Faculty Name: Mr. Vishal Vaman Mehtre

Experience: Teaching – 9 years, Industry – 3 years

Area of Interest: Renewable energy sector (Wind and Solar), Electric

Vehicles, Biomedical applications.



Conference papers:

- Analysis of a Doubly Fed induction generator based wind farm, Technological Innovations in ICT for Agriculture and Rural Development (TIAR), 2016 IEEE.
- Harmonic analysis and mitigation in wind power plants, Conference on Advances in Signal Processing CASP 2016.
- Performance comparison of SCIG and DFIG based wind farm in ETAP, International Conference on Automatic Control and Dynamic Optimization Techniques ICACDOT 2016
- National Power Electronics Conference, NPEC 2017.
- Contingency Analysis for a Solar Energy Generation System Using Real-Time Data Analysis, Lecture Notes in Electrical Engineering, Springer Nature, Conference Paper, 2024
- Membrane-less Microfluidic Fuel cell for Powering Pacemakers, International Conference on CyberTech and Smart Systems (ICCSS 2025)

Book Chapters:

- Graphene: A Promising Material for Flexible Electronic Devices, Advanced Structured Materials, Springer Nature, SCOPUS Indexed, 2023
- Revolutionizing Water Purification Through Nanotechnology, Nanotechnology in the Life Sciences, Springer Nature, SCOPUS Indexed, 2025

Books Published:

- Electrical Power Generation, TechNeo Publications, ISBN: 978-93-89251-14-2
- Electrical Power Transmission and Distribution, TechNeo Publications, ISBN: 978-93-89746-94-5
- Utilization of Electrical Energy, TechNeo Publications, ISBN: 978-93-89835-70-0
- Electrical Materials and Wiring Practice, Tech Knowledge Publications, ISBN 978-93-89233-34-6

Publications:

Publications	International Journal (s):	65	National Journals (s) :	1
	International Conference (s):	3	National Conference (s):	0
Book Chapters	2	Books Published	4	

- "Analysis of a Doubly Fed Induction Generator based Wind Farm"
- "Power Comparability Analysis of DFIG and SCIG based Wind Farm"
- "Harmonic Analysis and Mitigation in Wind Power Plants". IEEE Pune, CASP 2016
- "Analysis of a Squirrel Cage Induction Generator based Wind Farm in ETAP".
- "Performance Comparison of SCIG and DFIG based Wind Farm in ETAP" IEEE Pune, ICACDOT 2016
- "Analysis of Short Circuit faults in DFIG and PMSG Wind Farms", Journal of CPRI, September 2016
- "Newton Forward and Backward Interpolation Method", Iconic Research And Engineering Journals (IRE), Volume: 3, Issue: 6, Pg. No. 1215, ISSN: 24568880, December 2019
- "Analysis of Interpolation by using Lagrange's Method", International Journal for Research in Applied Science & Engineering Technology (IJRASET), Volume: 7, Issue: XII, Pg. No. 131135, ISSN: 23219653, December 2019
- "Analysis of Newton Raphson Method", International Journal of Innovative Research in technology (IJIRT), Volume 6, Issue 7, Pg. No. 7374, ISSN:23496002, December 2019
- "Object Oriented Programming", International Journal of Innovative Research in technology (IJIRT), Volume 6, Issue 7, Pg. No. 7072, ISSN:23496002, December 2019
- "Jacobi and GaussSeidel Iterative Methods for the solution of systems of linear equations comparison", International Journal of Innovative Research in technology (IJIRT), Volume 6, Issue 7, Pg. No. 6164, ISSN:23496002, December 2019
- "Interpolation Concept in Numerical Computations", International Journal for Research in Applied Science & Engineering Technology (IJRASET), Volume: 7, Issue: XII, Pg. No. 8890, ISSN: 23219653, December 2019
- "Analysis of Interpolation by using Lagrange's Method, International Journal for Research in Applied Science & Engineering Technology (IJRASET), Volume: 7, Issue: XII, Pg. No. 1820, ISSN: 23219653, December 2019
- "Interpolation Techniques in Numerical Computation", Iconic Research And Engineering Journals (IRE), Volume: 3, Issue: 6, Pg. No. 2729, ISSN: 24568880, December 2019
- "Secant Method for Numerical Solutions", International Journal of Innovative Research in technology (IJIRT), Volume 6, Issue 7, Pg. No. 6566, ISSN:23496002, December 2019
- "Class and Object", Iconic Research And Engineering Journals (IRE), Volume: 3, Issue:
 6, Pg. No. 2426, ISSN: 24568880, December 2019

