## MR. Vaibhav Ajit Sansare BE (Electrical) ME (Power System) PhD Pursuing

Designation	Assistant Professor	
Department	Electrical Engineering	66
Date of Joining the Institute	16/07/2012	
Education	Diploma (Electrical Engineering) 2009	
	BE (Electrical Engineering) 2012	
	ME (Power System) 2017	
	PhD pursuing	
Branch / Specialization	Electrical Power System	
Areas of Interest / Research Interest	Electrical Machine, Electrical Power System, Network Theory, Renewable Energy, Machine Design, EV charging technologies	
Email	Vaibhav.sansare@famt.ac.in	
Personal Homepage link		

## **Academic Appointments**

Name

Name of the University / Institute/ Industry	Duration	Designation
Finolex Academy of Management and Technology, Ratnagiri	01/07/2018 to till date	Assistant Professor
Finolex Academy of Management and Technology, Ratnagiri	16/07/2012 to 31/05/2018	Lecturer

# **Total Experience – 11.5 Years**

#### Books / Book Chapter - 01

- 1. "Power System", Vol-I, Technical Publication Pune, ISBN 978-93-90770-54-0, May-2021.
- 2. "Power System", Vol-II, Technical Publication Pune, ISBN 978-93-90770-75-5, July-2022.
- 3. "Energy Conservation", Technical Publication Pune, ISBN 978-93-90450-99-2, Nov-2021.

- 1. Long service award by Hope Foundation for completing 10 years of service in FAMT.
- 2. Secured 17<sup>th</sup> rank in Mumbai university in BE Electrical Examination (2011-2012)
- 3. **ISTE best student award** for year 2009 in Government Polytechnic, Ratnagiri.

#### **Students projects Guided at UG Level**

- 1. Design and implementation of Battery charging system.
- 2. Solar Powered Refrigerator.
- 3. Solar Powered 0-24V Voltage regulator.
- 4. Solar Powered Auto Irrigation System.
- 5. Demonstration Panel for Directional Overcurrent Relay.
- 6. Monitoring and Speed control of 3 phase Induction motor using PIC16 Microcontroller.
- 7. Home automation system.
- 8. Design and Implementation of Bidirectional DC-DC Converter.
- 9. Design and Implementation of single-phase Solar Inverter.

## Papers Published

## Papers Published in National / International Journals - 03

## International Journals – 03

- 1. Paper titled "Design of Controlled Boost Converter for PV based Charging Application" published in INTERNATIONAL JOURNAL OF RESEARCH AND ANALYTICAL REVIEWS (IJRAR) International Peer Reviewed, Open Access Journal, July 2020 (E- ISSN 2348-1269, P- ISSN 2349-5138)
- Paper titled "Development of Solar PV Battery Charger with Buck Converter" published in the INTERNATIONAL JOURNAL OF ENGINEERING SCIENCES & RESEARCH TECHNOLOGY, UGC Approved Journal, Volume-6, Issue-6, June 2017 (ISSN: 2277-9655)
- 3. Paper titled **"Design of Solar Battery Charger with voltage-controlled Buck Converter"** published in ASIAN JOURNAL OF CONVERGENCE IN TECHNOLOGY, Volume 2, Issue 3, **2016** (ISSN 2350 1146)

#### Papers Presented/Published in National/ International Conferences - 06

## **International Conferences – 04**

 Paper presented titled "Hardware Implementation of Isolated multi-output DC-DC Power Supply with Fixed and Programmable voltage levels" in ICAECC-2018 organized by Reva University Bangalore, India, on 11<sup>th</sup> and 12<sup>th</sup> March 2018.

- 2. Paper presented titled "Design of standalone PV charging system for Lead Acid Battery using controlled Boost converter" in IEEE international conference on current trends in Computer, Electrical, Electronics and Communication (ICCTCEEC-2017) organized by VCE, Mysuru, on 8<sup>th</sup> and 9<sup>th</sup> September 2017.
- 3. Paper published in conference proceeding book **'2017 International Conference on Current Trends in Computer, Electrical, Electronics and Communication (CTCEEC)' ISBN-978-1-5386-3242-0.**
- Paper presented titled "Design and Implementation of Multi- output DC-DC Power supply with Fixed and Programmable Voltage Levels" in IEEE international conference on current trends in Computer, Electrical, Electronics and Communication (ICCTCEEC-2017) organized by VCE, Mysuru, on 8<sup>th</sup> and 9<sup>th</sup> September 2017.

