

Department of Electrical Engineering

STAFF PROFILE INFORMATION

	Name of Staff:	Dr. Vishal Shridhar Wadkar
	Designation:	Associate Professor
	Qualification:	PhD Electrical Engineering
	Area of Specialization:	1. Power Electronics 2. Renewable Energy System
	Experience:	1. Academic: 13 Years 2. Industrial: 00 Years
	Email id:	vishal.wadkar@seti.edu.in vishalwadkar9@gmail.com
	Contact Number:	9028400639

➤ Research Publications:

Research Citations:

Google Scholar Citations: **10**, H-Index: **01**, i-10 index: **0**.

Publication Summary:

Patent Filed	International Journals	National Journals	International Conferences	National Conferences	Book Chapters	Total
08	16	00	09	01	02	36

Patents:

1. Published UK Design Patent entitled “Wireless Remote Control for a Bomb Diffusing Robot” and officially granted Design Registration by the UK Intellectual Property Office, Design Number 6530424, Registration Date 03 June 2026
2. Published Indian patent entitled “Compact Thermoelectric Energy Generation Device”, Application Number 499504-001, filed 25 April 2026
3. Published Utility Patent titles “System and Method for Real-Time Electrical Safety and Energy Management in High-Density Environments” and **Under review for Grant**, Application Number 202521082566, filed 30 August 2025
4. Published Indian patent entitled “Decorative Vertical Rooftop Wind Turbine”, Application Number 456080-001, filed 21 April 2025
5. Published Indian patent entitled “Wireless Electric Vehicle Charging Equipment”, Application Number 453960-001, filed 02 April 2025
6. Published Indian patent entitled “Fire Detection and Notification through Alarm using IoT”, Application Number 202321034060, filed 15 May 2023
7. Published Indian patent entitled “Smart Factory using Industry 4.0”, Application Number 202321019082, filed 21 March 2023
8. Published Indian patent entitled “Energy Saving for Data Transmission In Wireless Network”, Application Number 202241020523, filed 05 April 2022

Research Publications: International Journal

Sr. No.	Title	Journal	Volume	ISSN
1.	Solar Powered EV Charging System with Boost Converter	International Journal of Scientific Research and Engineering Development	Volume 9, Issue 3	
2.	Optimization of Smart Inverter Control Strategies for Solar-Powered Electric Vehicle Charging Stations: A Comprehensive Analysis	Journal of Innovative Engineering and Research	Volume 7, Issue 2	
3.	Evaluating the Effectiveness of Smart Inverter Control for Solar-Powered EV Charging Stations	International Journal of Intelligent Systems and Applications in Engineering	Volume 20, Issue 7	
4.	Enhancing Power Quality in ON-Grid Systems with PV-STATCOM for Reactive Power Compensation	Journal of Electrical Systems	Volume 20, Issue 7s	
5.	Comparative Study of Performance Metrics for Smart Inverter Control in Solar PV-Based EV Charging Stations	Journal of Electrical Systems	Volume 20, Issue 7s	
6.	Portable Weight Measurement Instrument for Trolley	International Journal for Science and Advance Research in Technology	Volume 10, Issue 05	

7.	Optimizing Solar-Powered EV Charging with Smart Inverter: A Performance Analysis	European Chemical Bulletin	Volume 12, Issue 6	
8.	A Review on Distributed Energy System and Smart Inverters	International Journal of Multidisciplinary Educational Research	Volume 10, Issue 11(4)	
9.	Development of Remote Controlled Mine Detection Robot	Seybold Journal	Volume 15, Issue 7	
10.	Design and Implementation of Supercharger for Lithium Ion Battery	International Journal of Advanced Research in Electrical, Electronics & Instrumentation Engineering	Volume 9, Issue 5	
11.	Wireless Power Transmission by Inductive Coupling	Journal of Control and Instrumentation Engineering	Volume 5, Issue 1	
12.	Design of LC Meter Using Arduino	Journal of Instrumentation and Innovation Sciences	Volume 4, Issue 1	
13.	Electrical energy generation by using gym equipment	International Journal of Engineering, Education & Technology	Volume 6, Issue 1	
14.	An Overview of Dynamic Voltage Restorer for Voltage Sag and Swell Compensation	International Journal of Advanced Technology in Engineering and Science	Volume 4, Issue 1	
15.	Phasor Measurement Unit: An Overview	International Journal of Engineering, Education & Technology	Volume 3, Issue 2	
16.	Analysis of fault location for transmission lines	International Journal of Scientific & Engineering Research	Volume 6, Issue 3	

