

## Faculty Profile



**Name:** Dr. Himanshu Sharma

**Designation:** Assistant Professor

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### Professional Qualification:

- PhD, IIT Dhanbad, India, 2017.
- MS, University of Greenwich, London, UK, 2010.
- BTech, NIEC, New Delhi, India, 2007.

### Publications (Journals & Conferences):

#### International Patent: (01 Nos.)

- **Himanshu Sharma** et al, “System And Method For Control of A Grid Connected Power Generation System”, <https://search.ipindia.gov.in/IPOJournal/Journal/ViewJournal>, Publication Date: 14<sup>th</sup> of Oct 2022, Application No. 202211056658A.

#### International Book: (02 Nos.)

- Pankaj Kumar, Kumar Avinash Chandra, Sanjay Patel, Nitai Pal, Mohit Kumar, **Himanshu Sharma**, “Operational Challenges towards Deployment of Renewable Energy”, of Book “Renewable Energy - Resources, Challenges and Applications”, ISBN No. 978-1-78984-284-5, Print ISBN: 978-1-78984-283-8, eBook (PDF) ISBN: 978-1-83962-155, Publisher: Intech open Published, **September 9th 2020**, DOI: <http://dx.doi.org/10.5772/intechopen.92041>, Book DOI: 10.5772/intechopen.81765.
- **Himanshu Sharma**, Pankaj Kumar, Nitai Pal, “A Control Strategy of Hybrid Solar-Wind Energy Generation System”, ISBN-13: 978-620-2-01771-8, ISBN-10: 6202017716, EAN: 9786202017718 Publisher: Lambert Academic Publishing, August 10<sup>th</sup> 2017.

#### International Journals: (21 Nos., 09 SCIEs, 06 Scopus)

- Shilpa Sambhi, **Himanshu Sharma**, Vikas Bhadoria, Pankaj Kumar, Georgios Fotis, Lambrous Ekonomou “Technical and 2E Analysis of Hybrid Energy Generating System with Hydrogen Production for SRM IST Delhi-NCR Campus”, Designs, ISSN: 2411-9660, Vol. 7(2), **April**

2023, Article-55; pp. 01-24, DOI: <https://doi.org/10.3390/designs7020055> (**Scopus, SNIP:0.982, Q2**).