# National Conferences – 02

- Paper presented titled "Development of Electronic Differential for EV" in National Conference on "Electrifying Experience in Electrical Transportation in India" (NCEEETI) organized by GHRIET, Pune, on 06<sup>th</sup> and 07<sup>th</sup> February, 2018.
- Paper presented titled "Design of Solar Battery Charger with voltage-controlled Buck Converter" at 2<sup>nd</sup> National Conference on Recent Advances in Science and Technology (RAST) organized by Finolex Academy of Management and Technology, Ratnagiri on 17<sup>th</sup> and 18<sup>th</sup> February 2016.

## Number of Workshops, Seminars, STTPs, FDPs Attended – 33

## STTP / FDPs

- Completed One week FDP on "Drones & Autonomous Systems" Conducted during 02<sup>nd</sup> May 2023 to 06<sup>th</sup> May 2023 organized by Center of Excellence Drones, CMR Institute of Technology, Bengaluru in association with IEEE CMRIT Student Branch
- Completed AICTE FDP on " Microgrid: A Path to Sustainability " organized by AICTE Training and Learning (ATAL) Academy from 20<sup>th</sup> December to 24<sup>th</sup> December 2021
- Completed One-week AICTE, ISTE sponsored National level Refresher Program on "Recent Advancements in Electric Vehicle Technology" organized by G. H. Raisoni Institute of Engineering and Technology, Pune during 10<sup>th</sup> December to 16<sup>th</sup> December 2021
- Completed AICTE FDP on " Power Electronics for Power systems " organized by AICTE Training and Learning (ATAL) Academy from 6<sup>th</sup> December to 10<sup>th</sup> December 2021
- Completed AICTE FDP on " Recent Trends in Power System Operation and Control " organized by AICTE Training and Learning (ATAL) Academy from 12<sup>th</sup> July to 16<sup>th</sup> July 2021
- 6. Completed One-week FDP on **"Research in Energy Technologies"** conducted by Bharati Vidyapeeth College of Engineering Pune from 6th July to 11th July 2020

- Completed three-day international FDP on "Research Methodology and Techniques" conducted by Sandip Institute of Engineering and Management, Nashik, from 4<sup>th</sup> July to 6<sup>th</sup> July 2020
- Completed one-week STTP on "Nanoscience for Engineering Applications" conducted by NITTTR, Chandigarh & Dr. B. R. Ambedkar NIT, Jalandhar from 22<sup>nd</sup> June to 26<sup>th</sup> June 2020
- Completed one-week FDP on "Real world Applications of Microcontroller" conducted by NITTTR, Chandigarh from 15<sup>th</sup> June to 19<sup>th</sup> June 2020
- Completed One-week TEQIP national workshop on "Next Generation Software Tools & Trends for Industrial Solutions: current practices" conducted by Government College of Engineering, Aurangabad, from 13<sup>th</sup> June to 17<sup>th</sup> June 2020
- 11. Completed three-day international FDP on **"Future Advancements and Applications** of IoT" conducted by Sandip Institute of Engineering and Management, Nashik, from 12<sup>th</sup> June to 14<sup>th</sup> June 2020
- 12. Completed One-week FDP on "Effective use of ICT Tools in Teaching Learning Process" conducted by Government Polytechnic, Malvan, from 8<sup>th</sup> June to 12<sup>th</sup> June 2020
- 13. Completed one-week FDP on **"Exploring the Dimensions of Innovation, Incubation** and Emerging Technologies to Embrace Post COVID Changes" conducted by Finolex Academy of Management & Technology, Ratnagiri, from 8<sup>th</sup> June to 12<sup>th</sup> June 2020
- 14. Completed one-week STTP on **"Renewable Energy and Utilization"** conducted by Sandip Institute of Engineering and Management, Nashik, from 26<sup>th</sup> May to 30<sup>th</sup> May 2020
- 15. Completed one-day Faculty development program on **"Faculty Program on NBA"** conducted by Bharati Vidyapeeth College of Engineering Navi Mumbai on 15th May 2020
- 16. Completed one-week STTP on "Energy Efficient Practices in Refrigeration and Air Conditioning" conducted by Finolex Academy of Management & Technology, Ratnagiri in association with ISHARE, Thane chapter from 2<sup>nd</sup> December to 6<sup>th</sup> December 2019

#### **Conferences and Seminars**

- 17. Attended National Conference on "Electrifying Experience in Electrical Transportation in India" (NCEEETI) organized by GHRIET, Pune, on 06<sup>th</sup> and 07<sup>th</sup> February, 2018.
- 18. Attended International Conference on Current Trends in Computer, Electrical, Electronics and Communication (CTCEEC) organized Vidyavardhaka College of Engineering, Mysuru, India during 8<sup>th</sup> and 9<sup>th</sup> September 2017
- 19. Attended 2<sup>nd</sup> National Conference on Recent Advances in Science and Technology (RAST) organized by Finolex Academy of Management and Technology, Ratnagiri from 17<sup>th</sup> to 18<sup>th</sup> February 2016

