson, *Power Flow Control by use of Controllable Series Component*, IEEE Trans on Power Delivery, Vol. 8 No. 3, pp. 1420-1429, July 1993.
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- 528. KN Srivastava, **SN Singh** and SK Joshi, Discussion of IEEE paper #SM 515-7~PWRS titled A Generation Rescheduling Method to Increase the Dynamic Security of Power System, **IEEE T-PWRS Feb 95**.
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- 530. SK Joshi, A Chandramouli, SN Singh and KN Srivastava, Discussion of IEEE paper # 94 WM 219-6~PWRS titled *Static Security in Power System Operation in Fuzzy Real Load Conditions*, IEEE T-PWRS Feb 95.
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- 533. **SN Singh**, KN Srivastava and SK Joshi, Discussion of IEEE paper # SM 537-1 PWRS titled A *Hybrid Tool to Assist the Operator in Reactive Power/Voltage Control and Optimization*, **IEEE T-PWRS** May Vol-10, N0.2, pp. 753-759, May 1995.
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Invited Lectures/papers

- 537. SN Singh, *Role of FACTS Devices in Competitive Power Market*, Workshop on Deregulation in Power Industry organized by IIT Bombay, November 18-19, 2002.
- 538. SN Singh, *Power System Restructuring Models*, Workshop on Deregulation in Power Industry organized by IIT Bombay, November 18-19, 2002.
- 539. SN Singh, Power System Restructuring: An Introduction, QIP sponsored short term course on Electric Power System Operation and Management in Restructured Environment, IIT Kanpur, 21-25 July 2003, pp. A.1-A.14.
- 540. SN Singh, *Electric Utility Restructuring: International Experiences*, **QIP sponsored short term course on Electric Power System Operation and Management in Restructured Environment, IIT Kanpur**, 21-25 July 2003, pp.A.15-A.38.
- 541. SN Singh, Power System Restructuring Models, QIP sponsored short term course on Electric Power System Operation and Management in Restructured Environment, IIT Kanpur, 21-25 July 2003, pp. A.39-A.56.
- 542. SN Singh, *Market Power*, QIP sponsored short term course on Electric Power System Operation and Management in Restructured Environment, IIT Kanpur, 21-25 July 2003, pp.A.57-A70.
- 543. SN Singh, *Role of FACTS Devices in Competitive Power Market*, QIP sponsored short term course on Electric Power System Operation and Management in Restructured Environment, IIT Kanpur, 21-25 July 2003, pp.A.71-A.104.
- 544. SN Singh, Future of FACTS Controllers in Restructured Power System, National Conference on Modern aspect of FACTS and its Applications at Coimbatore, August 29-30, 2003, pp. I-XI (Keynote paper).
- 545. SN Singh, *Evolutionary Computation*, ISTE sponsored short term course on ANN and Fuzzy Logic Application to Electrical Engineering at MITS Gwalior, January 19-25, 2004.
- 546. SN Singh, Artificial Neural Network: An Introduction, ISTE sponsored short term course on ANN and Fuzzy Logic Application to Electrical Engineering at MITS Gwalior, January 19-25, 2004.
- 547. SN Singh, Power System Restructuring: An Introduction, ISTE sponsored short term course on ANN and Fuzzy Logic Application to Electrical Engineering at MITS Gwalior, January 19-25, 2004.
- 548. SN Singh, Power System Security in Deregulated Environment", National Seminar on Voltage Stability (SVC'06), at Arulmigu Kalasalingam College of Engineering, Tamil Nadu, October 13-14, 2006 (Keynote Paper).

Studies/Reports

- 1. S.N. Singh, Sachchidanand and G.K. Dubey: "Performance Study of HVDC Link with GTO Inverter", Technical Report No. DOE/IITK/7/89/3, Department of Electrical Engineering, IIT Kanpur, 1989.
- 2. S.N. Singh, "Mitigation of Greenhouse Gases From Power Sector in India Through Efficient Demand Side Options: An Integrated Resource Planning Perspective" Energy Program, School of Environment, Resources and Development, Asian Institute of Technology, Bangkok, Thailand, August 1997.
- 3. S.N. Singh, "Optimal location of FACTS devices in Competitive Power Market" Asian Institute of Technology, Bangkok, Thailand, March 2002.
- 4. S.N. Singh and S.C. Srivastava, "Enhancement of Power Systems' Performance using Flexible AC Transmission Systems (FACTS) in Competitive Power Market", Central Power Research Institute Bangalore, India, June 2006.
- 5. SN Singh and SC Srivastava, Assessment and Analysis of Electric Power Quality Problems using Artificial Intelligence and Advanced Digital Signal Processing Techniques, DST New Delhi, June 2008.

Following studies were carried out and reports were compiled with other officers of U.P. State Electricity Board, India.

- 6. Power System Analysis for Complex Primary Transmission and Transformation System. (1989)
- 7. State Electricity Board System Studies: Anapara- Unnao 765 kV Line. (1989)
- 8. Capacitor Requirement of U.P.S.E.B in year 1991-92. (1990)
- 9. Evacuation System of Tehri-Koteshwar Hydro Complex. (1990)
- 10. Fault Analysis of Complete U.P. Power System: 552 Transformation Buses of Primary Systems. (1990)
- 11. System Studies for 1994-95. (1990)
- 12. Analysis of Distribution Losses of Lucknow Electricity Supply Undertaking System, India. (1991)
- 13. Transmission System Requirement for Evacuation of Anapara-B Project Power. (1991)
- 14. Transmission System for Evacuation of Power from Singrauli and Rihand Super Thermal Power Station of National Thermal Power Corporation.(1991)
- 15. Short Circuit Studies of 2000 AD. (1991)
- 16. Power Loss in Transmission System for 1991-92. (1991)
- 17. Evacuation System for Belthara Road Power Station of 2000 AD. (1992)
- 18. Fault Level of Tehri Hydro Development Corporation with U.P.S.E.B System. (1992)
- 19. Substation requirement of U.P. Power System with NTPC. (1992)
- 20. Start-up Power for Obra, Anapara and Singrauli Thermal Power Station. (1992)
- 21. Evacuation System of Anapara-C. (1993)
- 22. MW Power Flow Sultanpur 220 kV Substation for M/s Usha Rectifier. (1993)
- 23. 8th Five Year Plan (1996-97) Power System. (1994)
- 24. Revised Northern Capital Region System Power Evacuation. (1994)
- 25. Short Circuit Studies for year 2001-02. (1995)