Research Publications: International Conference

Sr. No.	Title	Conference	Volume	ISSN
1	An Integrated IoT Architecture for Real-Time Anti-Poaching and Forest Monitoring Using a Multi-Sensor Network	International Conference on Integrated Research and Sustainable Development (ICIRSD-2025) organized by Ashokrao Mane Group of Institutions, Kolhapur on 30th–31 st October & 1 st November 2025	-	-
2	IoT-Based Air Quality Monitoring and Alert System: Addressing Pollution Challenges in Indian Metropolises	IEEE 2025 6th International Conference of Emerging Technologies Organized by Jain College of Engineering & Research, Belgaum, 22 nd – 24 th May, 2025	-	-
3	Assessing the Effectiveness of Intelligent Inverter Control in Solar-Powered Electric Vehicle Charging Stations	International Multidisciplinary Conference on Recent Innovations in Science Engineering, Management and Humanities Organized by J. S. University, Shikohabad, 16 th -17 th December, 2023	-	-
4	Issues, Challenges and Opportunities in Grid Integration of PV System	International Conference on Robotics, Communication Technology, Electronics and Electrical Engineering Organized by Institute of Research and Journals, Pune, India, 31 st July, 2023	-	-
5.	Design and Implementation of IoT Based Surveillance Robot	International Conference on Science, Technology and Management Organized by Sanjeevan Engineering & Technology Institute (Diploma), Panhala, 8 th – 9 th July, 2022	-	-
6.	A Smart Inverter	International Conference on Emerging Trends in Engineering, Science and Management Organized by Universal College of Engineering & Technology, Andhra Pradesh, 18 th – 19 th February, 2022	-	-

7.	Wireless based speed control of AC motor using ZigBee	International Conference on Innovations & Recent Trends in Engineering at Satara on 25 th March 2017	-	-
8.	An Overview of Dynamic Voltage Restorer for Voltage Sag and Swell Compensation	International Conference on Recent Innovations in Engineering & Management at Kolhapur on 23rd March 2016	-	-
9	Three phase distribution protection & theft detection system using Zigbee	International Conference on Electrical, Electronics & Communication Engineering at Hyderabad on 28 th February 2016	-	-

Research Publications: National Conference

Sr. No.	Title	Conference	Volume	ISSN
1	Smart Inverter for Micro Grid Applications: A Review	National Conference on Multidisciplinary Approaches in Engineering, Science & Management Organized by Trinity Academy of Engineering, Pune, 24 th – 25 th February, 2023	-	-

➤ Research Contribution:

Research Grants :(Details of grants received)

Sr. No.	Funding Agency	Year	Title of the project	Amount in Rs.
-	-	-	-	-

➤ Book Published

Sr. No.	Title of Book	Year	Name of Publisher	ISBN
1	Electric Vehicle Charging Infrastructure and Grid Integration: Technologies, Challenges, Smart Charging and Future Trends	2026	Amazon Asia-Pacific Holdings Private Limited	979-8199500319

➤ **Research IDs:**

01	Google Scholar ID	https://scholar.google.com/citations?user=uuUEBj8AAAAJ&hl=en
02	Researcher ID	rid170226
03	ORCID ID	0000-0003-2261-6212

➤ **Number of Ph. D. scholars guiding: -**

➤ **Member of Professional Bodies:**

- * Life Member of Indian Society for Technical Education (ISTE)
- * Associate Member of The Institution of Engineers (India)
- * Member of Institute of Electrical and Electronics Engineers (IEEE) for year 2021-22
- * Senior Member of International Association of Electrical and Electronics Engineers (IAEEEE)
- * Member of National Institute for Technical Training and Skill Development (NITTSD)
- * Member of International Association of Engineers (IAENG)
- * Editorial Board Member of Journal of Power Electronics & Devices (MAT Journals)
- * Member of International Journal of Creative Research Thoughts (IJCRT)
- * Advisory Board Member of World Research Forum for Engineers & Researchers (WRFER)
- * Editorial Board Member of „Blue Eyes Intelligence Engineering and Sciences Publication“ and its journals for year 2021-22
- * Editorial Board Member of A R Research Publication & Conference World from 2017-2020

➤ **Achievements:**

1. “Young Researcher Award” by LKP Academy, Tamil Nadu on 15th August 2025
2. “Best Teacher Award” by Devdan Sevabhavi Sanstha, Sangli on 3rd September 2017

➤ **Details of Faculty Development Programs (Workshop/Conference/Training Program):**

Sr. No.	Title of Program	Nature of program (FDP/ STTP /Workshop)	Organized by (Venue)	Year	Duration
1.	Recent Advancements in IoT – Industrial Perspective	FDP	National Institute of Electronics & Information Technology (NIELIT) at Ashokrao Mane Group of Institutions, Vathar	2026	19th January to 24th January 2026
2.	NBA Accreditation Preparation	Workshop	Ashokrao Mane Group of Institutions	2026	4th January 2026

3.	NEP 2020: Guidelines for Syllabus Design	Workshop	Ashokrao Mane Group of Institutions	2026	3rd January 2026
4.	Next-Gen Manufacturing: Embracing Industry 4.0	FDP	Ashokrao Mane Group of Institutions	2025	25th August to 30th August 2025
5.	Research Challenges & Opportunities in Electrical Engineering	FDP	Rajarshi Shahu College of Engineering, Pune	2025	26th May to 31st May 2025
