

**Name:**

Dr. Mangesh S. Thakare

**Designation:**

Head and Associate Professor, Department of Electrical Engineering and

**Contact Details:**

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**Educational Qualifications:**

- Ph. D. (Energy science & Engineering), IIT Bombay, Mumbai, (2016).
- ME (Electrical Power System), Government COE, Amravati, Amravati Univ., 2000.
- BE (Electrical Engineering), Government COE, Amravati, Amravati Univ., 1997.
- ADCSSAA - (Advanced Diploma In Computer Software System Analysis And Applications) MSBTE-Mumbai, (Duration-1 year Part Time)(2000).

**Experience:**

- Teaching: 24 Years
- Research: 03 Years

**Research Interests:**

- Solar Photovoltaic and thermal systems
- Grid connected and isolated renewable Energy systems
- Operational strategies of electric vehicles
- Power system optimization
- Evolutionary computational techniques

**Research Projects:**

Design and Fabrication of Portable Genset for efficient use of Biomass- a promising Renewable Energy Source.( GVK, NOVOPAN Industries Ltd., 2007-08)

**Field of Consultancy (Aspiring):**

Renewable Energy Systems, Testing of Electrical Machines and Appliances, Energy Conservation opportunities.

## Number of Publications:

International Journal: 09

National Journal: 01

International Conference: 06

National Conference: 14

Book/Books Chapter: 01

**Number of PhD students Evaluated: 03**

**Number of PG Students Guided: 17 (Completed), 02 (Ongoing)**

## Recognition/ Awards:

- **Member:** Department Advisory Board, DY Patil College of Engineering, Pimpri, Pune.
- Selected as a Research Scholar for Ph. D. under Quality Improvement Programme of AICTE at Department of Energy Science & Engineering, I.I.T Bombay during May 2009.
- **Expert (Judge):**
  - “AVISHKAR” Research Festival 2017 (Phase-II), organized by North Maharashtra University (NMU), Jalgaon, Maharashtra, December 29th -30th, 2017.
  - Delivered expert sessions in AICTE –ATAL , ISTE sponsored Faculty Development Programs
- **Reviewer:**
  - International Journals:** a) Clean Technology and Environmental Policy
  - b) International Journal of Energy Technology and Policy
  - c) IEEE Access
  - d) Applied Solar Energy
  - International conference:** a) 7th International Conference on Power Systems, 2017 (ICPS 2017), organized by Government COE, Pune. (Dec 21<sup>st</sup> -23<sup>rd</sup>, Pune).
  - National conference:** The 8th National Power Electronics Conference 2017 (NPES 2017)|, organized by Government COE, Pune, December 18th -20st, Pune.
- Received **First prize** in the presentation for the paper “Power management and control strategies of PV-FC hybrid system with storage in grid connected mode” authored by Swapnil Patil and M S Thakare; at 3<sup>rd</sup> International Conference on Computing Communication Control and Automation organized by Pimpri-Chinchwad COE, Pune, during 17th-18th Aug, 2017.

- Received **First prize** in the presentation for the paper “Unit Sizing & Cost Analysis of Hybrid Wind-PV System” authored by Prashant Chaugule and M S Thakare; at National Conference on Renewable Energy Commercialization jointly organized by PVG’s COET, Pune and Maharashtra Non-Conventional Energy Producers Association, Nashik, during April 23rd – 24th, 2012.
- Secured **First position** in the group activity ‘Presentation to Industries’ as a part of AICTE-ISTE sponsored short term training program on ‘Industrial training’ at GCOE, Amravati. (2008)

#### **Professional Society Memberships:**

- ISTE---membership number LM ISTE 29622
- International Association of Engineers(IAENG)-257613

**Number of Workshops organized: 10**

**Number of Conferences / Seminars organized: 07**

**Number of FDPs / STTPs attended: 17**

**Number of Workshops attended: 05**

**Number of Conferences / Seminars attended: 10**

**Number of Online Certification Courses done: 03**

**Number of Webinar attended: 12**

**Number of times served as a Resource Person: 09**

**Number of times served as a Reviewer / Judge: 15**

#### **Details of Research papers published:**

- Gauri M. Karve, Mangesh S. Thakare, Geetanjali A. Vaidya, “Optimum Sizing of Photovoltaic System with Battery Energy Storage Considering Load Modelling and Variation in System Voltage”, **Journal of Optoelectronics Laser**, (ISSN: 1005-0086), Volume 41 Issue 9, October 2022, 95-111. (**Scopus Indexed Journal**)
- Pranjal Wagh., M S Thakare, “Analysis of energy consumption and auditing of educational building”, **International Journal of Computer Engineering and Applications**, (ISSN 2321-3469), Volume XII, Special Issue, April 18.

