

Dr. PRIYATOSH MAHISHE-MAIL ID: priyatosh@iitism.ac.inGoogle Scholar ID: <https://scholar.google.com/citations?user=U1wGWqQAAAAJ&hl=en>**Affiliation:** Assistant Professor

Department of Electrical Engineering
IIT(ISM) Dhanbad
Jharkhand-826004
India

**EDUCATIONAL QUALIFICATION**

- **Ph.D.** degree from IIT Kharagpur, India (2015-2021) on the topic of “Synchrophasor data based control of power systems” under supervision of Prof. A. K. Pradhan at IIT Kharagpur. (**date of award: 23 February, 2021**)
- Awarded Master of Engineering (**ME**) degree in First class with Distinction in Power system from BIT Mesra, India in 2013.
- **BTECH** degree received in 2010 with First class in Electrical Engineering from B. P. Poddar Institute of Management and Technology, Kolkata, India.

PROFESSIONAL EXPERIENCE

ORGANIZATION	POST HELD	PERIOD OF EMPLOYMENT
IIT(ISM) Dhanbad	Assistant Professor (Grade-I)	02-07-2025-Present
IIT Mandi, India	Assistant Professor (Grade-I)	22.05.2024-30.06.2025
IIT Mandi, India	Assistant Professor (Grade-II)	26.10.2022-21.05.2024
IIT Delhi, India	Post Doctoral Fellow in the Department of Electrical Engineering	22.07.2021-17.10.2022
IIT Delhi, India	Research Associate in the Department of Electrical Engineering	24.02.2021-21.07.2021
National Institute of Science and Technology (NIST), Odisha, India.	Assistant Professor in the Department of Electrical Engineering	06.07.2013 – 17.06.2015
IIT Kharagpur, India	Project Assistant in the Department of Mining Engineering	01.09.2010 – 28.02.2011

Teaching interest: Electrical machines, Power systems, Solar photovoltaic and wind energy systems**Soft skill:** C/C++, PSCAD, MATLAB SIMULINK/Coding, DIGSILENT, ETAP, LATEX, MS OFFICE**RESEARCH INTEREST**

- Deep technical expertise in power system dynamics and control.
- Strong interest in power electronic converters in renewable integration in power grid.

POSITIONS SERVED

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| • IEEE Student Member | 2016-2021 |
| • IEEE Member | Since 2022 |
| • Reviewer, IEEE Transactions on Sustainable Energy | Since 2019 |
| • Reviewer, IEEE PES General Meeting | Since 2019 |
| • Reviewer, IEEE Transactions on Power Delivery | Since 2020 |
| • Reviewer, IEEE Transactions on Industrial Electronics | Since 2020 |
| • Reviewer, International Journal of Electrical Power and Energy Systems, Elsevier | Since 2020 |
| • Reviewer, IEEE Transactions on Energy Conversion | Since 2021 |

PUBLISHED/ACCEPTED JOURNAL PAPERS

- M.R. Mishra, S. Mishra, and **P. Mahish**, "Time coordinated control strategy to improve voltage balance and regulation of low voltage PV rich networks," *IEEE Trans. Power Del.*, vol. 40, no. 4, pp. 2215-2227, Aug. 2025.
- **P. Mahish**, P. Kundu, and S. Mishra, "Wide Area Control of Inverter based Power Grids," *IEEE Trans. Sustain. Energy*, vol. 6, no. 2, pp. 852-865, Apr. 2025
- M. K. Das, **P. Mahish**, P. Buduma, and S. Mishra, "Systematic approach to improve performance of asymmetrical 21-level inverter with fewer components," *Int. J. Circ. Theor. Appl.*, Vol. 53, issue 5, pp. 2521-2540, May 2025. doi:[10.1002/cta.4229](https://doi.org/10.1002/cta.4229)
- **P. Mahish**, A. K. Pradhan, and S. Mishra, "Mitigating the impact of false data in wide area control of power systems," *Electric Power System Research*, vol. 236, pp. 110912, Nov. 2024.
- M.R. Mishra, **P. Mahish**, and S. Mishra, "An irradiance driven adaptive PQV droop for voltage regulation in active distribution system," *IEEE Trans. Power Del.*, vol. 38, no. 5, pp. 3192-3204, Oct. 2023.
- **P. Mahish**, and S. Mishra, "Synchrophasor data based Q-V droop control of wind farm integrated power systems," *IEEE Trans. Power Syst.*, 2022, vol. 38, no. 1, pp. 358-370, Jan. 2023.
- **P. Mahish**, and A. K. Pradhan, "Mitigating subsynchronous resonance using synchrophasor data based control of wind farms," *IEEE Trans. Power Del.*, vol. 35, no. 1, pp. 364-376, Feb. 2020.
- **P. Mahish**, and A. K. Pradhan, "Distributed synchronized control in grid integrated wind farms to improve primary frequency regulation," *IEEE Trans. Power Syst.*, vol. 35, no. 1, pp. 362-373, Jan. 2020.
- **P. Mahish**, A. K. Pradhan, and A. K. Sinha, "Wide area predictive control of power system considering communication delay and data drops," *IEEE Trans. Ind. Informat.*, vol. 15, no. 6, pp. 3243-3253, Jun. 2019.

