26-08-2021

Dr. Om Hari Gupta
Assistant Professor, Department of Electrical Engineering,
National Institute of Technology Jamshedpur, India-831014
http://www.nitjsr.ac.in/academics/departments/profile.php?user_id=EE25
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AREA OF RESEARCH AND INTERESTS

Modeling and simulation of Distributed Energy Resources (DERs) or Distributed Generations (DGs); Microgrid protection; Power systems compensation and protection; Harmonics analysis

Simulation & Hardware Platforms: MATLAB/SIMULINK; PSCAD; PSPICE; dSPACE; Real-time digital simulator (RTDS); Opal-RT

ACADEMIC QUALIFICATIONS

- ✓ **Ph.D. (Electrical Engineering)**, Thesis Title: "Protection aspects of transmission line and microgrid in the presence of switching devices", **Date of viva**: 8 March 2017
  Indian Institute of Technology (IIT) Roorkee, Roorkee, India (2013–2017)
- ✓ **M. Tech**. (**Power Electronics & ASIC Design**), Topic: Control of DC/AC drives using PID, Fuzzy-PID, and MRAC techniques
  Motilal Nehru National Institute of Technology (MN NIT), Allahabad, India (2009-2011)
- ✓ **B. Tech.** (**Electrical & Electronics Engineering**)
  Uttar Pradesh Technical University (UPTU), Lucknow, India (2004-2007)

AWARDS/RECOGNITION/ADDITIONAL RESPONSINILITIES

- **Queen Elizabeth II Diamond Jubilee Scholarship** awarded by Rideau Hall Foundation, Community Foundations of Canada, and Universities Canada for a research visit to UOIT, Canada, 2016.
- **Co-chair**, Plenary Session, National Systems Conference-2018 (NSC-2018), organized by Dayalbagh Educational Institute, Agra, 1st Dec – 3rd Dec 2017.
- **Expert Lecture**, Summer Internship Program in Electrical Engineering (SIPEE-2018), EED, MN National Institute of Technology, Allahabad, Prayagraj, 1st July 2018.
- **Lab-in-charge,** Control Systems Lab, EED, NIT JSR, 13th July 2018 – till date.
- **Professor-in-Charge**, Electrical Engineering Society, NIT JSR, 10th Jan 2019 – till date
- **Purchase coordinator,** EED, NIT JSR, 1st May 2019 – till date
- **Coordinator**, Short Term Course on "Recent Trends in Microgrid and Its Real-Time Implementation Using Opal-RT (RTM-2019)", EED, NIT JSR, India, 27th May – 1st June 2019.
- **Warden,** Hostel-D (Dr. Rajendra Prasad Hall of Residence), NIT JSR, 30th July 2019 – 8th Nov 2020.
- **Member, Publication Cell, NIT Jamshedpur**, 6th March 2020 – till date.
- **Organizing Secretary**, TEQIP-III sponsored "Electric Power and Renewable Energy Conference (EPREC-2020)", Organized by EED, NIT JSR, 29th – 30th May 2020.
- **Member, Research and Consultancy Committee, NIT Jamshedpur**, 23rd June 2020 – till date.
- **Expert Lecture** on "Introduction to Microgrid and Islanding Detection" in **webinar** organized by Faculty of Engineering, Pacific University, Udaipur, 27th June 2020.
- **Chair, Technical Session**, 6th Students' Conference on Engineering & Systems (**SCES-2020**) organized by EED, MN National Institute of Technology Allahabad, Prayagraj, 11th July 2020.
- **Expert Talk** on "Introduction to Microgrid and Islanding Detection" in TEQIP-III Sponsored Online Faculty Development Program On "RENEWABLE POWER GENERATION, CONTROL AND GRID INTEGRATION-2020 (**RPGCGI-2020**)" organized by Department of Electrical Engineering, Indira Gandhi Institute of Technology (IGIT), Sarang, 12th August 2020.
- **Expert Lecture** on "Microgrid – Requirement, Protection Challenges and Islanding" in TEQIP-III Sponsored Online Five-day workshop on "Advanced Micro Grid, Operation and

Control (**AMGOC-2020**)" organized by Department of Electrical and Electronics Engineering, Veer Surendra Sai University of Technology (VSSUT), Burla, 9th Sept 2020.