Conferences/Courses/Symposia/Workshops Attended

- 1. One month thermal training at Thermal Training Institute, Obra and one month management training at Staff College Dehradun (UP).
- 2. National Seminar on Multi-Phase System, organized by IE (INDIA) & IIT Kanpur, March 17-18, 1989, IIT Kanpur.
- 3. National workshop on Emerging Technology and their Application in Power Apparatus and Systems, December 12-14, 1989, IIT Kanpur.
- 4. Fifth Indian Engineering Congress, December 16-18, 1990, IIT Kanpur.
- 5. Seminar on Role of Professional Engineers in Emerging Information Age, April 6-7, 1991, I.E. Lucknow.
- 6. Short Term Course on Recent Advances in Power System and Use of Computer Technology, Sponsored by UPSEB Training & HRD Directorate Lucknow, May 6-11, 1991, IIT Kanpur.
- 7. Symposium on Compensation Techniques, October 22-23, 1991, Bharat Heavy Electrical Ltd. (BHEL), Bhopal.
- 8. Fifth National Workshop on HVDC Transmission, Oct 13-17, 1992, IIT KANPUR.
- 9. A one-week short-term course on Artificial Neural Network Applications to Power Systems conducted at Indian Institute of Technology, Kanpur.
- 10. 58th R & D Session of Central Board of Irrigation and Power (CBIP), April 18-22, 1993, Bangalore.
- 11. All India seminar on Grid Stability and Load Management with MW & MVAR Control (GRIDSAFE-93), October 29-30, 1993, Nagpur.
- 12. Seventeenth National System Conference organized by Indian Institute of Technology, Kanpur, December 24-26, 1993.
- 13. 59th R & D Session of CBIP, February 1-4, 1994, Calcutta.
- 14. All India Seminar on Digital Protection of Power Apparatus and Systems organized by Indian Institute of Technology, Kanpur, March 11-12, 1994.
- 15. A two-day workshop on New Perceptions in Power System Stability conducted at Indian Institute of Technology, Bombay, July 28-29, 1994.
- 16. Eighth National Power System Conference at Indian Institute of Technology, New Delhi, December 14-17, 1994.
- 17. An Intensive Course on Modern Trends in Power System Protection organized by Indian Institute of Technology, Kanpur, May 8-13, 1995.
- 18. National workshop on Voltage Instability in Electric Power System and FACT Technology organized by IEEE UP-Section and CBIP New Delhi at I.I.T. Kanpur (INDIA), July 20-22, 1995.
- 19. International Conference on Water & Energy 2001 in the 60th R & D session of C.B.I.P., New Delhi, October 9-12, 1995.
- 20. Ninth National Power System Conference at Indian Institute of Technology, Kanpur, Dec. 17-21, 1996.
- 21. International Conference on Computer Application in Electrical Engg. A Recent Advances (CERA97) organized by University of Roorkee, India, 8-11 September 1997.
- 22. 2nd International R& D Conference of C.B.I.P. New Delhi at Vadodara, 21-24 October 1997.
- 23. All India Seminar on Electric Energy System Management- Indian Scenario, at Roorkee University, Roorkee, September 4-5, 1998.
- 24. 10th National Power System Conference at M.S. University Vadodara, October 14-16, 1998.
- 25. Symposium on Open Access at H.K. Polytechnic University, Hong Kong, June 1, 1999.
- 26. Workshop on Power System Restructuring at China Light and Power Co. Hong Kong, 1999.
- 3rd IEEE International Conference on Power Electronics and Drive Systems, Hong Kong, July 26-29, 1999.
- 28. IEEE Power Engineering Society, Winter Power Meeting, 2000, Singapore, January 23-27, 2000.
- 29. National Conference on Biomedical Engineering, April 21-22, 2000, Roorkee India.

- 30. Power Quality Synergy[™] Asia 2001, May 14-16, Bangkok, Thailand
- 31. IEEE Power Engineering Society, Summer Power Meeting, Vancouver, Canada, July 15-19, 2001.
- 32. Asia Regional Seminar on Market transformation: capitalizing on energy Efficient Technologies, Organized by International Institute of Energy Conservation, Thailand, 23-24 July 2001, Bangkok.
- 33. Siemens Open House (invited), Thailand, August 30, 2001,
- 34. 4^{rth} IEEE International Conference on Power Electronics and Drive Systems, Bali, Indonesia, October 22-25, 2001.
- 35. 1st Eco-Energy and Materials Science and Engineering Symposium, November 22-23, 2001, Rajamangala Institute of Technology, Thailand.
- 36. Power System Transient Simulation & Its Applications, 11-14 December 2001, AIT Thailand. (Resource Person)
- 37. Organization of the electric supply industry to enhance development, Feb. 8-9, 2002, AIT Thailand. (**Resource Person**)
- 38. National Conference on Modern aspect of FACTS and its Applications at Coimbatore, India, August 29-30, 2003. (Keynote Speaker)
- 39. 12th ISAP03, Lemnos, Greece, 31st August- 3rd September 2003.
- 40. ISTE sponsored short term course on ANN and Fuzzy Logic Application to Electrical Engineering at MITS Gwalior, January 19-25, 2004. (Keynote Speaker)
- 41. International Conference on Electric Utility Deregulation and Restructuring and Power Technologies, Hong Kong during 5-8 April 2004. (**Panelist**)
- 42. International Conference on Power System during Nov 3-5, 2004 in Kathmandu, Nepal,
- 43. 13th National Power System Conference, IIT Madras (Chennai), December 27-30, 2004 (**Tutorial Speaker**).
- 44. ISAP05, Washington, USA, November 6-10, 2005.
- 45. International Conference on Future Power System, Netherlands, November 16-18, 2005.
- 46. National Conference on Electric Power Technology, Management and IT Application, MMMEC Gorakhpur, February 17-18, 2006 (**Keynote Speaker**)
- 47. National Conference on Technical Challenges in Power Systems, KNIT Sultanpur, March 24-25 2006. (**Tutorial Speaker**)
- 48. IEEE Power India Conference Delhi, April 10-12, 2006 (Session Chairman)
- 49. International Conference on Energy, Efficiency and Environment, UPTU Lucknow, June 10-11, 2006 (Organizing committee member, Technical Committee Chairman, Session Chairman)
- 50. IEEE Power Engineering Society, General Meeting, Montreal, Canada, June 18-22, 2006. (Panelist)
- 51. National Seminar on Voltage Stability (SVC'06), Arulmigu Kalasalingam College of Engineering, Tamil Nadu, October 13-14, 2006. (Keynote Speaker)
- 52. Workshop on Laboratory Teaching in Electrical Engineering (LTEE-06), KNIT Sultanpur, India, November 24-26, 2006 (Guest of Honor, Valedictory session).
- 53. AICTE Sponsored National Conference on Advances in Electrical Engineering, MITS Gwalior, Indian, November 29-30, 2006. (**Keynote Speaker, Inaugural Session**)
- 54. Short-term course on Power System Control, Stability and Operation, Andhra University College of Engineering, Vishakhapattanam, October 25-27, 2007, (**Guest Lectures**)
- 55. 14th International Conference on Intelligent System Applications to Power Systems (ISAP07), 5 – 8 November, 2007, Kaohsiung, Taiwan (**Best Paper Award**).
- 56. 2nd International Conference on Power Systems (ICPS2007), CPRI Bangalore, 12-14 December 2007 (Session Chairman)
- 57. 2nd Workshop on Laboratory Teaching in Electrical Engineering (LTEE-08), KNIT Sultanpur, India, Feb 28-29, 2008 (**Key Note speaker**).
- 58. AICTE-ISTE course on "Recent Trends in Power System' at NERIST, Nirjuli, Itanagar, June 23-27, 2008. ((**Key Note speaker**).