- 20. Two-week workshop on "Electrical Power System" conducted by IIT Kharagpur under the national mission on Education through ICT (MHRD, Govt. of India), from 25<sup>th</sup> June to 10<sup>th</sup> July 2017
- 21. Completed one-week workshop on **"FACTS Devices and Distributed Generation through ICT"** conducted by NITTTR, Chandigarh from 06<sup>th</sup> -10<sup>th</sup> Feb. 2017
- 22. Completed one-week workshop on weekend on **"Funding Schemes Available for Research Proposal"** organized by FAMT, Ratnagiri, from 13<sup>th</sup> Feb to 23<sup>rd</sup> April 2016
- 23. Completed Two-week ISTE workshop on **"Control System"** conducted by IIT Kharagpur under the national mission on Education through ICT (MHRD, Govt. of India), during 2nd -12th Dec. 2014
- 24. Completed Two-week ISTE workshop on **"Signals and Systems"** conducted by IIT Kharagpur under the national mission on Education through ICT (MHRD, Govt. of India), during 2nd-12th Jan 2014
- 25. Completed Two-week ISTE workshop on **"Analog Electronics"** conducted by IIT Kharagpur under the national mission on Education through ICT (MHRD, Govt. of India), during 4th-14th June 2013

#### Workshops

- 26. Completed the workshop on **"Embedded Systems An Application Driven** Approach" organized by the All India Council for Technical Education (AICTE), ATAL Academy, STMicroelectronics and Arm Education, from 25<sup>th</sup> to 27<sup>th</sup> August 2021
- 27. Completed one month industry internship on "IoT Project Development using Industry Grade Micro- controller" conducted by Anand Techno Creations, Satara from 28<sup>th</sup> June to 28<sup>th</sup> July 2021
- 28. Completed one-day workshop on **"eSim, A first course in the IoT series for Teachers"** organized by the teachers learning Centre ICT at IIT Bombay
- 29. Completed Two-day workshop on **"Intellectual Property Rights (IPR)"** conducted by Finolex Academy of Management and Technology, Ratnagiri from 15<sup>th</sup> March to 16<sup>th</sup> March 2019
- 30. Completed one-day workshop on **"DIgSILENT Power Factory software"** used for Power system modelling, analysis and simulation.
- 31. Completed One-day workshop on **'Inter Collegiate Research Convention Avishkar'** conducted by Mumbai University on 12<sup>th</sup> August 2014.
- 32. Completed Two-day workshop on 'Repair and Maintenance of Electrical Home Appliances' held at FAMT college, Ratnagiri in 8 to 20 Februvary, 2013
- 33. Completed Two-day workshop on 'Aakash for Education' held at FAMT College, Ratnagiri from 10<sup>th</sup> Nov to 11<sup>th</sup> Nov 2012

## **Certification Course / Refresher Courses completed - 7**

- 1. Four-week online international certification course on **"Energy: The Enterprise"** conducted by The State University of New York; University at Buffalo during 25th May-26th June 2020.
- 2. Four-week online international certification course on **"Natural Gas"** conducted by University at Buffalo during 1st May-2nd June 2020.
- 3. Two-week online international certification course on **"Electric Power Systems"** conducted by University at Buffalo during 1st May-13th May 2020.
- 4. Three-week online international certification course on **"Safety in the Utility Industry"** conducted by University at Buffalo during 1st May-21st May 2020.
- Two-week online international certification course on "Embedded Software & Hardware Architecture" conducted by University of Colorado Boulder during 1st May-12th May 2020.
- 6. Twelve-week NPTEL online certification course on **"Electrical Machines-I"** conducted by Swayam NPTEL during June 2019-October 2019.
- 7. Four-week online international certification course on **"PCB Design using KiCad"** conducted by Great Learning.

#### Technical Seminars/ Workshop/ Lecture/ Invited Talks As a Resource Person - 10

- 1. Conducted Expert Lecture on **"Career after Diploma in Electrical Engineering"** at Government Polytechnic Ratnagiri on 29th April 2023
- 2. Conducted Guest lecture series on **"Electrical Machines"** at Government College of Engineering, Ratnagiri from 29th November 2022 to 5th December 2022
- 3. Conducted a add-on course on **"Power Generation Technologies in India"**, at Finolex Academy of engineering and technology, Ratnagiri on 9th and 10th September 2022
- 4. Conducted Expert Lecture on **"Electric Vehicle- The future of Transportation"** at Government Polytechnic Ratnagiri on 05th May 2022
- 5. Conducted Guest Lecture on **"Electric Vehicle Technology"** at Yashawantrao Bhonsale Polytechnic, Sawantwadi on 12th March 2022
- 6. Conducted workshop on **"PCB design and circuit making for SE Electrical"** at Finolex Academy of engineering and technology, Ratnagiri 23rd and 24th September 2017
- 7. Conducted workshop on **"PCB design and circuit making for TE Electrical"** at Finolex Academy of engineering and technology, Ratnagiri 9th and 10th September 2017
- 8. Conducted workshop on **"PCB design and circuit making for SE Electrical"** at Finolex Academy of engineering and technology, Ratnagiri on 21st and 22nd March 2016
- 9. Conducted workshop on **"Basics of Residential Wiring"** at Finolex Academy of engineering and technology, Ratnagiri from 17th to 19th September 2015