- **Expert Lecture** on "Protection aspects of modern Transmission and Distribution Systems" in TEQIP-III Sponsored Online workshop on "Recent Advances in Electrical and Electronics Engineering (**RAEEE-2020**)" organized by Department of Electrical and Electronics Engineering, Gaya College of Engineering (GCE), Gaya, 13th and 16th Oct 2020.
- **Expert Talk** on "Protection of modern transmission & distribution systems" in Online workshop on "Research Trends in Energy and Power systems" organized by Department of Electrical Engineering, Maulana Azad National Institute of Technology (MANIT), Bhopal, 21st Oct 2020.
- **Coordinator**, Short Term Course on "Recent Trends in Microgrid (**RTM-2020**)", EE Department, NIT JSR, India, 27th Oct – 31st Oct 2020.
- **Professor-in-Charge**, R&C, EED, NIT JSR, 29th Oct 2020 – till date.
- **Warden,** Hostel-K, NIT JSR, 9th Nov 2020 – till date.
- **Chair, Technical Session**, 7th IEEE Uttar Pradesh Section International Conference on Electrical, Electronics and Computer Engineering (**UPCON-2020**) organized by EED, MN National Institute of Technology Allahabad, Prayagraj, 28th Nov 2020.
- **Expert Lecture** on "Protection of modern power system" in e-Workshop on "Power System Control – A Smart Approach" organized by Department of Electrical Engineering, National Institute of Technology (NIT) Srinagar, 14th Dec 2020.
- **Expert Lecture** on "Use of FACTS Devices & their Impacts on Transmission Line" in TEQIP-III sponsored Faculty Development Programme on "Recent Advances in Industrial Power Electronics & Drive" organized by Department of Electrical Engineering, Shrinathji Institute of Technology & Engineering, Rajsamand, Rajasthan, 25th Feb 2021.
- **Chair, Technical Session**, IEEE International Conference on Emerging Trends in Industry 4.0 **(ETI 4.0)** organized by O.P. Jindal University, Chhattisgarh, India, 20th May 2021.
- **Organizing Secretary**, 2nd Electric Power and Renewable Energy Conference (EPREC-2021), Organized by EED, NIT JSR, 28th – 30th May 2021.
- **B.Tech Project Professor-in-charge**, EED, NIT JSR, 26th June 2021 – till date.

REVIEW WORK

Journal Name	Publisher
IEEE Transactions on Power Delivery	IEEE
IEEE Transactions on Industry Applications	IEEE
IEEE Systems Journal	IEEE
Electric Power Components and Systems	Taylor & Francis
International Journal of Electronics	Taylor & Francis
IET Generation Transmission & Distribution	IET
Canadian Journal of Electrical & Computer Engineering	IEEE
Journal of Institution of Engineering (Series B)	Springer
International Journal of Electronics Letters	Taylor & Francis
International Journal of Electrical Power and Energy Systems	Elsevier
Iranian Journal of Science and Technology, Transactions of Electrical Engineering	Springer

MEMBERSHIP OF PROFESSIONAL GROUP

- IEEE Student Member (2015, 2016)
- IEEE Member (2019, 2020, 2021)
- IEEE Senior Member (2021)

VISITING RESEARCHER/SCHOLAR EXPERIENCE – POST DOCTORAL

March – June 2017	Department of Electrical, Computer and Software Engineering, Ontario Tech University (formerly: University of Ontario Institute of Technology), ON L1H 7K4, Canada

TEACHING EXPERIENCE (MORE THAN 7 YEARS)