- 59. All India Seminar on "Energy Management in Indian Perspective; Efficiency Improvement and Energy Conservation in Power & Utilities & Emerging Technologies in the Alternative Energy for Power Generation" on October 17-19, 2008 at IE(I), Lucknow (**Key Note speaker**).
- 60. 3rd National Frontiers in Engineering, Oct. 24-25, 2008, IIT Madras. Theme IV Infrastructure (Participants).
- 61. Colloquium for Humboldt Alumni in the Engineering Sciences in India, New Delhi / INDIA, 31 October - 2 November, 2008.
- 62. IEEE Conference & Exhibition on Control, Communication and Automation, INDICON 2008, IIT Kanpur, 11-13 December, 2008 (Session Chairman)
- 63. 15th National Power System Conference, IIT Bombay (Mumbai), December 16-18, 2008.
- 64. GRIDTECH 2009 Conference and Exhibition, PGCIL, New Delhi, January 29-30, 2009 (Invited attendee).
- 65. National Seminar on Non-Conventional Energy Resources & Its Application (NCERU09), February 27-28, 2009, KNIT Sultanpur (Keynote Speaker, Panelist)
- 66. IEEE General Meeting, July24-28, Calgary, Canada (Panelist).
- 67. NWPC 2009, September 10-11, Bornholm, Denmark.
- 68. 15th International Conference on Intelligent System Applications to Power Systems (ISAP07), 8-12 November, 2009, Curitiba, Brazil.
- 69. Course on MATLAB Application to Electrical Engineering, 14-16 December 2009, KNIT Sultanpur (Guest Speaker).
- 70. International Conference on Autonomous and Intelligent Systems (AIS 2010) June 21-23, 2010, Povoa de Varzim, Portugal.
- 71. International Conference on the European Energy Markets (EEM10), June 23-25, 2010, Madrid, Spain.
- 72. IEEE General Meeting, July25-29, 2010, Minneapolis, USA (Organizing Chairman of one Panel, Panelist in two other panels).
- 73. 4rth IASTED Power and Energy Conference, Phuket, Thailand, Nov. 24-26, 2010 (Session Chairman)
- 74. Two-day Indo-Canadian Workshop on Urban Electric System Integration with PHEV Charging stations and solar farms, Anna University, Chennai, Jan 6-7, 2011 (**Invites Speaker**)
- 75. Workshop On *Data Mining---Research Issues, Recent Trends & PASW Modeler 12.0(R) Based Implementation,* IP University,, Delhi, March 4-5, 2011 (Keynote Speaker)
- 76. National Conference on *Emerging Trends in Engineering and Technology*, Shree L R Tiwari College of Engineering, Mumbai, March 11,2 2011 (Guest of Honor).
- 77. National Conference in *Recent Advances in Electrical Power and Energy System Management*, MMMEC Gorakhpur, March 25-26, 2011 (Keynote speaker)
- 78. IEEE General Meeting, July 24-28, 2011, Detroit, USA (Two research papers, one panel).
- 79. 2nd AIT-PEA International Conference & Utility Exhibition on Power and Energy Systems: Issues and Prospects for Asia (ICUE 2011), September 28-30, Pattaya, Bangkok (**Keynote speaker**)
- 80. Training program on Ancillary Services in Power System, organized by National Load Dispatch Center, New Delhi during September 21-22, 2011.
- 81. All India Seminar on Power System Management at IE(I) Guwahati during October 14-15, 2011 (Keynote Lecture).
- 82. International Workshop on "Power Quality Issues and Challenges" (PQ Issues in Electrical Systems and challenges for RE sources in Grid Integration), November 18-19, 2011, CPRI Bangalore (Key Note Speaker).
- 83. Workshop on Electrical and Power Engineering during 9-13 December 2011, Jamia Milia Islamia Univ. Delhi (**Expert Lecture**).
- 84. STC on "Electricity Market and design", MNIT Jaipur, December 19-23, 2011 (Expert Lecture).
- 85. STC on Renewable Energy & Energy Security: Trends and challenges (under TEQIP), 16-20 Jan 2012, MANIT Bhopal (**Expert Lecture**).

- 86. National Conference on "Emerging Trends in Electrical, Instrumentation & Communication Engineering (ETEIC-2012)" 6th & 7th April 2012, Anand College of Engineering, Agra (Key Note Speaker).
- 87. Workshop on Ancillary Services in Indian System, organized by POSOCO, New Delhi during June 15, 2012 (**Expert Lecture**).
- 88. DST-NWO Workshop on Smart Energy Systems held during September 24-28, 2012 at TU Deft, Netherlands (**Invited Speaker**).
- 89. 2012 International Conference on Renewable Energy and Policy held during 11-15 November 2012 at National Taiwan University in Taipei (**Invited Guest**)
- 90. 17th National Power Systems Conference (NPSC-2012) held during December 12-14, 2012 at Department of Electrical Engineering, IIT (BHU) Varanasi (Session Chairman).
- 91. 2nd International Conference on Power, Control and Embedded Systems (ICPCES-2012) held during December 17-19, 2012 at Motilal Nehru National Institute of Technology, Allahabad (**Key Note speaker, Session Chairman**)
- 92. 5th IEEE Power India 2012 Conference held during 18-22 December at DCRUST, Murthal, Sonepat, (**Tutorial speaker**).
- 93. India-UK Workshop on Smart Grid, DTU Delhi, 18th Feb 2013 (**Resource Person**).
- 94. IEEE R-10 meeting, Chiang Mai, Bangkok during March 2-3, 2013. (IEEE UP Section chairman)
- 95. National seminar on "*Future of Electric Power Sector: Issues and Challenges*, 'FEPSIC2013' Galgotias College of Engineering and Technology, Greater Noida, 16 March 2013 (**Key note speaker**)
- 96. Seminar on Emerging Trends on Engineering and Technology, Vishwasaraiya Group of Institutions, Dadri, March 16-17, 2013 (Guest of Honor, Inaugural function & Chief Guest, valedictory function)
- 97. International Scientific Seminar India-UK on Exploring Beyond the Frontiers to Build A smarter Grid, Coventry University, 19-20 March 2013 (**Speaker**)
- 98. Workshop on Advanced Power Systems Operation Protection and Control, RVCE Bangalore, March 25-28, 2013 (Chief Guest of Inaugural function and Key note speaker)
- Workshop on Industry-Academia Relation, IEEE PES Bangalore Chapter (REVA college), 26th March 13 (Panelist)
- 100. GRIDTECH 2013 Conference and Exhibition, PGCIL, New Delhi, April 3-5, 2013 (Invited attendee).
- National Conference on Trends in Signal Processing & Communication, BIT Muzaffarnagar, 12-14, 2013 (Chief Guest and Key note speaker).
- 2nd Students' Conference on Engineering and Systems (SCES 2013), MNNIT Allahabad, April 12-14, 2013 (Expert Lecture).
- 103. National Conference on Microwaves Antennas and Remote Sensing (MARS), GEHU, Dehradun, June 7-8, 2013 (Guest of Honor).
- 104. 17th International Conference on Intelligent System Applications to Power Systems (ISAP13), 1-4 July 2013, Tokyo Japan (Session Chairman).
- 105. 1st Annual International conference on Power, Energy and Electrical Engineering (PEEE), Singapore during August 26-27, 2013 (**Keynote Speaker, Editor-in-Chief**).
- 106. Workshop on Distributed Generation and Power System Restructuring, August 30-31, 2013, Udaipur (Chief Guest, Keynote speaker)
- 107. National Seminar on "Advances in Power Systems (NSAPS-2013), September 07, 2013, KNIT Sultanpur, (Guest of Honor, Keynote speaker)
- 108. Seminar on Renewable Energy Based Power Generation: Options and Challenges, September 14, 2013, MITS Gwalior (**Chief Guest, Keynote speaker**)
- 109. Seminar on Distributed Generation: The Power Paradigm for New Millennium, September 28-29, 2013, UEM, Kolaghat, (Guest of Honor, Keynote speaker)