- Shilpa Sambhi, **Himanshu Sharma**, Vikas Bhadoria, Pankaj Kumar, Ravi Chaurasia, Georgios Fotis, Vasiliki Vita “Technical and Economic Analysis of Solar PV/Diesel Generator Smart Hybrid Power Plant Using Different Battery Storage Technologies for SRM IST, Delhi-NCR Campus”, Sustainability, ISSN: 2071-1050, Vol. 15(4), **February 2023**, Article - 3666, pp. 01-23, DOI: <https://doi.org/10.3390/su15043666> (**SCIE, IF:3.889, Q2**).
- Shilpa Sambhi, **Himanshu Sharma**, Vikas Bhadoria, Pankaj Kumar, Ravi Chaurasia, Giraja Shankar Chaurasia, Georgios Fotis, Vasiliki Vita, Lambrous Ekonomou, and Christos Pavlatos “Economic Feasibility of a Renewable Integrated Hybrid Power Generation System for a Rural Village of Ladakh”, Energies, ISSN: 1996-1073, Vol. 15(23), **December 2022**, Article - 9126, pp. 01-25, DOI: <https://doi.org/10.3390/en15239126> (**SCIE, IF:3.252, Q3**).
- Shilpa Sambhi, **Himanshu Sharma**, Pankaj Kumar, Georgios Fotis, Vasiliki Vita and Lambrous Ekonomou “Techno-Economic Optimization of an Off-Grid Hybrid Power Generation for SRM IST Delhi-NCR Campus”, Energies, ISSN: 1996-1073, Vol. 15(21), **October 2022**, Article - 7880, pp. 01-24, DOI: <https://doi.org/10.3390/en15217880> (**SCIE, IF:3.252, Q3**).
- Anup Kumar, **Himanshu Sharma**, Ram Niwash Mahia, Om Prakash Mahela, Baseem Khan, “Design and Implementation of Hybrid Transmission Line Protection Scheme Using Signal Processing Techniques”, International Transactions on Electrical Energy Systems, ISSN: 2050-7038, Vol. 2022, **May 2022**, Article ID 7209553, pp. 01-20, DOI: <https://doi.org/10.1155/2022/7209553> (**SCIE, IF:2.639, Q3**).
- Pankaj Kumar, Nitai Pal, **Himanshu Sharma**, “Optimization and techno-economic analysis of a solar photo-voltaic/ biomass/diesel/battery hybrid off-grid power generation system for rural remote electrification in eastern India”, Energy, ISSN: 0360-5442, Vol. 247, **January 2022**, Article- 123560, pp. 01-17, DOI: <https://doi.org/10.1016/j.energy.2022.123560> (**SCIE, IF:8.857, Q1**).
- Pankaj Kumar, Nitai Pal, **Himanshu Sharma**, “Techno-economic analysis of solar photo-voltaic/diesel generator hybrid system using different energy storage technologies for isolated islands of India”, Journal of Energy Storage, ISSN: 2352-152X, Vol. 41, **September 2021**, Article- 102965, pp. 01-22, DOI: <https://doi.org/10.1016/j.est.2021.102965> (**SCIE, IF:8.907, Q1**).
- Pankaj Kumar, Nitai Pal, **Himanshu Sharma**, “Performance analysis and evaluation of 10 kWp solar photovoltaic array for remote islands of Andaman and Nicobar”, Sustainable Energy Technologies and Assessments, ISSN: 2213-1388, Vol. 42, **December 2020**, Article-100889, pp. 01-14, DOI: <https://doi.org/10.1016/j.seta.2020.100889> (**SCIE, IF:7.632, Q2**).
- Pankaj Kumar, **Himanshu Sharma**, Nitai Pal, Pradip Kumar Sadhu, “Comparative Assessment and Obstacles in the Advancement of Renewable Energy in India and China”, Problemy Ekorozwoju/Problems of Sustainable Development, ISSN: 1895-6912, e-ISSN: 2080-1971, Vol.14, Issue No.2, **July 2019**, pp.191-200, Publisher: Politechnika Lubelska, Wydział Inżynierii Srodowska, Ul Nadbystrzycka 40 B, Lublin, Poland, 20-618 (**SSCI, IF:0.864, Q4**).
- **Himanshu Sharma**, Pankaj Kumar, Nitai Pal, Pradip Kumar Sadhu, “Problems in the Accomplishment of Solar and Wind Energy in India”, Problemy Ekorozwoju/Problems of Sustainable Development, ISSN: 1895-6912, e-ISSN: 2080-1971, Vol.13, Issue No.1, **January**

**2018**, pp.41-48, Publisher: Politechnika Lubelska, Wydział Inżynierii Środowskiej, Ul. Nadbystrzycka 40 B, Lublin, Poland, 20-618 (**SSCI, IF:0.864, Q4**).