10. Conducted workshop on **"Basics of Residential Wiring"** at Finolex Academy of engineering and technology, Ratnagiri from 12th to 14th August 2014

#### Extension / Outreach Programs / Social Programs As a Resource Person

- 1. Conducted Guest Lecture on **"Ancient India"** during NSS Camp Indira College of Pharmacy, Sadavali, Devrukh on 24th January 2020
- 2. Conducted Guest Lecture on **"Ancient India"** during NSS Camp Finolex Academy of engineering and technology, Ratnagiri on 24th December 2019
- 3. Conducted Guest Lecture on **"Ancient India"** during NSS Camp Gogate Jogalekar College Ratnagiri on 10th November 2019

#### **Professional Membership**

- 1. Indian Society of Technical Education (I.S.T.E)
- 2. Life member of Electrical Engineer's Associations.

#### **Other Experience**

#### **College Level Administrative Responsibilities**

- 1. Working as a criteria head of NAAC Criteria VI
- 2. Working as a Faculty In-charge Brainwaves 2024, National Technical Event of FAMT
- 3. Working as Member of Competitive & Qualifying Exam Cell (CQE)
- 4. Working as Core member of NAAC Criterion VI
- 5. Worked as Exam Coordinator online examination
- 6. Worked as Member of Institute Exam Conduction Committee
- 7. Working as Member of Admission and Carrier Counseling Cell
- 8. Working as Member of Attendance Monitoring Committee
- 9. Working as Member of Admission Committee of FE and DSE admission
- 10. Working as a Department Academic Coordinator
- 11. Worked as departmental organizing committee member in 2nd National Conference on "Recent Advances in Science and Technology" held at FAMT
- 12. Worked as a Faculty In-charge Brainwaves 2023, National Technical Event of FAMT

## Judge Panel / Staff Selection Committee / Subject Expert

- 1. Worked as a **Judge** for **SAEINDIA AWIM Ratnagiri Olympic 2023** organized by Mahindra & Mahindra Ltd on 15<sup>th</sup> December 2023.
- 2. Worked as a **Judge** for **Project Exhibition and Competition of BE students** organized by Department of Electrical Engineering, Finolex Academy of Management and Technology, Ratnagiri.
- 3. Worked as a **Judge** for **College level Research Convention AVISHKAR 2018-19** conducted for District Leve; Research Convention AVISHKAR 2018-2019 as a part of Research Convention of University of Mumbai, held at Finolex Academy of Management and Technology, Ratnagiri on 1<sup>st</sup> November 2018.
- Worked as a Judge for Technical Paper presentation in Brainwaves 2k15, Brainwaves 2k16 A National Level Technical Event organized by Finolex Academy of Management and Technology, Ratnagiri.

Sr.No	Name of Subject	Year/Branch/Semester	Experience (Years)
1	Electrical Networks	SE Electrical (Sem - III)	07
2	Elements of Power System	SE Electrical (Sem - IV)	04
3	Power System Analysis	TE Electrical (Sem - V)	05
4	Power System Protection	TE Electrical (Sem - VI)	04
5	Electrical Machines-I	SE Electrical (Sem - IV)	04
6	Basic Electrical and Electronics Engineering	FE ALL BRANCHES (Sem - I)	04
7	Electrical Machines-I	TE Electrical (Sem - V)	03
8	Electrical Machines-IV	TE Electrical (Sem-VI)	03
9	Fundamentals of Electrical Machines and Measurement	SE Electrical (Sem-III)	03
10	Conventional and Nonconventional Power Generation	SE Electrical (Sem-III)	03
11	Control System-I	TE Electrical (Sem-V)	02
12	Electrical Power System-II	TE Electrical (Sem-V)	04
13	Electrical Machine Design	BE Electrical (Sem-VII)	02
14	Power Quality and FACTs	BE Electrical (Sem-VIII)	01
15	Special Electrical Machines	TE Electrical (Sem-VI)	01
16	Electrical Power System-I	SE Electrical (Sem-IV)	01
17	PCB Design and Fabrication	SE Electrical (Sem-IV)	02
18	Electrical Workshop	SE Electrical (Sem-IV)	02

## Subject Taught