- 110. International Conference on Computer Applications in Electrical Engineering-Recent Advances (CERA13) October 3-5, 2013, IIT Roorkee (**Plenary Speaker and Session Chairman**)
- 111. 5th International Conference on Power and Energy Systems (ICPS), October 28-30, 2013, Kathmandu, Nepal (**Session chairman**).
- 112. Indicon13, IIT Bombay, December 13-16, 2013 (Special Invitee)
- 113. 2013 International Conference on Control, Automation, Robotics and Embedded Systems (CARE
 13), IIITDM Jabalpur, December 15-17, 2013 (Keynote Speaker and Session Chairman)
- 114. National Conference on Electric Power, and Intelligent Control Systems (EPICS), Galgotias College of Engineering and Technology, Greater Noida during March 28-29, 2014 (Chief Guest, Keynote speaker)
- 115. National Conference on Computer Intelligence and Robotics (NICCIR-14)" ABES Engineering College, April 4-5, 2014 (Key Note Speaker)
- 116. Seminar on Power Quality, ABESIT Noida during May 3-5, 2014 (Guest of honor, Keynote speaker)
- 117. Three-day Residential Training Program on "Power Procurement Strategy & Power Exchanges" July 28-30, 2014 at IIT Kanpur (**Resource Person**)
- 118. Workshop on Power System Operation and Electricity Market in India, POSCOCO, New Delhi on August 01, 2014 (**Keynote Speaker**)
- 119. Workshop on MATLAB for Engineers, BSACET, Mathura, 29-30 September 2014 (Chief Guest and Key Note Speaker).
- 120. 3rd International Conference on Reliability, Infocom Technology and Optimization (ICRITO'2014) during Oct 8-10, 2014 at Amity University, Noida, India (**Chief Guest**)
- 121. National Conference on Electrical, Electronics, and Computer Engineering, IEEE CALCON2014, 7-8 November 2014, Kolkata (**Key Note Speaker**).
- 122. 6th IEEE Power India International Conference (PIICON-2014), during 5-7 December 2014, Delhi Technological University (DTU), New Delhi, India (Session Chair).
- 123. 3rd International Conference on Power, Control and Embedded Systems (ICPCES-2014) held during December 26-28, 2014 at Motilal Nehru National Institute of Technology, Allahabad (Key Note speaker)
- 124. IEEE R10 Technical Seminar on 25th January, Kathmandu Nepal (Organizing Coordinator).
- 125. Workshop on "Advances in Optimization Techniques and Their Applications in Power Systems (WAOTAPS-2015), February 20-21, 2015, KNIT Sultanpur, (**Keynote Speaker**)
- 126. International Conference of Science and Technology-2015, Feb. 27-28, 2015 at SRMS College of Engineering & Technology, Bareilly (**Keynote speaker**)
- 127. Technical Seminar in American International University-Dhaka, Bangladesh, 9th March, 2015, (Keynote Speaker)
- 128. International Conference on Advances in Computer Engineering & Applications-2015, IMS Engineering Ghaziabad, March 19-20, 2015 (Guest of Honor)
- First UP Section Conference International Conference on Energy Economics and Environment ICEEE2015), During March 26-28, 2015 at Galgotias College of Engineering & Technology Greater Noida, (General Chair, Tutorial Speaker)
- 2nd National Conference on Recent Advances in Communication, Electronics and Electrical Engineering (RACE-2015) from 27th-28th March, 2015 at I.T.S Engineering College, Greater Noida (Invited Speaker)
- GRIDTECH 2015, 5th Conference and Exhibition, PGCIL, New Delhi, April 8-10, 2015 (Session Chair)
- 132. 2nd National Conference on Advances in Power and Energy Systems, April 10-11, 2015, KNIT Sultanpur (**Keynote Speaker**).
- 133. Workshop on Transmission Systems, May 18-20, 2015, PMTI BHEL Noida (Keynote Speaker).
- 134. National Workshop on Computation Intelligence Application to Smart grid, May 28-30, 2015, IIT Mandi (**Keynote Speaker**).

- 135. TEQIP-II sponsored Faculty Development Programme on Recent Advances and Challenges in Power & Energy for Sustainable Growth, June 1 –5, 2015 at Electrical Engineering Department of DTU Delhi (**Guest of Honor and Invited Speaker**)
- IEEE R10 Student, Young Professional & Women in Engineering Congress (SYWC 2015), July 9-12, 2015 Colombo Sri Lanka (Invited Speaker)
- 137. IEEE Panel of Conference Organizers (IEEE POCO), July 16-18, 2015, Glasgow, UK (Invited Attendee from R10).
- 138. International Conference on Smart Grid Technologies 2015 (ICSTG 2015), August 6-8, 2015, Amritanagar, Coimbatore (**Tutorial Speaker & Guest of Honor**).
- International Solar Energy seminar 2015, August 21-22, 2015, Galgotias College of Engineering & Technology, Greater Noida, UP (General Chair)
- 140. 4rth International Conference on Reliability, Infocom Technologies and Optimization (ICRITO) (Trends and Future Directions), September 2-4, 2015, Amity University, Noida (Keynote Speaker)
- 141. 1st International Conference on Next Generation Computing Technologies (NGCT-2015) (Current and Future Trends), University of Petroleum and Energy Studies, Deharadun, September 4-5, 2015 (**Keynote Speaker**).
- 142. IEEE R10 TENCON 2015, Nov 1-4, 2015, Macau (Guest speaker)
- 143. National workshop on Power Electronics (NWPE2015), Electrical Engg. Dept. Delhi Technological University, New Delhi, November 6-7, 2015 (Keynote Speaker).
- 144. National Workshop on Advance Application of RTDS in Power Engineering Research & Controller Validation, IIT Kanpur, November 20-21, 2015 (**Panelist**)
- 145. First International Conference on Computing, Communication and Security (ICCCS- 2015), Mauritius, Dec 4-5, 2015 (General Chair and Keynote Speaker).
- 146. 2nd UP Section Conference International Conference on *Electrical, Computer & Electronics,* December 4-6, 2015 at IIIT Allahabad, India (2nd UP CON 2015) (General Chair and Mini-POCO speaker).
- 147. 9th IFAC Symposium on Control of Power and Energy Systems (CPES) 2015, IIT Delhi, December 9-11, 2015 (Session Chair).
- 148. Second International Conference "Control, Instrumentation, Energy and Communication-CIEC 16" during January 28-30, 2016, at Kolkata Univ., India (Keynote Speaker)
- 149. 3rd International Conference on Signal Processing and Integrated Networks (SPIN) 2016, Feb 11-12, 2016, Amity Univ, Noida. (**Guest of Honor**)
- 150. 2nd IEEE International Conference on Computational Intelligence & Communication technology CICT-2015,12-13th, Feb, 2016 ABES Ghaziabad, (**Keynote speaker**)
- 151. International Conference on Emerging Trends in Electrical, Electronics & Sustainable Energy Systems (ICETEESES-16)", KNIT Sultanpur, on March 11-12, 2016 (Global Citizen Award)
- 152. 2nd International Conference on Advances in Computing and Communication Engineering, April 7-9, 2016 at Tula's Institute Dehradun, (**Keynote speaker**)
- 153. National Conference On "Recent Development in Electrical, Electronics and Communication Engineering" "RDEECE-2016", BSA Mathura (April 9-10, 2016), (Keynote speaker)
- 154. IEEE R10 mini-POCO (Panel of Conference Organizer), UPES Dehradun June 11, 2016 (Keynote speaker)
- 155. International Workshop on Next Generation Active Distribution Networks to Empower Future Low Carbon Indian Society, at IIT Mandi, August 12-14, 2016 (**Resource Person**)
- 156. International Workshop on Smart Micro-Grids for Autonomous Zero-Net-Energy Communities", 8-9 September 2016, Birmingham, UK (**Resource Person**)
- 157. 2nd International Conference on Advances in Computing, Communication & Automation (ICACCA 2016), MJP Ruhilkhand University Bareilly,30 September & 01 October 2016 (Keynote speaker).