- **Himanshu Sharma**, Nitai Pal, Pankaj Kumar, Ashiwani Yadav, “A Control Strategy of Hybrid Solar-Wind Energy Generation System”, Archives of Electrical Engineering, ISSN: 1427-4221, e-ISSN: 2300-2506, Vol. 66, No.2, **July 2017**, pp. 241-251, DOI: <https://doi.org/10.1515/ae-2017-0018> (**Scopus & ESCI, SNIP:0.444**).
- Anup Kumar, **Himanshu Sharma**, Ram Niwas Mahia, “Voltage and current actuated hybrid protection scheme for utility grid with high penetration levels of renewable energy”, International Journal of Power and Energy Conversion, ISSN: 1757-1154, e-ISSN: 1757-1162, Vol. 13, 6, No.3/4, **May 2023**, pp. 294-318, DOI: <https://doi.org/10.1504/IJPEC.2022.130965> (**Scopus, SNIP:0.396**).
- Prakhar Sharma, Pankaj Kumar, **Himanshu Sharma**, Nitai Pal, “Closed Loop Controlled Boost Converter using a PID Controller for Solar Wind Power System Installation”, International Journal of Engineering & Technology, ISSN: 2227-524X, Vol. 7, No. 2.8, **2018**, pp. 255-260, DOI: [10.14419/ijet.v7i2.8.10420](https://doi.org/10.14419/ijet.v7i2.8.10420) (**Scopus, SNIP:0.277**).
- **Himanshu Sharma**, Nitai Pal, Yaduvir Singh, Pradip Kumar Sadhu, “Development and Simulation of Stand Alone Photovoltaic Model Using Matlab/Simulink”, International Journal of Power Electronics and Drive Systems (IJPEDS), ISSN: 2088-8694, Vol. 6, No. 4, **December 2015**, pp.703-711, DOI: <http://dx.doi.org/10.11591/ijped.v6.i4> (**Scopus, SNIP:0.928**).
- **Himanshu Sharma**, Nitai Pal, Pradip Kumar Sadhu, “Modeling and Simulation of Off-grid Power Generation System using Photovoltaic”, Indonesian Journal of Electrical Engineering and Computer Science, ISSN: 2502-4752, e-ISSN: 2502-4760, Vol. 13, No. 3, **March 2015**, pp. 418-424, DOI: <http://dx.doi.org/10.11591/telkomnika.v13i3.7061> (**Scopus, SNIP: 0.649**).
- Abhinav Kumar Jain, Deepak Pawar, Sanjay Raj Chauhan, **Himanshu Sharma**, “Design and Development of Off-Grid Solar-Battery Hybrid Eco Electric Air Conditioner (AC)”, International Journal for Research in Applied Science & Engineering Technology (IJRASET), ISSN: 2321-9653, Volume 9, Issue V, **May 2021**, pp. 1125-1130, DOI: <https://doi.org/10.22214/ijraset.2021.34472>.
- Nagendra Kumar, Jitendra Kumar, Ravi Chaurasia, **Himanshu Sharma**, “Comparison of Various Load Frequency Control Schemes in Restructured Power System Environment”, Journal of Physics: Conference Series, Online ISSN: 1742-6596 Print ISSN: 1742-6588, Article 012028, pp. 1-9, DOI: <http://dx.doi.org/10.1088/1742-6596/2007/1/012028> through 3<sup>rd</sup> International Conference on Computational & Experimental Methods in Mechanical Engineering Organised by Department of Mechanical Engineering, G.L. Bajaj Institute of Technology & Management, Greater Noida during 11th - 13th **February, 2021**
- Adarsh Dumrewal, **Himanshu Sharma**, Nitai Pal, Yaduvir Singh, “PV Cell Characteristic Variation Due To Change In Parameters”, International Journal of Industrial Electronics and Electrical Engineering, ISSN(p): 2347-6982, ISSN(e): 2349-204X, Vol. 8, Issue-6, **June 2020**, pp. 16-21, DOI: [IJIEE-IRAJ-DOI-17266](https://doi.org/10.11591/ijiee.v8i6.17266).
- **Himanshu Sharma**, Pankaj Kumar, Jagannath Patra, Nitai Pal, “Performance Analysis of Different PV Topologies with MPPT”, International Journal of Trend in Scientific Research and Development, UGC, ISSN: 2456-6470, Vol. 1, No.4, **2017**, pp. 656-664.