June 2018 – till date **3 Years, 1 Month**	Assistant Professor, Department of Electrical Engineering, **National Institute of Technology, Jamshedpur, India**
Jan 2017 – June 2018 **1 Year, 5 Months**	Assistant Professor, Department of Electrical Engineering, FOE, **Dayalbagh Educational Institute, Agra, India**
July 2012 – Dec 2012 **0 Year, 5 Months**	Assistant Professor, Department of Electrical and Electronics Engineering, **Vidya College of Engineering, Meerut, India**
June 2011 – May 2012 **1 Year, 0 Month**	Assistant Professor, Department of Electrical and Electronics Engineering, **GLA University Mathura, India**
Nov 2007 – July 2009 **1 Year, 8 Months**	Lecturer, Department of Electrical Engineering, **BSA College of Engineering & Technology, Mathura, India**

SUBJECTS TAUGHT (UG LEVEL)

- Switch Gear and Protection
- Analog Electronics
- Basic Electrical Engineering
- Instrumentation
- Electric Machines
- Digital Electronics
- Electrical Networks
- Utilization of Electric Power

SUBJECTS TAUGHT (PG LEVEL)

- Electric Power Quality
- Micro and Smart Grids
- HVDC Transmission System

PHD SUPERVISED

S.N.	Scholar Name	Topic	Reg. Year	Status
1.	**Jai Praksh Sharma** (2018RSEE010)	Sequential Components-Based Pilot Relaying Scheme for Transmission lines	Autumn 2018-19	Ongoing (Advanced stage)
2.	**Jeetendra Kumar** (2018RSEE011)	Microgrid Protection (tentative)	Autumn 2018-19	Ongoing
3.	**Ravi Shankar Tiwari** (2018RSEE017)	Protection of Hybrid AC/DC Grids (tentative)	Spring 2018-19	Ongoing
4.	**Salauddin Ansari** (2019RSEE006)	Enhanced Protection of PV-integrated Microgrid Feeders	Autumn 2019-20	Ongoing

M.TECH SUPERVISED

S.N.	Student Name	Topic	Status
1.	**Amar Baboo** (164502) Engg. Sys, EED, DEI, Agra	High-performance Buck-Boost converter for MPPT	Awarded (May 2018)
2.	**Kaja Sivaramprasad** (2017PGEEPS01) EED, NIT JSR	DFX - scan feature validation for early detection of silicon bugs in SoC's	Awarded (June 2019)
3.	**Neethish Ravindran** (2017PGEEPE12) EED, NIT JSR	Signal integrity impact on dual referenced signal traces and mitigation techniques	Awarded (June 2019)
4.	**JAYSHREE** (2018PGEEPS11) EED, NIT JSR	Modelling & simulation of islanding detection technique for DG system	Awarded (June 2020)

5.	**Paluru Venkatesh** (2018PGEEPS12) EED, NIT JSR	Modelling and analysis of micro-grid integrated with solar PV and wind power (DFIG)	Awarded (June 2021)
6.	**CH. S. Balasubrahmanyam** (2019PGEEPE05) EED, NIT JSR	Power quality enhancement and grid support using solar energy conversion system	Awarded (June 2021)
7.	**Shaili Shaw** (2019PGEEPE01) EED, NIT JSR	CLLC Bidirectional Resonant Converter	Awarded (June 2021)
8.	**Gaurav Kumar Singh** (2020PGEEPE17) EED, NIT JSR	Microgrids in vessels (tentative)	Ongoing
9.	**Medha Chaudhary** (2020PGEEPE13) EED, NIT JSR	DC Microgrid (tentative)	Ongoing
10.	**Rahul Kumar** (2020PGEEPE12) EED, NIT JSR	HVDC system (tentative)	Ongoing