PUBLISHED/ ACCEPTED CONFERENCE PAPERS

- M. R. Mishra, S. Mishra and **P. Mahish**, "Resilient Voltage Restoration Scheme for AC Microgrids Under Cyber Attack," *2025 IEEE Energy Conversion Congress & Exposition Asia (ECCE-Asia)*, Bengaluru, India, 2025.
- B. K. Yadavendu, M. Mishra and **P. Mahish**, "Sub/super synchronous resonance analysis of grid following inverter at islanded operation," *2024 IEEE 21st India Council International Conference (INDICON)*, Kharagpur, India, 2024.
- **P. Mahish**, and S. Mishra, "Improving frequency regulation of power system using primary and secondary reserves in grid integrated wind farms," *9th International Conference on Power Systems (ICPS)*, Kharagpur, India, 2021.
- **P. Mahish**, and A. K. Pradhan, "A state predictive approach to mitigate communication latency and data loss for wide area control of power system," in *Proc. IEEE Power Energy Soc. General Meeting*, Atlanta, GA, USA, Aug. 2019, pp. 1-5.
- **P. Mahish**, and A. K. Pradhan, "Synchrophasor data based distributed droop control in grid integrated wind farms to improve primary frequency response," *8th International Conference on Power Systems (ICPS)*, Jaipur, India, 2019.
- **P. Mahish**, and S. Chakraborty, "Frequency tuning properties of Magneto-Optic sensor," in *Proc. ICDCCom*, India, Sept, 2014, pp. 1-3.
- P Sarkar, **P Mahish**, M. Chowdhury, and K Sakurai, "Securing sensor networks by moderating frequencies," *Lecture Notes of the Institute for Computer Sciences, Social Informatics and Telecommunications Engineering book series (LNICST, vol. 153)*, Springer, 2015, pp. 173-185.

BOOK CHAPTERS

- **P. Mahish** and S. Mishra, "Wide area control design indifferent aspects of oscillations," *Synchrophasor technology: Real-time operation of power networks*, Institution of Engineering Technology, 2023, pp. 49-77.
- **P. Mahish**, M. R. Mishra, S. Mishra, "Distributed generation system integration: Operation and control," *Microgrid Cyberphysical Systems*, Elsevier, 2022, pp. 29-66.

SPONSORED PROJECTS

- Integration of digital olfaction with a mobile phone and television **IIT Mandi iHub & HCI Foundation** (Budget: 1.07 Cr.)
- Cyber resilient wide area control of inverter-based power networks **ANRF Early Career Research Grant** (Budget: 0.68 Cr.)

EDUCATIONAL AND PROFESSIONAL ACHIEVEMENTS

- Received POSOCO Power System Award (PPSA) 2022 in PhD thesis category.
- Best Paper award in *9th International Conference on Power Systems (ICPS)*, Kharagpur, India
- Conference paper selected for best paper session in IEEE PES General Meeting 2019, held at Atlanta, GA, USA during 4th -8th August 2019.
- Awarded best paper presentation in EEE department at the BIT INTERNATIONAL CONCLAVE 2013 held at BIT Patna campus during 22nd-23rd February 2013.
- Graduate Aptitude Test in Engineering (GATE) Qualified in 2011 and 2013.

Priyatosh Mahish

Research IDs
Google Scholar ID: https://scholar.google.com/citations?user=U1wGWqQAAAAJ&hl=en ORCID ID: 0000-0002-0838-952X Web of Science Researcher ID: AAR-5752-2020

Dated: 03-09-2025

(Priyatosh Mahish)

Place: Dhanbad