- **Himanshu Sharma**, Pankaj Kumar, Jagannath Patra, Nitai Pal, “Effects of Parameter Variations of PV Module based on MATLAB-Simulink Modeling”, International Journal of Trend in Scientific Research and Development, UGC, ISSN: 2456-6470, Vol. 1, No.4, **2017**, pp. 665-671.
- **Himanshu Sharma**, Nitai Pal, Yaduvir Singh, Ashiwani Yadav, Ganesh Gowri, “Standalone Photovoltaic Model Development and Simulation”, Vision and Quest, ISSN: 0975-8410, Vol.5, No.2, July–December 2015, pp. 48-52 through 2<sup>nd</sup> IEEE International Conference on Computational Intelligence & Communicational Technology (ICICT 2016) organized by the ABES Engineering College, Ghaziabad during 12<sup>th</sup> – 13<sup>th</sup> **February, 2016**.
- **Himanshu Sharma**, Nitai Pal, Yaduvir Singh, Ashiwani Yadav, Ganesh Gowri, “Photovoltaic Power Generation System Modeling And Simulation”, Vision and Quest, ISSN: 0975-8410, Vol.5, No.2, July–December 2015, pp. 35-39 through 2<sup>nd</sup> IEEE International Conference on Computational Intelligence & Communicational Technology (ICICT 2016) organized by the ABES Engineering College, Ghaziabad during 12<sup>th</sup> – 13<sup>th</sup> **February, 2016**.

#### **International Conference: (09 Nos.)**

- Anup Kumar, **Himanshu Sharma**, Ram Niwas Mahia “Cross Country Fault Detection Algorithm for Transmission Line Protection”, presented in the IEEE Students Conference on Engineering and Systems (SCES), Motilal Nehru National Institute of Technology Allahabad, Prayagraj, India during 01<sup>st</sup>-03<sup>rd</sup> of **July, 2022**, ISBN: 978-1-6654-8072-7/22.
- Anup Kumar, **Himanshu Sharma**, Ram Niwas Mahia “Evolving Fault Detection Algorithm for Transmission Line Protection”, presented in the International Conference on Intelligent Controller and Computing for Smart Power (ICICCCSP), Hyderabad, India, during 21<sup>st</sup> -23<sup>rd</sup> July, **2022**, ISBN: **978-1-6654-7258-6/22**, DOI: 10.1109/ICICCCSP53532.2022.9862408.
- Anup Kumar, **Himanshu Sharma**, “Application and Design of Photovoltaic System”, presented in the 1<sup>st</sup> International conference on renewable energy and green technology (ICREGT-2020), SRM Institute of Science and Technology, Delhi NCR Campus, India during 09<sup>th</sup>-10<sup>th</sup> of **October, 2020**, ISBN: 978-81-946241-5-8
- Shilpa Sambhi, **Himanshu Sharma**, “Technical analysis for optimization of stand-alone micro-grid in Leh”, presented in the 1<sup>st</sup> International conference on renewable energy and green technology (ICREGT-2020), SRM Institute of Science and Technology, Delhi NCR Campus, India during 09<sup>th</sup>-10<sup>th</sup> of **October, 2020**, ISBN: 978-81-946241-5-8.
- Anup Kumar, **Himanshu Sharma**, “Solar Energy and Photovoltaic Systems”, presented in the 1<sup>st</sup> International conference on renewable energy and green technology (ICREGT-2020), SRM Institute of Science and Technology, Delhi NCR Campus, India during 09<sup>th</sup>-10<sup>th</sup> of **October, 2020**, ISBN: 978-81-946241-5-8.
- Adarsh Dumrewal, **Himanshu Sharma**, Nitai Pal, Yaduvir Singh “PV Cell Characteristic Variation due to Change in Parameters”, presented in the International Conference organized Asian Society for Academic Research, Bangaluru, India during 06<sup>th</sup> **March, 2020**.
- Yaduvir Singh, Nitai Pal, **Himanshu Sharma** “Small Signal Stability of Hybrid Power System”, presented in the International Conference on Innovative Applications of Computational Intelligence on Power, Energy and Controls with their impact on Humanity (CIPECH-18) organized by KIET, Ghaziabad during 1<sup>st</sup> – 2<sup>nd</sup> **November, 2018**.
- **Himanshu Sharma**, Nitai Pal, Yaduvir Singh, Ashiwani Yadav, Ganesh Gowri, “Standalone Photovoltaic Model Development and Simulation”, 2<sup>nd</sup> IEEE International Conference on

Computational Intelligence & Communicational Technology (CICT 2016) organized by the ABES Engineering College, Ghaziabad during 12<sup>th</sup> – 13<sup>th</sup> **February, 2016.**

- **Himanshu Sharma**, Nitai Pal, Yaduvir Singh, Ashiwani Yadav, Ganesh Gowri, “Photovoltaic Power Generation System Modeling And Simulation”, 2<sup>nd</sup> IEEE International Conference on Computational Intelligence & Communicational Technology (CICT 2016) organized by the ABES Engineering College, Ghaziabad during 12<sup>th</sup> – 13<sup>th</sup> **February, 2016.**

#### **National Conference: (02 Nos.)**

- **Himanshu Sharma**, Pankaj Kumar, Yaduvir Singh, Nitai Pal, “PV Cell Characteristic Variations due to Change in Parameters”, presented in the National Conference on Renewable Energy Sources for Sustainable Climate (Solaris-2017) organized jointly by IIT (BHU), IIT Delhi and BERS during 7<sup>th</sup> – 9<sup>th</sup> **February, 2017**, pp. 134-141.
- Nitai Pal, **Himanshu Sharma**, Shivam Yadav, Pankaj Kumar, “A Modeling and Simulation of Photovoltaic Power Generation System for Surface Mine”, published in the National Conference on Mining Equipment: New Technologies, Challenges and Applications (MENTCA 2015) organized by the Department of Mining Machinery Engineering, IIT Dhanbad during 9<sup>th</sup> – 10<sup>th</sup> **October, 2015**, pp. 358-362.

#### **Awards and Achievements**

- 1st Rank in PhD Entrance Examination in Department of EEE in ISM Dhanbad.
- ICE-TEAS 2022 International Conference Session Chair held on 30th Dec 2022.
- ‘Reviewer’ in the International Conference on Small Satellites (ICSS-2022) held on April 29-30, 2022.

#### **Workshops/Seminars/FDPs**

- Participated in workshop on “**Applications of Technical Terminology in Modeling, Optimization & Computing in Science & Technology**” conducted by ministry of human resource Development held on 26<sup>th</sup> - 28<sup>th</sup> April 2019, at SRMIST Ghaziabad.
- Attended workshop on “**Advanced Power Electronics and Power Quality**” conducted by Electrical department held on 05-10 July 2015, at ISM, Dhanbad.
- Workshop on “**Assessing Clean Energy Technology Project Opportunities**” conducted by Weentech held on 18-19 Dec 2014, at National Institute of Technology, Patna.
- Workshop on “**National Workshop on Power Electronics NWPE**” conducted by NaMPET held on 7-8 Nov 2014, at BIT, Misra.
- Attended workshop on “**Application of Power Electronics in Renewable Energy**” conducted by Electrical department held on 7-11 July 2014, at ISM, Dhanbad.
- **Attended** workshop on “**Matlab Based Soft Computing Techniques**” conducted by Electrical department held on 27 June – 2<sup>nd</sup> July 2014, at ISM, Dhanbad.
- **ISTE** sponsored Workshop on “**Analog Electronics**” conducted by IIT, Kharagpur held on 4-14 June 2013, at DCE, Gurgaon.
- Attended seminar on “**Intellectual Property Rights (IPR): Opportunities & Strategies**” organised by Dronacharya College of Engineering, Gurgaon held on 8 Dec 2012.

- Attended workshop on “**ICT Applications for E & C Engineering Laboratories**” in association with DIT-GOVT. OF INDIA held on 30, 31 Aug & 1 Sep 2012, at DCE Gurgaon.

**Work Experience:** 11 Year 6 Month.

**Professional Memberships:**

- Institute of Electrical and Electronics Engineers (IEEE)
- Institution of Engineering and Technology (IET)
- Society of Digital Information and Wireless Communications (SDIWC)
- International Association of Engineers (IAENG)
- Computer Science Teachers Association (CSTA)