B.TECH SUPERVISED

S.N.	Student(s) Name(s)	Topic	Status
1.	**Harsh Pachauri** **Prateek Badhautia** **Vasim Ali** **Sapna Solanki** EED, DEI, Agra	Impact of power swing on relaying schemes	Awarded (May 2018)
2.	**Aditya Anand** **Saurabh Kumar Singh** **Saurabh Kumar** EED, NIT JSR	Modelling and simulation of solar-based distributed generation	Awarded (June 2019)
3.	**Rishi Vignan V.** **Ashok Kumuram** **Phanindra Pabba** EED, NIT JSR	Modelling and simulation of biomass-based distributed generation	Awarded (June 2019)
4.	**Kasala Vijetha** **Priya Bharti** **Balla Satya Sravani** EED, NIT JSR	DC Component Based Pilot Relaying Scheme for Protection of Transmission Line	Awarded (June 2020)
5.	**Mohan Rajak** **Bimal Kumar Jalutharia** **Vishnu Kumawat** EED, NIT JSR	Study and Operation of Renewable Based Distributed Generation	Awarded (June 2020)
6.	**Prem Prakash** **Aman Kumar** **Rahul Kumar** EED, NIT JSR	Transmission System Compensation and Protection	Awarded (June 2021)
7.	**Rohit Deepankar** **Diwakar Kumar** **Anirban Mukharjee** EED, NIT JSR	Transmission System Compensation and Protection	Awarded (June 2021)
8.	**Praveen Kumar Singh** **Vedansh Kushwaha** **Rohit Kumar Acharya** EED, NIT JSR	Transmission line fault current limitation using thyristor-based devices (tentative)	Ongoing

9.	**Shivam Kumar** **Ambulgekar Saurabh Madhav** **Pawan Rajak** EED, NIT JSR	Buck boost converter for solar application (tentative)	Ongoing
10.	**Kalaka Anjali** **Kolliboina Samba** EED, NIT JSR	Battery Management System using IoT and Machine Learning (tentative)	Ongoing

PUBLICATIONS

Journals

1. S. Sheel and **O.H. Gupta**, "New Techniques of PID Controller Tuning of a DC Motor—Development of a Toolbox", **International Journal of Electrical and Instrumentation Engineering**, vol.2, no.2, pp. 65-69, **2012**, (*Publisher: Science & Engineering Research Support soCiety, ISSN: 2005-4297*)

2. S. Sheel and **O.H. Gupta**, "High Performance Fuzzy Adaptive PID Speed Control of a Converter Driven DC Motor", **International Journal of Control and Automation**, vol.5, no.1, pp. 71-88, **2012**, (*ISSN: 2230-7656*)

3. **O.H. Gupta** and M. Tripathy, "An Innovative Pilot Relaying Scheme for Shunt-Compensated Line", **IEEE Transactions on Power Delivery**, vol. 30, no. 3, pp. 1439-1448, June **2015**, (*DOI:10.1109/TPWRD.2015.2394353, Publisher: IEEE, ISSN: 0885-8977*)

4. **O.H. Gupta** and M. Tripathy, "Superimposed Energy-Based Fault Detection and Classification Scheme for Series-Compensated Line", **Electric Power Components and Systems,** vol. 44, no. 10, pp. 1095-1110, June **2016**, (*DOI:10.1080/15325008.2016.1148082, Publisher: Taylor & Francis Group, ISSN: 1532-5008*)

5. **O.H. Gupta** and M. Tripathy, "ERF-Based Fault Detection Scheme for STATCOM-Compensated Line", **International Transactions on Electrical Energy Systems,** vol.27, no.6, pp. 1-22, June **2017**, (*DOI:10.1002/etep.2314, Publisher: John Wiley & Sons Ltd, ISSN: 2050-7038*)

6. **O.H. Gupta** and M. Tripathy, "Universal Pilot Relaying Scheme for Series and Shunt-Compensated Lines", **IET Generation, Transmission & Distribution**, vol.12, no.4, pp. 799-806, Feb **2018**, (*DOI:10.1049/iet-gtd.2017.0814, Publisher: IET, ISSN: 1751-8687*)