- Devesh Imade, M S Thakare,” Rural Electrification using Renewable Energy Sources”, International Journal of Advance Research in Science and Engineering (IJARSE), (ISSN 2319-8354), Volume No 6, Issue no. 11, November 2017, 382-391.
- Thakare M.S., Krishna Priya, G.S., Ghosh P.C., Bandyopadhyay S., “Optimization of Photovoltaic-Thermal (PVT) based Cogeneration System through Water Replenishment Profile”. **Solar Energy 133** (2016), 512–523.
- Thakare M.S., Ghosh P.C., Bandyopadhyay S., “Optimal Sizing of a Photovoltaic-Thermal Hybrid System using Energy ratio ”, **Chemical Engineering Transactions**, Vol 45, 373-378, 2015
- Thakare M.S., Ghosh P.C., Bandyopadhyay S., “Utilization of Excess Energy while Sizing of Photovoltaic-Thermal System (PVT) using Design Space Approach”, **Chemical Engineering Transactions**, Vol 45, 1609-1614, 2015
- Krishna Priya, G.S., Thakare M.S., Ghosh P.C., Bandyopadhyay S., 2013,“Sizing of standalone photovoltaic thermal (PVT) systems using design space approach”. **Solar Energy 97** (2013), 48–57.
- Ujjwala Agawane, M S Thakare, “Analysis of PSO Strategies for Non-convex Economic Load Dispatch, International Journal of Engineering Research and Technology (IJERT) (ISSN: 2278-0181), Vol.2 - Issue 11 (November - 2013), pp 3485-3493.
- Santosh Mhetre, M S Thakare , “Evolutionary Computational Techniques to Solve Economic Load Dispatch Problem Considering Generator Operating Constraints”, International Journal of Engineering Research and Applications (IJERA) (ISSN: 2248-9622 ) special issue of National Conference on “Advances in Energy and Power Control Engineering” (AEPCE-2K12)

#### **Details of FDPs / STTPs attended in last 5 years:**

- **ISTE sponsored One week FDP** on “AI Techniques In Solar Energy Applications”, organized by Center of Excellence in Teaching & Learning, National Rural Development and Research Society’s, Suryodaya College of Engineering & Technology, Suryodaya Polytechnic, Nagpur during 09-14 August 2021.
- **AICTE Training And Learning (ATAL) Academy Online FDP** on “Electric Vehicles ” organized by All India Shri Shivaji Memorial Society's College of Engineering Pune during 05-09 October 2020.
- **AICTE Training And Learning (ATAL) Academy Online FDP** on “ Advances in renewable Energy sources (Electrical & Computer Engineering )” organized by Government College of Engineering Pune during 21-25 September 2020.
- **AICTE sponsored One Week phase-2 STTP** “Artificial Intelligence (AI) and Machine Learning (ML) Applications in Power Systems” ” organized by K K Wagh, Institute of Engineering Education & Research, Nasik during 31 August-05 September 2020.
- **AICTE sponsored One Week phase-1 STTP** on “IoT & Advanced Power Electronics Applications in Smart Grid” organized by Department of Electrical

Engineering, K K Wagh, Institute of Engineering Education & Research, Nasik during 10-14 August 2020.

**Major Portfolios Handled: (college level and department level)**

- Head of Electrical Engineering Department: 08<sup>th</sup> August 2022- till date
- Incharge-Substation and Electrical Maintenance
- Academic and Research Coordinator (SPPU)
- PG Coordinator
- Research Center coordinator

**Role in University Bodies....**

- Member Board of Studies – Printing Engineering
- Member LIC Committee, SPPU
- Subject Expert, interview committee, SPPU