- 158. International Conference on Recent Trends in Electrical and Electronics & Communication Engineering, BIET Jhansi, Oct 15-16, 2016 (Key Note Speaker).
- 159. 2nd International Conference on Control, Computing, communication and Materials (ICCCCM-2016), United College of Engineering & Research, Allahabad, Oct 21-22, 2016 (General Chair and Keynote Speaker).
- 160. International Conference on Emerging Trends in Communication Technology (ICETCT-2016) Graphic Era University Dehradun, Uttarakhand, INDIA, Nov 18-19, 2017(General Chair and Keynote Speaker).
- 161. IEEE TENCON 2016, Singapore Nov 22-25, 2016 (IEEE R10 Observer)
- 162. IEEE Uttar Pradesh Section Conference on *Electrical, Computer & Electronics,* December 9-11, 2016 at IIT BHU, India (3nd UP CON 2016) (**General Chair**).
- 163. International Conference on Electrical Power and Energy Systems (ICEPES–2016), MANIT Bhopal, Dec 14-16, 2016 (Guest of Honor and Key Note Speaker).
- 164. International Conference on Advances in Engineering Research and Applications [ICAERA-2016], Oriental College of Technology Bhopal, December 15th -16th, 2016 (Guest of Honor and Key Note Speaker)
- 165. INDICON 2016, IISc Bangalore, Dec 16-18, 2016 (Invited Guest)
- 166. 19th National Power System Conference, IIT Bhubaneswar, December 19-21, 2016 (Session Chair)
- 167. IEEE R10 HTC 2016, DEI Agra, December 21-23, 2016 (Session Chair, Keynote speaker and IEEE R10 Observer).
- 168. 8th International Conference on "Cloud Computing, Data Science & Engineering" Amity University, January 12-13, 2017 (Guest of Honor)
- 169. Third-International Conference on Computational Intelligence and Communication Technology (CICT), ABES EC Ghaziabad, Feb 9-10, 2017 (**IEEE UP Section Observer**)
- 170. International Conference on Electrical, Computer and Communication Engineering (ECCE), Cox's Bazar, Bangladesh, Feb 16-18, 2017 (Keynote speaker)
- 171. 4th International Conference on Power, Control and Embedded Systems (ICPCES-2016), March 9-11, 2017, MNNIT Allahabad (**Keynote Speaker**).
- 172. 2nd International Conference for Convergence in Technology (IC2T), Pune, April, 7-9, 2017 (Keynote Speaker).
- 173. IETE Mid-term Symposium (MTS-2017), PSIT Kanpur, April 7-9, 2017 (General Chair)
- 174. 1st Malviya Research Conclave 2017, MMMUT Gorakhpur, July 8-10, 2017 (Organizer)
- 175. IEEE R10 Technical Symposium (TENSYMP 2017), Kochi, Kerala, 14-16 July 2017 (Invited Guest).
- 176. IEEE Power & Energy Society general Meeting at Chicago, USA , July 17-21, 2017 (Panelist, author)
- 177. IEEE Panel of Conference Organizer (POCO) meeting , Sydney, Australia, August 7-10, 2017 (Invited Guest)
- 178. IEEE Section Congress meeting, Sydney, Australia, August 11-13, 2017 (Invited delegate).
- 179. 2nd International Conference on Advances in Computing, Communication and Automation, September 15-16, 2017 at Tula's Institute Dehradun (**Chief Guest**).
- 180. 6th International Conference on Reliability, Infocom Technologies and Optimization (ICRITO), September 20-23, 2017, Amity University, Noida (**Guest of Honor**).
- 181. International Conference on Green Chemistry and Environmental Health (GCEH 2017), Marwar Business School Gorakhpur, September 25-26, 2017 (Chief Guest).
- 182. All India Student, Young Professionals, Women in Engineering Congress (AISYWC), IIIT Allahabad, September 27-29, 2017 (Guest of Honor).
- 183. 1st International Conference on Intelligent Systems and Information Management (ICISIM-2017), MGMs' Jawaharlal Nehru Engineering College, Aurangabad, MS India, during 5-6 October 2017 (Chief Guest).

- 184. 4th IEEE Uttar Pradesh Section International Conference on Electrical, Computer & Electronics, (UPCON) 2017, GLA Mathura, October 26-28, 2017 (Keynote speaker).
- 185. International Conference on Recent Innovation in Electrical, Electronics & Communication Systems (RIEECS-2017), Graphic Era University, Dehradun, October 28-29, 2017 (Keynote Speaker).
- 186. IEEE International Conference on Emerging Trends on Computing and Communication Technologies, was held on 17-18, Nov. 2017 at Graphic Era Hill University, Dehradun (Chief Guest).
- 187. National Seminar on Sustainable Development for Purvanchal (UP), Nov 26, 2017, DDU Gorakhpur University (Guest of honor).
- 188. 14th IEEE India Council International Conference (INDICON 2017), IIT Roorkee December 15-17, 2017 (Valedictory Function Chief Guest).
- 189. 3rd IEEE Women in Engineering, Electronics and Communication Engineering (WIECON-ECE 2017), WIT Dehradun, Dec 18-19, 2017 (**Guest of honor**)
- 190. 5th Region 10 Humanitarian Technology Conference (R10-HTC), BUET Dhaka, Dec 21-23, 2017 (Keynote Speaker)
- 191. 5th International Conference on Signal Processing & Integrated Networks SPIN 2018, Amity University, Noida, February 22-23, 2018 (Guest of Honor)
- 192. International conference on internet of things: Smart Innovation and Usages (IoTSIU2018), BIAS Bhimtal, February 23-24, 2018 (Chief Guest).
- 193. 6th National Power Engineering Conference, TCE Madurai, March 9-10, 2018 (**Chief Guest and Keynote Speaker**).
- 194. International Conference on Advance Computing, Communication, Energy, Instrumentation and Robotics (ICAC2EIR18), Galgotias College of Engineering and Technology, Greater Noida, India March 23-24, 2018 (Chief Guest and Keynote Speaker).
- 195. 3rd International Conference on Recent Innovations in Science and Engineering, BIT Gorakhpur, April 1-2, 2018 (**Chief Guest**)
- 196. International Conferences For Convergence Of Technology (I2CT), Pune, April 7-8, 2018 (chief guest and keynote speaker)
- 197. 2018 IEEE 1st International Conference on " Power Energy, Environment and Intelligent Control", organized by GL Bajaj ITM, Greater Noida during April 13-14, 2018 (Chief Guest).
- 198. Mini-POCO (Panel of Conference Organizer), Vizag, May 20, 2018, (Chief Guest and Panelist)
- 199. IEEE Panel of Conference Organizer (Convene) meeting , Berlin, Germany, July 18-20, 2018 (Invited Guest)
- 200. All India Student, Young Professionals, Women in Engineering Congress (AISYWC), IEEE Bangalore Section at Mysore, September 28-30, 2018(**Panelist & Guest of Honor**).
- 201. International Conference on Computing, Power and Communication Technologies (GUCON), Galgotias University; India, September 28-29, 2018 (Guest of Honor and Keynote Speaker).
- 202. International Conference on Automation and Computational Engineering (ICACE 2018), Amity University Greater Noida, October 3-4, 2018 (Guest of Honor & Award Recipient).
- 203. International Conference on Advance Computing, Communication, Energy, Instrumentation and Robotics (ICAC2EIR18), Galgotias College of Engineering and Technology, Greater Noida, India March 23-24, 2018 (Chief Guest and Keynote Speaker).
- 204. International Conference on Advances in Computing, Communication Control and Networking (ICAC3N'18), GCET Greater Noida, October 12-13, 2018 (Chief Guest and Keynote Speaker).
- 205. 2018 IEEE Region 10 Conference (TENCON), Jeju Korea, Oct 19-31, 2018 (Invited Guest).
- 206. International Conference on Emerging Trends in Engineering, Science and Technology, Charusat, Changa, Gujrata, Nov 14, 2018 (Chief guest).
- 207. 20th National Power System Conference, NIT Trichy, December 14-16, 2018 (**Core Committee Member**)