7. **O.H. Gupta** and M. Tripathy, "An Improved Pilot Relaying Scheme for Shunt-Compensated Transmission Line Protection Based on Superimposed Reactive Power Coefficients", **Electric Power Components and Systems**, vol.45, no.20, pp. 2228-2245, Mar **2018**, (*DOI:10.1080/15325008.2017.1376361, Publisher: Taylor & Francis Group, ISSN: 1532-5008*)

8. **O.H. Gupta** and M. Tripathy, "EPE-Based Pilot Relaying Scheme Immune to SIR Variations", **IETE Journal of Research**, vol.66, no.3, pp. 359-369, March **2020**, (DOI:10.1080/03772063.2018.1488629, *Publisher: Taylor & Francis Group, ISSN: 0377-2063*)

9. **O.H. Gupta**, M. Tripathy, and V.K. Sood, "Islanding Detection Scheme for Converter-Based DGs with Nearly Zero Non-Detectable Zone", **IET Generation, Transmission & Distribution**, vol.13, no.23, pp. 5365–5374, Dec **2019**, (*DOI:10.1049/iet-gtd.2018.5168, Publisher: IET, ISSN: 1751-8687*)

10. Ch.S. Balasubrahmanyam and **O.H. Gupta**, "Detailed Study of Solar Energy Conversion System using Boost Converter – A New MPPT Technique", **Journal of The Institution of Engineers (India): Series B,** vol. 101, no. 6, pp. 631–639, Dec **2020**. (*DOI:10.1007/s40031-020-00478-1*, *Publisher: Springer, ISSN: 2250-2114*)

11. J.P. Sharma, K.V. Reddy, P. Bharti, S.S. Balla, and **O.H. Gupta**, "Extracted DC Component-based Pilot Relaying for Series-Compensated Lines", **International Transactions on**

Electrical Energy Systems, vol. 31, no. 4, pp. 1-18, Apr 2021**.** (*DOI:*10.1002/2050-7038.12834*, Publisher: John Wiley & Sons Ltd, ISSN: 2050-7038*)

12. J.P. Sharma, K.V. Reddy, P. Bharti, S.S. Balla, **O.H. Gupta**, and P. Khadke, "Differential DC Component-based Relaying Scheme for Transmission Lines", ***accepted*** in **IETE Journal of Research,** pp. 1-13, Apr 2021**.** (*DOI:*10.1080/03772063.2021.1915890*, Publisher: Taylor & Francis Group, ISSN: 0377-2063*)

13. J.P. Sharma, **O.H. Gupta,** and M. Tripathy, "A New Sequence Current-Based Adaptive Pilot Relaying Scheme for Modern HVAC Transmission Lines", **Electric Power Components and Systems,** vol. 49, no. 1-2, pp. 32-47, June **2021**. (*DOI:10.1080/15325008.2021.1937394, Publisher: Taylor & Francis Group, ISSN: 1532-5008*)

14. S. Ansari and **O.H. Gupta**, "Differential Positive Sequence Power Angle-Based Microgrid Feeder Protection", ***accepted*** in **International Journal of Emerging Electric Power Systems,** pp. 1-7, May 19, 2021. (*DOI: 10.1515/ijeeps-2021-0071, Publisher: DE GRUYTER, ISSN: 1553-779X*)

15. J.P. Sharma, **O.H. Gupta,** O.P. Malik, S. Sharma, and M. Tripathy "Voltage-Assisted Sequence Current-Based Pilot Relaying for Lines with/without TCSC", ***accepted*** in **IEEE Transactions on Power Delivery,** pp. 1-11, Jun 18, 2021. (*DOI: 10.1109/TPWRD.2021.3091401, Publisher: IEEE, ISSN: 0885-8977*)

Books Authored/Edited

1. **O.H. Gupta** and V.K. Sood, "Recent Advances in Power Systems - Select Proceedings of EPREC 2020" **Lecture Notes in Electrical Engineering**, **Springer, Singapore,** pp. 1-542, 2021 [*available online at: https://www.springer.com/gp/book/9789811579936*]
(DOI: 10.1007/978-981-15-7994-3, Hardcover ISBN: 978-981-15-7993-6, eBook ISBN: 978-981-15-7994-3)