- "Abstraction in MATLAB and OOPS", Iconic Research And Engineering Journals (IRE), Volume: 3, Issue: 6, Pg. No. 3538, ISSN: 24568880, December 2019
- "MATLAB" Basics: Commands, Functions & Operations, International Journal of Research in Engineering, Science and Management (IJRESM), Volume 2, Issue 11, Pg. No. 708710, ISSN: 25815792, November 2019
- "Secant Method in Numerical Computation", International Journal of Innovative Research in technology (IJIRT), Volume 6, Issue 7, Pg. No. 4648, ISSN:23496002, December 2019
- "Analysis of MATLAB", International Journal of Innovative Research in technology (IJIRT), Volume 6, Issue 7, Pg. No. 6769, ISSN:23496002, December 2019
- "Detailed Analysis of Bisection Method and Algorithm for Solving Electrical Circuits",
 International Journal for Research in Applied Science & Engineering Technology
 (IJRASET), Volume: 7, Issue: XI, Pg. No. 959964, ISSN: 23219653, November 2019
- "Root Finding Methods: Newton Raphson Method", International Journal for Research in Applied Science & Engineering Technology (IJRASET), Volume: 7, Issue: XI, Pg. No. 411414, ISSN: 23219653, November 2019
- "Rules of Numerical Integration in Details", Iconic Research And Engineering Journals (IRE), Volume: 3, Issue: 6, Pg. No. 3538, ISSN: 24568880, December 2019
- "Newton Raphson Technique", International Journal for Research in Applied Science & Engineering Technology (IJRASET), Volume: 7, Issue: XII, Pg. No. 196198, ISSN: 23219653, December 2019
- "Rolle's Theorem", Iconic Research And Engineering Journals (IRE), Volume: 3, Issue: 6, Pg. No. 3034, ISSN: 24568880, December 2019
- "Role of Bisection Method", Iconic Research And Engineering Journals (IRE), Volume: 3, Issue: 6, Pg. No. 3941, ISSN: 24568880, December 2019
- "Data Structures and Its Limitations", Iconic Research And Engineering Journals (IRE),
 Volume: 3, Issue: 6, Pg. No. 4244, ISSN: 24568880, December 2019
- "Gauss Jordan Method to Obtain Solution of Simultaneous Equation", International Journal of Innovative Research in technology (IJIRT), Volume 6, Issue 7, Pg. No. 7577, ISSN:23496002, December 2019
- "Review Paper on C++", Iconic Research And Engineering Journals (IRE), Volume: 3, Issue: 6, Pg. No. 4850, ISSN: 24568880, December 2019
- "Newton Raphson Single and Multi Variable Methods to Obtain the Solutions of Linear and Non Linear Equations", Iconic Research And Engineering Journals (IRE), Volume: 3, Issue: 6, Pg. No. 4547, ISSN: 24568880, December 2019
- "Review on Newton Raphson Method", International Journal for Research in Applied Science & Engineering Technology (IJRASET), Volume: 7, Issue: XI, Pg. No. 669671, ISSN: 23219653, November 2019
- "Newton Gregory Method", International Journal for Research in Applied Science & Engineering Technology (IJRASET), Volume: 7, Issue: XII, Pg. No. 9295, ISSN: 23219653, December 2019