- 208. 15th IEEE India Council International Conference (INDICON 2018), Amrita Vidyapeetham, Coimbatore, December 16-18, 2018 (**Guest of Honor**).
- 209. Amity International Conference on Artificial Intelligence (AICAI'19), Amity University Dubai, Feb 4-6, 2019 (**Guest of honor & Keynote Speaker**).
- 210. MATLAB & Its Application in Electrical Engineering" Rajarshi Rananjay Sinh Institute of Management & Technology, Amethi, during February 19-23, 2019 (Chief Guest & Keynote Speaker).
- 211. 5Th International Conference On Signal Processing And Communication (ICSC-2019), Jaypee Institute of Information Technology, Noida (INDIA) March 7th-9th, 2019 (**Keynote Speaker**).
- 212. 6th International Conference on Signal Processing and Integrated Networks (SPIN 2019)
 7-8 March 2019, ASET, Amity University (Valedictory Function Guest of Honor)
- 213. 5th International Conference for Convergence in Technology, Pune (MS), India, 29th -31st March 2019 (Chief Guest).
- 214. 4th International Conference on "Academic Research in Engineering, Management And Information Technology", F.E.T., M. J. P. Rohilkhand University, Bareilly, April 16-18, 2019 (Keynote speaker).
- 215. 4th International Conference on Internet of Things: Smart Innovation and Usages (IoT-SIU 2019), KEC Ghaziabad, April 18-19, 2019 (**Chief Guest**).
- 216. 5th Students' Conference on Engineering and Systems, SCES-2019, May 29-31, 2019 MNNIT Allahabad (**Keynote speaker**).
- 217. International Conference on "Advances in Electronics, Electrical & Computational Intelligence, IIIT Allahabad, May 31-June 1, 2019 (**Keynote speaker**).
- 218. IIIT Allahabad, June 24-30, 2019 (Chief Guest).
- 219. Skill program, MNNIT Allahabad, June 24, 2019 (Key note speaker)
- 220. Ist Renewable Energy Dialogue: Unlocking Renewable Energy Potential in Uttar Pradesh, Sun Source Energy Lucknow, June 29, 2019 (Guest of Honor)
- 221. 2019 IEEE Convene, Washington DC, USA, August 1-2, 2019 (Panelist)
- 222. 2019 IEEE Power & Energy Society Genral Meeting, Atlanta USA, August 5-8, 2019.
- 223. IEEE R10 Conference Leadership Program, Goa, India, August 17-18, 2019.
- 224. International conference on Defence and Space Technologies ICDST2019, Institute of Engineering and Technology, Lucknow, Aug 23-25, 2019 (Guest of Honor)
- 225. IEEE R10 Panel of Conference Organizer (POCO), MMMUT Gorakhpur, Sept. 25, 2019 (Chief Guest & Panelist)
- 226. International Conference On Computing, Power and Communication Technologies (GUCON 2019), Galgotias University, Greater Noida, Sept 27-28, 2019 (Guest of Honor).
- 227. 4rth International Conference on Computing, Communication and security, Rome, Italy, October 10-11, 2019 (**Keynote Speaker**).
- 228. 2nd IEEE International Conference on Power Energy Environment and Intelligent Control; GL Bajaj Institute of Technology and Management, Greater Noida, October 18-19, 2019 (Chief Guest)
- 229. 6th IEEE Uttar Pradesh Section International Conference on Electrical, Computer & Electronics, (UPCON) 2017, AMU Aligrah, November 8-10, 2019 (Chief Guest).
- 230. 4th International Conference on Information Systems & Computer Networks (ISCON), GLA University, Nov 21-22, 2019 (Guest of Honor).
- 231. 2nd International Women Institute of Technology Conference on Electrical and Computer Engineering" (WITCON ECE), WIT Dehradun, November 22-23, 2019 (Guest of Honor).
- 232. 8th International Conference on System Modeling & Advancement in Research Trends (SMART), TMU Moradabad, 22-23 November 2019 (**Guest of Honor**).
- 233. International Conference on Energy, Environment and Material Sciences (ICE2M), MMMUT Gorakhpur, December 1-3, 2019 (Chief Guest).
- 234. 16th India Council International Conference (INDICON), December 13-15, 2019, Marwadi University, Rajkot, Gujarat (**Guest of Honor**).

- 235. 2nd Indian Conference on Antennas & Propagation (InCAP2019) December 19-22, 2019, Ahmadabad, India (Guest of Honor).
- 236. International Conference on Contemporary Computing and Applications (IC3A) February 5-6, 2020, AKTU Lucknow (**Co-Patron**).
- 237. International Conference on Electrical and Electronics Engineering (IC3), MMMUT Gorakhpur, February 14-15, 2020 (Chief Guest).
- 238. International Conference on Power Electronics & IoT Applications in Renewable Energy and its Control (PARC 2020), February 28-29, 2020, GLA Mathura, India (**Chief Guest**).
- 239. IEEE Region 10 Symposium (TENSYMP) 2020, Dhaka, Bangladesh, June 5-7, 2020 (Keynote speaker).
- 240. 8th International Conference on Reliability, Infocom Technologies and Optimization (ICRITO'2020), June 4-5, 2020 (Amity University Noida (**Chief Guest**).
- 241. 6th International Conference on Electronics, Computing and Communication Technologies, (CONECCT 2020) IEEE Bangalore Section, India, July 2-4, 2020 (**Special Guest**).
- 242. 6th Students' Conference on Engineering and Systems (SCES 2020), MNNIT Allahabad, July 10-12, 2020 (Chief Guest).
- 243. Student Professional Awareness Activities Month IEEE Mar Athanasius College of Engineering Student Branch of Kerala Section, Sept 3, 2020 (Chief Guest).
- 244. International Conference for Convergence in Engineering (ICCE 2020), Netaji Subhash Engineering College, Kolkata, Sept 5-6, 2020 (Guest of Honor).
- 245. International Newsletter Editors' Meetup 2020, IEEE Bangladesh Section, Sept 5, 2020 (Chief Guest)
- 246. IEEE Hyderabad Section Conference (HYDCON20202), IEEE Hyderabad Section, September 10, 2020 (Guest of honor)
- 247. 1st IEEE India Council Subsection Conference (INDISCON), Vizag Section, Gayatri Vidya Parisad College of Engineering, Vishakhapatnam, Oct 3-4, 2020 (**Guest of honor**).
- 248. All Hyderabad Computer Society and Women in Engineering Virtual Congress 2020, 6 October 2020 (Chief Guest).
- 249. IEEE Bangalore Humanitarian Technology Conference (B-HTC), BLDEA'S V.P. Dr. P.G.Halakatti College of Engineering and Technology, Vijayapur, Karnataka, Oct 8-10,2020 (**Chief Guest**).
- 250. IEEE R10 (Asia Pacific) Panel of Conference Organizer (POCO), IEEE Madras Section, 10-11 October 2020 (Chief Guest).
- 251. STC on Transition in Power Electronics towards Sustainable, Smart and Flexible Micro-Grids" October 19-23, 2020, NIT Delhi, (**Chief Guest**).
- 252. International Conference on Advances and Applications of Artificial Intelligence and Machine Learning (ICAAAML) during 29th 30th October'2020, Sharda University, Gr Noida (Chief Guest)
- 253. IEEE R10 (Asia Pacific) Panel of Conference Organizer (POCO), IEEE India Council, 31st October 2020 (**Chief Guest**).
- 254. Bangalore Technology Conclave 2020, IEEE Bangalore Section, Nov 3-7, 2020 (Guest of Honor).
- 255. IEEE Women in Engineering (WiE), International Leadership Symposium, Nov 6-8, 2020 (Guest of Honor)
- 256. International Conference on Renewable Energy (ICREN), Rome, Italy, November 25-27, 2020. (Plenary Speaker)
- 257. 7th IEEE Uttar Pradesh Section International Conference on Electrical, Electronics and Computer Engineering (UPCON 2020), MNNIT Allahabad, November 27-29, 2020 (Guest of Honor).
- 258. 5th IAPR International Conference on Computer Vision and Image Processing (CVIP-2020). IIIT Allahabad, December 4-5, 2020 (Guest of Honor).
- 259. 9th IEEE International Conference on System Modelling & Advancements in Research (SMART-2020), Faculty of Engineering & Computing Sciences (FOECS), Teerthanker Mahaveer University Moradabad, December 4-5, 2020 (Chief Guest).

- 260. 3rd IEEE Pune Section International Conference (PuneCon2020), VIT Pune, Dec 16-18, 2020 (Guest of Honor).
- 261. 11th World Renewable Energy Technology Congress & Expo, New Delhi, Dec 15-16, 2020 (Keynote speaker).
- 262. 2nd IEEE International Conference on Advances in Computing, Communication Control and Networking (ICACCCN-2020), GCET Greater Noida 18th& 19th December- 2020 (Chief Guest).
- 263. 2nd International Conference on Machine Learning, Advances in Computing, Renewable Energy and Communication (MARC2020) December 17-18, 2020, Krishna Engineering College, Ghaziabad (Chief Guest of Valedictory).
- 264. 6th Women in Engineering Conference on Electrical and Computer Engineering (WiECON-ECE), Bhuvneshwar Section, December 26-27, 2020 (**Guest of Honor**).
- 265. 1st International Conference Power Electronics and Energy-2021, KIIT Bhubneshwar, Jan 2-3, 2021 (Chief Guest).
- 266. 11th International Conference– CONFLUENCE' 2021 on "Cloud Computing, Data Science & Engineering" at Amity University Uttar Pradesh, Noida Campus, January 28-29, 2021 (Guest of Honor in Valedictory).
- 267. IEEE International Conference on Advance Computing and Innovative Technologies in Engineering Conference, 4-5 March 2021, GCET Greater Noida (Chief Guest).
- 268. e-International Conference on "Advances in Renewable Energy and Electric-Vehicles"-(ICAREEV-2021), Sagar Institute of Research and Technology, Bhopal, 13-14 May 2021 (Guest of Honor).
- 269. 2nd Electric Power and Renewable Energy Conference (EPREC-2021), NIT Jamshedpur, May 28-30, 2021 (Chief Guest and Keynote Speaker).
- 270. IEEE Conference on Intelligent Technologies (CONIT- 2021), KLE Institute of Technology, Hubballi, Karnataka, June 25-26, 2021 (Chief Guest).
- 271. 9th International Conference on Reliability, Infocom Technologies and Optimization (ICRITO'2021), September 3-4, 2021, Amity University Noida (Guest of honor).
- 272. International Conference on Smart Energy and Advancement in Power Technologies (ICSEAPT-2021), September 6-8, 2021, NIT Jamshedpur (**Guest of honor and Keynote speaker**).
- 273. 4th International Conference Recent Developments in Control Automation and Power Engineering (RDCAPE), October 7-8, 2021, Amity University Noida (Guest of honor).
- 274. IEEE 5th International Conference on Information Systems and Computer Networks (ISCON), 22nd 23rd October 2021, GLA Mathura (**Guest of honor**).
- 275. 8th IEEE Uttar Pradesh Section International Conference on Electrical, Electronics and Computer Engineering (UPCON 2021), Tulas Institute Dehradun, November 11-13, 2021 (Chief Guest).
- 276. IEEE International Conference on Intelligent Systems, Smart and Green Technologies (ICISSGT 2021), Vizag Section Vishakhapatnam, 13-14 November 2021, (**Guest of honor**).
- 277. 2021 International Conference on Power System Technology (POWERCON21), Haikou, China, December 8-9,2021 (Keynote speaker and Panelist).
- 278. International conference on control, automation, power and signal processing (CAPS-2021), IIITDM Jabalpur, December 10-11,2021 (Guest of Honor & Keynote speaker).
- 279. 10th IEEE Scopus Indexed International Conference on System Modelling & Advancement on Research Trends (SMART-2021), TMU Moradabad (India), Dec 10-11, 2021 (Keynote speaker).
- 280. International conference on Intelligent Computing and Security: A Paradigm Shift (IICS-2021), G. L. Bajaj ITM, Greater Noida, India, 17th 18th December 2021 (Chief Guest).
- 281. 3rd IEEE International Conference on Advances in Computing, Communication Control and Networking (ICAC3N-21)", GCET Greater Noida, 17th 18th December 2021 (Chief Guest).
- 282. First International Conference on Advances in Computing and Future Communication Technologies ICACFCT-2021, MIET Meerut, December 16-17, 2021 (Keynote speaker).