2. **O.H. Gupta**, M. Tripathy, and V.K. Sood, "Protection Challenges in Meeting Increasing Electric Power Demand," **Springer International Publishing, Switzerland,** pp. 1-197, Jan 2021 [*available online at: https://www.springer.com/gp/book/9783030604998*]
(DOI: 10.1007/978-3-030-60500-1, Hardcover ISBN: 978-3-030-60499-8, eBook ISBN: 978-3-030-60500-1)

Book Chapters

1. **O.H. Gupta**, M. Tripathy, and V.K. Sood, "Hybrid Event Classification Scheme for Converter-Based DG with Improved Power Quality," In: Ray, P. and Biswal, M. (eds.) Microgrid: Operation, Control, Monitoring and Protection *(ISBN:978-981-15-1780-8)*, pp. 207–238. **Springer** (2020).
DOI: 10.1007/978-981-15-1781-5_7

2. Ch.S. Balasubrahmanyam, **O.H. Gupta**, and V.K. Sood, "Power Quality Enhancement and Grid Support Using Solar Energy Conversion System," In: C. Sharmeela, et. al. (eds.) ***Micro grid technologies*** *(ISBN: 978-1-119-71079-0)*, pp. 307–326**, SCRIVENER PUBLISHING, Wiley**, March **2021.**
DOI: 10.1002/9781119710905.ch12

3. S. Ansari and **O.H. Gupta**, "Comparison of Selected MPPT Techniques using Different Performance Features", ***accepted***: In "Next Generation Smart Grids: Modeling, Control and Optimization", **Springer,** pp. 1-28, Apr 03, 2021.

Conferences

1. S. Sheel, R. Chandkishor and **O.H. Gupta**, "Speed control of DC drives using MRAC technique", *2010 2nd International Conference on Mechanical and Electrical Technology (ICMET 2010)*, **Singapore,** pp.135-139, Sept. 10-12, **2010**.
DOI:10.1109/ICMET.2010.5598335 (e-ISBN: 978-1-4244-8102-6)

2. **O.H. Gupta** and S. Sheel, "Control of induction motor drive with PSpice-MATLAB interfacing,"*2012 IEEE International Conference on Power Electronics, Drives and Energy Systems (PEDES 2012)*, **Bengaluru, India,** pp.1-6, Dec. 16-19, **2012.** DOI:10.1109/PEDES.2012.6484441 (e-ISBN: 978-1-4673-4508-8)

3. **O.H. Gupta** and R.K. Swami, "Comparative results for a continuously stirred tank reactor (CSTR) blending process control using PID toolbox", *National Conference on Technology Advances in Electrical & Renewable Energy Engineering (EREECON-2013)*, **Udaipur, India**, pp. 07-11, 23-24 Feb. **2013.**

4. R.C. Gupta, **O.H. Gupta** and R. K. Swami, "Backing of the truck by a self-organizing Fuzzy Approach", *National Conference on Technology Advances in Electrical & Renewable Energy Engineering (EREECON-2013)*, **Udaipur, India**, pp. 33-40, 23-24 Feb. **2013.**

5. **O.H. Gupta** and M. Tripathy, "Impact of Degraded Power Quality on Distance Relaying for EHV Transmission Lines: A Case Study", *8th International Conference on Capacitors (CAPACIT-2014)*, **New Delhi, India**, pp. 1-8, 20-21 Nov. **2014.**

6. **O.H. Gupta** and M. Tripathy, "An Integrated Impedance-Based Pilot Protection Scheme for SVC-Compensated Transmission Line", *2014 3rd International Conference on Power, Control and Embedded Systems (ICPCES 2014)*, **Allahabad, India**, pp. 1-6, 26-28 Dec. **2014.** DOI:10.1109/ICPCES.2014.7062798 (e-ISBN: 978-1-4799-5912-9)