- "Analysis of Object Oriented Programming", Iconic Research And Engineering Journals (IRE), Volume: 3, Issue: 6, Pg. No. 1720, ISSN: 24568880, December 2019
- "Review Paper on Numerical Method and Necessity of Computers for a High Speed Calculation", International Journal of Innovative Research in technology (IJIRT), Volume 6, Issue 7, Pg. No. 4245, ISSN:23496002, December 2019
- "Analysis of Different Method of Solving Quadratic Equations", International Journal for Research in Applied Science & Engineering Technology (IJRASET), Volume: 7, Issue: XI, Pg. No. 660664, ISSN: 23219653, November 2019
- "Object Recognition Based on MATLAB", International Journal of Scientific Research & Engineering Trends (IJSRET), Volume 5, Issue 6, Pg. No. 18651867, ISSN:2395566X, NovDec2019
- "Analysis of Different Method of Solving Quadratic Equations", International Journal for Research in Applied Science & Engineering Technology (IJRASET), Volume: 7, Issue: XI, Pg. No. 665668, ISSN: 23219653, November 2019
- "Inheritance in C++ Programming Language", International Journal of Scientific Research and Engineering Development (IJSRED), Volume 2, Issue 6, Pg. No. 144147, ISSN:25817175, NovDec2019
- "Newton Raphson Single and Multi Variable Methods to obtain the Solutions of Linear and NonLinear Equations", International Journal for Research in Applied Science & Engineering Technology (IJRASET), Volume: 7, Issue: XI, Pg. No. 926929, ISSN: 23219653, November 2019
- "Review Paper on Identification of Errors and their Computation", International Journal for Research in Applied Science & Engineering Technology (IJRASET), Volume: 7, Issue: XI, Pg. No. 705707, ISSN: 23219653, November 2019
- "Interpolation Techniques in Numerical Computation", International Journal for Research in Applied Science & Engineering Technology (IJRASET), Volume: 7, Issue: XI, Pg. No. 672674, ISSN: 23219653, November 2019
- "Interpolate", International Journal of Research in Engineering, Science and Management (IJRESM), Volume 2, Issue 11, Pg. No. 711712, ISSN: 25815792, November 2019
- "Errors and Their Computation in Numerical Method", Iconic Research And Engineering Journals (IRE), Volume: 3, Issue: 6, Pg. No. 47, ISSN: 24568880, December 2019
- "Concepts Related to Object Oriented Program OOP's: Basics", Iconic Research And Engineering Journals (IRE), Volume: 3, Issue: 6, Pg. No. 811, ISSN: 24568880, December 2019
- "Review on Concepts Related to Object Oriented Programming System", Iconic Research And Engineering Journals (IRE), Volume: 3, Issue: 6, Pg. No. 5658, ISSN: 24568880, December 2019
- "Design of Electric Vehicle Along With Brief Description of Different Types of Batteries and Motors", INTERNATIONAL JOURNAL OF INNOVATIVE RESEARCH IN TECHNOLOGY, Vol. 06, Issue 11, Pg. No. 351353, ISSN: 23496002, April 2020

- "Nuclear Plant Safety and its Environmental Impact", International Journal of Engineering Applied Sciences and Technology, Vol. 04, Issue 12, Pg. No. 205210, ISSN: 24552143, April 2020
- "SolarWind Hybrid Energy Generation System", International Journal of Advanced Research In Computer And Communication Engineering (IJARCCE), Vol. 9, Issue 6, June 2020.

 Improvement of Reliability and Power Quality using Battery Energy Storage System of Distribution Network, International Journal of Scientific Research in Science, Engineering and Technology, Vol. 12, Issue 3, May 2025.

Extra Activities:

- Workshop conducted on ETAP
- Project based learning for First year Engineering students.
- Worked as Hackathon Coordinator in Bharatiyam Technical event 2K18
- Review papers published by students for the course Digital Computational Techniques
- Conducted guest lecture on topic: "Introduction to ETAP software"
- You-Tube Channel named, "Computer Applications in Power Systems", 11 videos uploaded, 307 subscribers and more than 33k overall views.

Project/ Achievements:

- Completed 9 online certified quiz competitions organized by various colleges/Universities.
- Completed 9 Short Term courses related to Electrical and Electronics Engineering under TATA Steel Learning Centre during April – May 2020.
- Completed 2 online workshops under ALTAIR software for design of electrical machines.
- Hands-on training sessions for B. Tech and M. Tech students for professional software Electrical Transient Analyzer Program (ETAP), 120 students have been trained in last three years.
- Expertise in Professional Software MATLAB, ETAP