

FACULTY PROFILE



Name: Dr. Jitendra Kumar

Designation: Assistant Professor & Head of the Department

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Professional Qualification:

- PhD, Indian Institute of Technology, Delhi (IIT, D), India, 2020.
- M.Tech, Indian Institute of Technology, Delhi (IIT, D), India, 2011.
- B. E., J S S A T E, Noida, Uttar Pradesh, India, 2003.

Publications (Journals & Conferences):

- Optimal Scheduling of Grid Connected Solar Photovoltaic and Battery Storage System Considering Degradation Cost of Battery. *Iranian Journal of Science and Technology Transactions of Electrical Engineering*, vol. 46, pp. 1175-1188, 27 July, 2022. (<https://doi.org/10.1007/s40998-022-00529-x>)
- Analysis of Techno-economic Viability with Demand Response Strategy of a Grid Connected Microgrid Model for Rural Area in Uttar Pradesh State, India, *Energy*, vol. 178, pp. 176-185, 1 July 2019. (<https://doi.org/10.1016/j.energy.2019.04.105>)
- Performance analysis of Solar PV system for the remote region of State of West Bengal, India, Lecture Notes in Electrical Engineering, **2023 (Accepted)**

- Comparative Analysis of Hybrid Photovoltaic Thermal (PV/T) Solar Dryer, *Asian Journal of Water, Environment and Pollution*, Vol. 20, No. 1, pp. 57-66, (2023). (DOI [10.3233/AJW230009](https://doi.org/10.3233/AJW230009)).
- Modeling and Analysis of an Intelligent Approach for Load Frequency Control in a Deregulated Power System: A case Study Based on Different Control Schemes, *Intelligent Data Analytics for Power and Energy Systems, Lecture Notes in Electrical Engineering*, Springer Nature, Singapore, Vol. 802, pp. 61-83, 2022. (https://doi.org/10.1007/978-981-16-6081-8_4)
- Model order reduction using logarithmic assembly technique and second cauer form for power system models, *Journal of Physics:vol.* 2007 (2021) 012013, pp.1-9,2021.(<https://doi:10.1088/1742-6596/2007/1/012013>).
- Comparison of Various Load Frequency Control Schemes in Restructured Power System Environment, *Journal of Physics: vol.* 2007 (2021) 012028, pp. 1-9, 2021. (<https://doi:10.1088/1742-6596/2007/1/012028>).
- A priority list based fuzzy logic controller for short term unit commitment problem, *International Journal of Power, and Energy Conversion (IJPEC)*, vol. 10, No. 4, pp. 497-511, 2019. (<https://doi: 10.1504/IJPEC.2019.102981>)
- Generation Scheduling and Power Management of Pedaling System with Solar Photovoltaic System, *International Journal of Innovations in Engineering Research and Technology*, (IJERT), pp. 12-17, 2019. (<https://repo.ijert.org/index.php/ijert/article/view/2029>).
- Energy Generation Using Paddling System with Solar System, *MIT International Journal of Mechanical Engineering (MITIJME)* vol. 6, No. 1, pp. 5-8, January 2016.
- Design and Experimental Analysis of Automatic Bowling Machine, *MIT International Journal of Mechanical Engineering (MITIJME)* vol. 5, Issue 2, pp. 87-90, August 2015.
- An Ultras sonic Module for Automatic Landing of an Aircraft, *International Journal of Electronics, Electrical and Computational System IJEECS*, Volume 2, Issue 2, pp. 16-19, February 2014.
- Energy Generation and Storage using Bicycle Pedal System, *IJSDGE*, V-2, I-1, pp. 114-116, 2013.
- Autonomous UAV (Unmanned Aerial Vehicle) for Navigation & Surveillance Purposes, *GJRE* Volume 12, Issue 2, Version 1.0, 2012.

Conferences:

- Optimal EKHO-IMC-PID controller design and LFC based on adaptive integral k-means control approach for LSPS," 2023 *International Conference on Artificial Intelligence and Smart*

Communication (AISC-2023), Greater Noida, India, 2023, pp. 71-77, Doi: 10.1109/AISC56616.2023.10084998.

➤ Adaptive integral velocity sliding mode control approach-based optimal AGWO-IMC-PID controller design and LFC for LSPS, *2023 International Conference on Power, Instrumentation, Energy and Control (PIECON-2023)*, Aligarh, India, 2023, pp. 1-6, Doi: 10.1109/PIECON56912.2023.10085790.

➤ Comparative Analysis of Hybrid Photovoltaic Thermal (PV/T) Solar Dryer, *3rd International Conference on Renewable Energy Potential for sustainable Initiatives (REPSI-2022)*, New Delhi, India, Feb 03-04, **2022**.

➤ Model order reduction using logarithmic assembly technique and second cauer form for power system models, *3rd international conference on computational & experimental methods in mechanical engineering (ICCEMME-2021)*, Greater Noida, U.P. India.

➤ Comparison of Various Load Frequency Control Schemes in Restructured Power System Environment, *3rd International Conference on Computational & Experimental Methods in Mechanical Engineering (ICCEMME-2021)*, Greater Noida, U.P. India.

➤ Optimal PV Placement in Village Distribution Network considering Loss Minimization and Unbalance, *International Conference on Computing, Power, and Communication Technologies (GUCON-2019)* Galgotia University, Greater Noida, UP, India, pp. 566-571, Sep. 27-28, **2019**.

➤ Generation Scheduling and Power Management of Pedaling System with Solar Photovoltaic System, *International Conference on Sustainable Development (ICS-2019)*, Pune, India, pp. 12-17, Feb. 14-15, **2019**.

➤ An Optimization Algorithm for Unit Commitment Economic Emission Dispatch Problem, *First International Conference on Signals, Machines and Automation (SIGMA-2018)*, NSIT-Delhi, India, 23-25 Feb. **2018**.

Awards and Achievements

- Electrical Power & Energy Systems (Elsevier)
- Solar Energy (Elsevier)
- Walailak Journal of Science and Technology (WJST)
- Project Peer Reviewer in Qatar University
- IEEE Easy Chair

Workshops/Seminars/FDPs

- Developing Healthy Work Culture NITTTR, Ministry of Education, Govt. of India, 13-17 March **2023**
- National Intellectual Property Awareness Mission Intellectual Property Office, India, 27 **April 2023**
- Industry 4.0 Technologies: Application in Manufacturing Supply Chain, NIT, Patna, 02-13 **May 2022**
- Advanced Security Analytics and Machine Learning, SRMIST, NCR, GZB, 18-23 **April 2022**
- Recent challenges in Electrical & Electronics Engineering, GJUST, Hisar, Haryana, 15-20 **Nov 2021**
- Moral, Values, Attitude and Behavior Sciences (Phase-II), GLBITM, Gr. Noida (UP), India, 22-27 **Feb 2021**
- Moral, Values, Attitude and Behavior Sciences (Phase-III), GLBITM, Gr. Noida (UP), India, 08-13, March **2021**
- Control Design with MATLAB and Simulink, SRM IST Delhi NCR, 1-**Oct 2020**
- MAT Lab and Its Application, SBCET, Jaipur, 1-3 **Sep 2020**
- The Emerging Economic Scenario: Identify and Create Competencies, FICCI, New Delhi, July 23, **2020**
- A Joint Policy Model for Transboundary Cooperation on the Yarlung-Tsangpo/Brahmaputra/Jamuna (Y-B-J) River Basin to Address Issue at the Nexus of Climate Change, Water, Energy and Food System, Indian Institute of Technology (IIT), Delhi, **Sept. 2015**

Work Experience: 20+ Years

Professional Memberships:

- **LM ISTE,**
- **LM-IAENG**