7. **O.H. Gupta** and M. Tripathy, "Directional Relaying Scheme for TCSC-Compensated Line", *2015 Electrical Power and Energy Conference (EPEC 2015)*, **Ontario, Canada**, pp. 303-307, 26-28 Oct. **2015**. DOI:10.1109/EPEC.2015.7379967 (e-ISBN: 978-1-4799-7664-5)

8. **O.H. Gupta** and M. Tripathy, "Energy-Based Relaying Scheme for Series Compensated Line", *39th National Systems Conference (NSC-2015)*, **Noida, India,** pp. 1-6, 14-16 Dec. **2015.** DOI:10.1109/NATSYS.2015.7489126 (e-ISBN: 978-1-4673-6829-2)

9. **O.H. Gupta** and M. Tripathy, "Relaying Scheme for STATCOM-Compensated Transmission Line", *2016 6th IEEE International Conference on Power Systems (ICPS 2016)*, **New Delhi, India,** pp. 1-6, 04-06 Mar. **2016.** DOI:10.1109/ICPES.2016.7584053 (e-ISBN: 978-1-5090-0128-6)

10. **O.H. Gupta** and M. Tripathy, "Positive Sequence Phasor Estimation Based Pilot Relaying Scheme for Shunt Compensated Line", *19th National Power Systems Conference (NPSC-2016)*, **Bhubaneswar, India,** pp. 1-6, 19-21 Dec. **2016.** DOI:10.1109/NPSC.2016.7858845 (e-ISBN: 978-1-4673-9968-5)

11. **O.H. Gupta** and M. Tripathy, "EC-Based Relaying Scheme for the Protection of Shunt-Compensated Transmission Line", *4th International Conference on Power, Control and Embedded Systems (ICPCES-2017)*, **Allahabad, India**, pp. 1-6, 09-11 Mar. **2017.** DOI:10.1109/ICPCES.2017.8117664 (e-ISBN: 978-1-5090-4426-9)

12. **O.H. Gupta** and M. Tripathy, "Real-Time Validation of ERF-Based Scheme for Shunt-Compensated/Uncompensated Line", *2017 3rd International Conference on Power Generation Systems and Renewable Energy Technologies (PGSRET 2017)*, **Johor Bahru, Malaysia,** pp. 1-6, 04-06 Apr. **2017.** DOI:10.1109/PGSRET.2017.8251823 (e-ISBN: 978-1-5090-5353-7)

13. **O.H. Gupta**, M. Tripathy, and V.K. Sood, "Digital Relaying Scheme for Protection of Shunt-Compensated Transmission Lines", *IEEE Electrical Power and Energy Conference (EPEC-2017)*, **Saskatoon, Canada**, pp. 1-6, 22-25 Oct. **2017.** DOI:10.1109/EPEC.2017.8286138 (e-ISBN: 978-1-5386-0817-3)

14. Jayshree, J.P. Sharma and **O.H. Gupta**, "Study of different passive islanding detection techniques and verification by MATLAB simulation", *International Conference on Emerging Trends for Smart Grid Automation and Industry 4.0 (ICETSGAI4.0-2019)*, **Ranchi, India**, pp. 1-9, 05-07 Dec. **2019.** DOI: 10.1007/978-981-15-7675-1_79 (e-ISBN: 978-981-15-7675-1)

15. R.S. Tiwari and **O.H. Gupta**, "Study of Combined Time and Current Grading Protection Scheme for Distribution System", *International Conference on Power Electronics & IoT*

Applications in Renewable Energy and its Control (PARC-2020), **Mathura, India**, pp. 443-448, 28-29 Feb. **2020.**
DOI: 10.1109/PARC49193.2020.236651 (e-ISBN: 978-1-7281-6575-2)

16. S. Ansari and **O.H. Gupta**, "Voltage Ripple Based Islanding Technique on Modified IEEE-13 Bus Test Feeder for Photovoltaic Inverter", *Electric Power and Renewable Energy Conference (EPREC-2020)*, **Jamshedpur, India**, pp. 139-156, 29-30 May **2020.**
DOI: 10.1007/978-981-15-7994-3_13 (e-ISBN: 978-981-15-7994-3)