- 283. 9th International Conference on Power System (ICPS 2021), IIT Kharagpur, December 16-18, 2021 (Session chair).
- 284. International Conference on Advance Computing and Ingenious Technologies in Engineering Science (ICACITES 2021), GCET Greater Noida, December 30-31, 2021(Chief Guest).
- 285. 2nd International Conference on Power Electronics & IoT Application in Renewable Energy and its Control (PARC), GLA Mathura, January 21-22, 2022, (Guest of honor).
- 286. 12th International Conference on Cloud Computing, Data Science & Engineering (CONFLUENCE 2022), Amity University Noida, January 27-28, 2022, (Guest of Honor).
- 287. Ist IEEE Delhi Section International Conference on Electrical, Electronics and Computer Engineering (DELCON2022), Delhi (online), February 12-13, 2022, (**Plenary Speaker**)
- 288. 2 nd International Conference on Advance Computing and Innovative Technologies in Engineering, GCET Gr Noida, April 28-29, 2022 (Chief Guest and Keynote speaker).
- 289. 4th International Conference on Energy, Power and Environment (ICEPE-2022), NIT Meghalaya, April 29-May 1, 2022 (**Keynote Speaker**).
- 290. 11th international conference on Soft Computing for Problem Solving (SocProS 2022), IIT Mandi, 14 15 May 2022, (Chief Guest in Valedictory).
- 291. 3rd Electric Power and Renewable Energy Conference (EPREC-2022), NIT Jamshedpur, May 27-29, 2022 (Chief Guest and Keynote speaker).
- 292. 15th & 16th Uttarakhand State Science & Technology Congress (USSTC), GEU Dehradun, 22-24 June, 2022 (**Jury member and Lead Speaker**)
- 293. 1st International Conference on Sustainable Technology For Power And Energy Systems, NIT Srinagar, July 4-6, 2022 (Chief Guest and Keynote speaker).
- 294. 3rd Biennial International Conference on Future Learning Aspects of Mechanical Engineering (FLAME2022), Amity University, 3-5 August 2022 (**Chief Guest in Valedictory**).
- 295. International Conference on Computer Vision and Machine Intelligence (CVMI), **12-13** August 2022 IIIT Allahabad, Prayagraj, INDIA (Chief Guest in Valedictory).
- 296. 2022 IEEE Global Conference on Computing, Power and Communication Technologies (GlobConPT 2022), India Habitant Center, New Delhi, September 23-25, 2022 (Guest of honor in Inauguration).
- 297. All India Student Young Professionals Women in Engineering Congress (AISYWC), COE Pune, October 7-9, 2022 (**Panelist**).
- 298. 44th All India Accounting Conference and International Seminar on Accounting Education and Accounting Research on 29th -30th October, 2022 Jiwaji Univ, Gwalior (Keynote speaker).
- 299. 6th Conference on Information and Communication Technology (CICT), ABV-IIITM Gwalior, Nov 18-20, 2022 (**Chief Patron**).
- IEEE North Karnataka Subsection International Conference "NKCon-2022", B.L.D.E.A V.P. Dr. P.G. Halakatti College of Engineering and Technology, Vijayapur, during 20-21, November 2022 (Chief Guest).
- 301. 10th Power India International Conference (PIICON), NIT Delhi, November 25-26, 2022 (Keynote speaker and Chief Guest in Valedictory).
- 302. 9th IEEE Uttar Pradesh Section International Conference on Electrical, Electronics and Computer Engineering (UPCON 2022), IIIT Allahabad, December 2-4, 2022 (Chief Guest, keynote speaker).
- 303. Third International Conference on "Communication, Networks & Computing (CNC-2022)", December 08-10, 2022, ITM University Gwalior (**Guest of Honor**).
- 304. 11th International Conference on System Modeling & Advancement in Research Trends (SMART)" on 16-17 December 2022, TMU Moradabad (Chief Guest Day-2).
- 305. 4th International Conference on Advances in Computing, Communication Control and Networking (ICAC3N-22), GCET, Gr Noida, Dec 16-17, 2022 (Chief Guest).
- 306. National Power System Conference IIT Delhi , Dec 17-19, 2022 (Panelist)
- 307. International Conference on Communication, Security and Artificial Intelligence (ICCSAI-2022), Galgotias University, Greater Noida, December 23-24, 2022 (**Chief Guest**).

- 308. 2nd International Conference on Innovative Sustainable Computational Technologies (CISCT-2022), Graphic Era University, 23rd 24th December 2022 (**Keynote speaker**).
- 309. 13th International Conference on Cloud Computing, Data Science & Engineering, (CONFLUENCE 23), Amity University, Nodia, January 19-20, 2023 (Guest of Honor)
- 310. 2nd International Conference for Advancement in Technology 2023 (ICONAT), at Goa by RIT Sangli, January 24-26, 2023 (Guest of Honor).
- 311. Multi-disciplinary International Congress on Industry 5.0 and Paradigm Shift: Emerging Challenges, SVVV Indore, 1-3 February 2023 (**Plenary Speaker**).
- 312. NIELIT's International Conference on Communication, Electronics and Digital Technologies (NICE-DT); 10-11 February 2023, New Delhi (Guest of Honor).
- International Conference on Artificial Intelligence, Blockchain, Computing and Security (ICABCS-2023), School of Computing Science and Engineering, Galgotias University, India during 24-25 February 2023 (Chief Guest).
- International Conference on Microwave Antenna and Communication (MAC2023), MNNIT Allahabad, Université de Sherbrooke, Canada & Benedict College, Columbia, USA, March 24-26, 2023 (Chief Guest).
- 315. 2nd International Conference on Smart Grid Energy Systems and Control (SGESC-2023), NIT Kurukshetra, April 07-09, 2023 (**Keynote speaker and Chief Guest in Valedictory**).
- 316. International Conference on Disruptive Technologies (ICDT-2023), GL Babaj College of Engineering and Technology, Gr Noida, 11th-12th May, 2023 (Chief Guest in Valedictory).
- 317. 3rd International Conference on Advance Computing and Innovative Technologies in Engineering, Galgotias College of Engineering & Technology (GCET), Gr Noida, May 12-13, 2023 (Chief Guest).
- 318. Ist International Conference on Computer, Electronics & Electrical Engineering and their Applications (IC2E3-2023), NIT Uttarakhand, Srinagar Garhwal, Uttarakhand, June 8th- 9th, 2023 (Keynote speaker and Guest of Honor).
- 319. International Conference on IoT, Communication and Automation Technology (ICICAT-2023), Buddha Institute of Technology Gorakhpur, 23 & 24 June 2023 (**Chief Guest**).
- 320. 2nd International Conference on Frontiers of Energy and Environment Engineering (CFEEE 2023), Sanya, **China**, September 1-3, 2023 (**Keynote speaker**).
- 321. 3rd International Conference on Innovative Sustainable Computational Technologies (CISCT 2023) GEU Dehradun, September 8-9, 2023 (Chief Guest and Keynote speaker).
- 322. 6th International Conference on Contemporary Computing and Informatics (IC3I), Amity University, Greater Noida (IC3I 2023), September 14-16, 2023 (Chief Guest, Valedictory).
- 323. 7th International Conference on Computer Application in Electrical Engineering Recent Advances (CERA-23), Department of Electrical Engineering, Indian Institute of Technology Roorkee, October 27-29, 2023 (Keynote speaker).
- 324. 2nd International Conference on Communication, Security and Artificial Intelligence (ICCSAI-2023), SCEE, Galgotias University; November 23-24, 2023 (Chief Guest)
- 325. 4th IEEE R10 PES West Zone (India) Global Workshop, Hyderabad, November 24-25, 2023 (Plenary speaker and moderator)

Dr SN Singh

February 18, 2024