17. S. Das and **O.H. Gupta**, "Study and Simulation of PMSG-based Wind Turbine", *Electric Power and Renewable Energy Conference (EPREC-2020)*, **Jamshedpur, India**, pp. 37-46, 29-30 May **2020.** DOI: 10.1007/978-981-15-8586-9_4 (e-ISBN: 978-981-15-8586-9)

18. Ch.S. Balasubrahmanyam and **O.H. Gupta**, "Study and Implementation of 1-phase DVR for Power Quality Enhancement", *Electric Power and Renewable Energy Conference (EPREC-2020)*, **Jamshedpur, India**, pp. 29-35, 29-30 May **2020.**
DOI: 10.1007/978-981-15-8586-9_3 (e-ISBN: 978-981-15-8586-9)

19. J.P. Sharma, S. Shaw, and **O.H. Gupta**, "Application of Admittance-based Relaying Scheme under Dynamic Shunt Compensation", *Electric Power and Renewable Energy Conference (EPREC-2020)*, **Jamshedpur, India**, pp. 327-336, 29-30 May **2020.**
DOI: 10.1007/978-981-15-7994-3_30 (e-ISBN: 978-981-15-7994-3)

20. R.S. Tiwari, **O.H. Gupta**, and V.K. Sood, "Ground Fault Detection Using Pole Differential Current Measurement for 2-Terminal Bipolar HVDC Lines", *Electric Power and Renewable Energy Conference (EPREC-2020)*, **Jamshedpur, India**, pp. 1-14, 29-30 May **2020.**
DOI: 10.1007/978-981-15-7994-3_1 (e-ISBN: 978-981-15-7994-3)

21. S. Ansari, **O.H. Gupta**, and M. Tripathy, "An Islanding Detection Methodology for SOFC-based Static DG using DWT", *Electric Power and Renewable Energy Conference (EPREC-2020)*, **Jamshedpur, India**, pp. 95-108, 29-30 May **2020.**
DOI: 10.1007/978-981-15-7994-3_9 (e-ISBN: 978-981-15-7994-3)

22. S. Ansari, J.P. Sharma, and **O.H. Gupta**, "Fault detection Scheme for AC Microgrids based on Sum of Squared Relay Current and TKEO", *IEEE International Conference on Emerging Trends on Industry 4.0 (ETI 4.0)*, **Raigarh, India**, pp. 1-5, 19-21 May **2021.**
DOI:

23. J.P. Sharma, S. Ansari, and **O.H. Gupta**, "DC Component-based Differential Pilot Relaying Scheme for Half-wave Transmission Lines", *IEEE International Conference on Emerging Trends on Industry 4.0 (ETI 4.0)*, **Raigarh, India**, pp. 1-4, 19-21 May **2021.**
DOI:

24. G.K. Singh, S. Chaturvedi, and **O.H. Gupta**, "Solar PV System for DC Microgrid in Vessels", *2nd Electric Power and Renewable Energy Conference (EPREC-2021)*, **Jamshedpur, India**, pp. 1-14, 28-30 May **2021.**
DOI:

25. P. Venkatesh, J.P. Sharma, S. Ansari, and **O.H. Gupta**, "Control and Operation of Microgrid Integrated with Solar PV and Wind Power", **accepted in** *International Conference on Smart Energy and Advancement in Power Technologies (ICSEAPT 2021)*, **Jamshedpur, India,** pp. 1-15, 06-08 Sept **2021.**
DOI:

26. G.K. Singh, J.P. Sharma, and **O.H. Gupta**, "Impact of Phase-Locked Loop on the Control of TCSC", **accepted in** *International Conference on Smart Energy and Advancement in Power Technologies (ICSEAPT 2021*), **Jamshedpur, India,** pp. 1-9, 06-08 Sept **2021.**
DOI:
