Name MR. SUDHIR S. WAMANE M.Tech (Control System)

Designation Assistant Professor

Department Electrical

Date of Joining the

Institute Education 22/07/2008

Diploma (Electrical Engg.), GPS, 2005

B.E. (Electrical Engg.), FAMT, 2008

M.Tech (Control System), VJTI, 2013

Branch /
Specialization

Control System

Areas of Interest PID Controllers, FACTS Devices and Active Filters

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Mobile 8378916306



# **Academic Appointments**

Name of the Institute	Duration	Designation
Finolex Academy of Management and Technology, Ratnagiri	From 22/07/08 to till date	Assistant Professor (Selection Grade)

# **Total Experience – 13 Years 5 Months**

# Awards / Honors / Prizes - 03

- Achieved Meritorious Award in Convocation Ceremony by Vice Chancellor, University of Mumbai on date 10/09/2008 for securing 2<sup>nd</sup> rank in Mumbai University in Final Year Examination of Electrical Engineering Degree (B.E.) (2007 - 2008).
- 2. Awarded by "Late Smt. Mohini P. Chhabria Award" For standing First in the B.E. Electrical Examination at FAMT, Ratnagiri college (2007-2008).
- 3. Achieved **"Elite grade"** in "Control Engineering" course in NPTEL Online Certification by NPTEL Coordinator, IIT Madras on date 01/10/2017.

# Seminars/Lecture/Invited Talks Conducted - 17

- 1. Delivered Expert Lecture on **"Control System Design"** at Sandip foundation engineering college, Nashik on 8<sup>th</sup> Feb. 2013.
- 2. Conducted One day workshop on "PROTEUS Software" at FAMT, Ratnagiri on 10th Sept. 2015.
- 3. Conducted Add-on course on **"MATLAB Software"** at FAMT, Ratnagiri on 23rd Jan. 2016.

- 4. Conducted course enrichment on "Basics of FACTS devices via MATLAB Software" at FAMT, Ratnagiri on 8th Feb. 2016.
- 5. Conducted Two days workshop on "Analog and Digital Circuits Design using PROTEUS Software" at FAMT, Ratnagiri during 19th 20th March 2016.
- 6. Conducted Add-on course on **"MATLAB Software (Simulink)"** at FAMT, Ratnagiri on 24th Jan. 2017.
- 7. Conducted Two days workshop on "Analog and Digital Circuits Design using PROTEUS Software" at FAMT, Ratnagiri during 4th 5th March 2017.
- 8. Conducted course enrichment on "Basics of FACTS devices via MATLAB Software (Simulink)" at FAMT, Ratnagiri on 15th March 2017.
- 9. Expert Lecture on "FACTS Devices" at Rajaram Shinde College of engineering, Pedhambe on 6th April 2017.
- 10. Conducted One day workshop on "Analog and Digital Circuits Design using PROTEUS Software" at RSCOE, Pedhambe on 6th April 2017.
- 11. Conducted Course Enrichment on **"Tuning of PID Controllers"** at FAMT, Ratnagiri on 12th August 2017.
- 12. Expert Lecture on **"Control Systems"** at Rajaram Shinde College of engineering, Pedhambe on 23th Sept. 2017.
- 13. Conducted course enrichment on "Basics of FACTS devices via MATLAB Software (Simulink)" at FAMT, Ratnagiri during 4<sup>th</sup> 6<sup>th</sup> April 2018.
- 14. Conducted Course Enrichment on **"Tuning of PID Controllers"** at FAMT, Ratnagiri on 29th Sept. 2018.
- 15. Conducted One day workshop on "Analog and Digital Designs using Proteus" at Government Polytechnic, Ratnagiri on 17th Feb. 2020.
- 16. Conducted One day workshop on **"Tuning of PID Controllers"** at FAMT, Ratnagiri on 5th March. 2022.
- 17. Conducted Two days workshop on "Microcontroller based project design using PROTEUS" at FAMT, Ratnagiri during 11th 12th March 2022.

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

### International Journals - 06

- 1. "A comparative study on compensating current generation algorithms for Shunt active filter under Non linear load conditions", International Journal of Scientific and Research Publications (IJSRP), 2013, Vol. 3, Issue 6, ISSN: 2250-3153, Pages 1-6.
- 2. "Study on Mitigating Inrush Current of Transformer using Point on Wave Switching and Prefluxing Technique", Asian Journal of Convergence in Technology (AJCT), 2016, Vol. 6, Issue 3, ISSN: 2350-1146, Pages 1-6.
- 3. "Experimental study on helical coil heat exchanger", International Journal of Scientific and Research Publications (IJSRP), May 2017, Vol. 7, Issue 5, ISSN 2250-3153, Pages 56-59.
- 4. "PLC Based Automatic Railway Gate Controller and Obstacle Detector", International Journal of Latest Trends in Engineering and Technology (IJLTET), Jan. 2018, Vol. 9, Issue 3, eISSN: 2278-621X, Pages 133-139. [UGC approved Journal]
- 5. "Modelling and Control of UPFC for Power Flow Management", International Journal of Current Engineering and Scientific Research (IJCESR), April 2018, Vol. 5, Issue 4, ISSN: 2393-8374, Pages 54-60. [UGC approved Journal]
- 6. "Design and implementation of solar emulator through flyback converter", International Journal of Scientific Research in Engineering and Management (IJSREM), March 2020, Vol. 4, Issue 3, ISSN: 2582-3930, Pages 1-4.

## Papers Presented/Published in National / International Conferences - 02

#### **International Conferences - 01**

1. "Performance based comparison of UPQC compensating signal generation algorithms under distorted supply and non-linear load conditions", 8<sup>th</sup> IEEE Conference on Industrial Electronics and Applications, Melbourne, Australia, 2013, ISBN: 978-1-4673-6320-4, Pages 38-42.

#### **National Conferences - 01**

1. "Study on Mitigating Inrush Current of Transformer using Point on Wave Switching and Prefluxing Technique", 2<sup>nd</sup> National Conference on Recent Advances in Science and Technology (RAST-2k16), FAMT Ratnagiri, Maharashtra, India, 2016, ISBN: 978-93 83046-31-7, Pages 94-98.

### Number of Workshops, Seminars, STTPs, FDPs Attended - 40

## Workshops

- Attended Two-days workshop on "Simulation of Electronic Circuits and Power Electronics System using SEQUEL" organized by FAMT, Ratnagiri, during 31st Oct -1st Nov 2009.
- 2. Attended One day workshop on **"Entrepreneurship Awareness Programme"** conducted by MITCON Consultancy Services Ltd. in association with FAMT, Ratnagiri (Sponsored by Department of science and Technology, New Delhi) in August, 2007.
- 3. Attended One day workshop on "Quality Education in Engineering and Technical Institution" organized by FAMT, Ratnagiri under the FAMT ISTE Chapter on 24th Jan 2009.
- 4. Attended Two days workshop on "Nonlinear Dynamical Systems: Modelling and Analysis" organized by V.J.T.I., Mumbai, during 27th 28th Jan 2013.
- Attended One week Coordinator's workshop on "Control System" conducted by IIT Kharagpur under the national mission on Education through ICT (MHRD, Govt. of India), during 15th - 19th Sept 2014.
- 6. Attended 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.
- 7. Attended Two-week ISTE workshop on **"Pedagogy for Effective use of ICT in Engineering Education"** conducted by IIT Bombay under the national mission on Education through ICT (MHRD, Govt. of India), during 5th 31st Jan 2015.
- 8. Attended 2<sup>nd</sup> National Conference on Recent Advances in Science and Technology (RAST) organized by Finolex Academy of Management and Technology, Ratnagiri during 17<sup>th</sup> 18<sup>th</sup> February 2016.
- 9. Attended One day workshop on **"Inter collegiate Research convention Avishkar 2016"** organized by VPM's MPCOE, Velneshwar, on 24th Sept. 2016.
- 10. Attended Two days workshop on **"Raspberry pi"** organized by FAMT, Ratnagiri, during 10th -11th Feb. 2017.
- 11. Attended One week workshop on **"FACTS Devices and distributed generation through ICT"** conducted by NITTTR, Chandigarh, during 6th 10th Feb. 2017.
- 12. Organized and participated in Two days workshop on **"Intellectual Property Rights (IPR)"** organized by Research, Development & Consultancy Committee, FAMT Ratnagiri, during 24th 25th March 2018.
- 13. Attended One day seminar conducted by **Tata Power Skill Development Institute Trombay**, organized by VPM's MPCOE, Velneshwar, on 26th Sept. 2018.
- 14. Attended one day Webinar on "Design & Development of an Experimental Learning", organised by Quasar on 16<sup>th</sup> November 2018.

- 15. Attended one day Webinar on "Machine Learning: Current state of the art and future trends", organised by McGraw Hill Education on 24<sup>th</sup> October 2018.
- 16. Attended Workshop on "Avishkar Research Convention 2019-20" held in July, 2019.
- 17. Attended Workshop on "R" held in November, 2019.
- 18. Attended Two days workshop on **"Internet of Things"** conducted by Universal College of Engineering Vasai, during 14<sup>th</sup> 15<sup>th</sup> May, 2020.

#### **FDPs**

- 1. Attended FDP on **"Future Energy Trends & its Impact"** conducted by SJB Institute of Technology Bengaluru, during 24<sup>th</sup> 28<sup>th</sup> August, 2020.
- 2. Attended FDP on **"Design and Development of Automated System using PLC"** conducted by KIT Kolhapur, during 14<sup>th</sup> 19<sup>th</sup> May, 2021.
- 3. Attended FDP on "Recent Trends in Power Systems" conducted by Sharad Institute of Technology College of Engineering, Yadrav (Ichalkaranji), during 22<sup>nd</sup> 26<sup>th</sup> June, 2020.
- 4. Attended FDP on **"Explore Electrical Engineering in Industrial Applications"** conducted by Manakula Vinayagar Institute of Technology Puducherry, during 15<sup>th</sup> 19<sup>th</sup> June, 2020.
- 5. Attended FDP on **"Future Advancements and Applications of Internet of Things"** conducted by Sandip Institute of Engineering and Management Nashik, during 12<sup>th</sup> 14<sup>th</sup> June, 2020.
- Attended FDP on "Electric Power Grid Modernization Trends Challenges & Opportunities" conducted by KKR & KSR Institute of Technology and Sciences Guntur, during 9<sup>th</sup> 13<sup>th</sup> June, 2020.
- 7. Attended FDP on **"Effective use of ICT Tools in Teaching Learning Process"** conducted by Government Polytechnic Malvan, during 8<sup>th</sup> 12<sup>th</sup> June, 2020.
- 8. Attended FDP on **"Exploring the Dimensions of Innovation, Incubation and Emerging Technologies"** conducted by FAMT Ratnagiri, during 8<sup>th</sup> 12<sup>th</sup> June, 2020.
- 9. Attended FDP on "Recent Trends in Electrical Engineering" conducted by Vishnu Institute of Technology, Bhimavaram, during 8<sup>th</sup> 12<sup>th</sup> June, 2020.
- 10. Attended FDP on "Technological Advances in Power Switching Converters in Renewable Energy Sources & Fuel Cell Technology for E-Vehicles" conducted by Bapatla College of Engineering, during 1st 5th June, 2020.
- 11. Attended FDP on **"Moodle Learning Management System"** conducted by Pune Institute of Computer Technology, during 26<sup>th</sup> 30<sup>th</sup> May, 2020.
- 12. Attended FDP on **"Promoting Quality Culture in Technical Institutions"** conducted by AISSMS College of Engineering Pune, during 25<sup>th</sup> 29<sup>th</sup> May, 2020.
- 13. Attended FDP on **"Technical Teachers Training"** conducted by Vidyavardhini Institute of Technology Pal, during 22<sup>nd</sup> 27<sup>th</sup> May, 2020.
- 14. Attended FDP on "Recent Trends in Electrical Engineering" conducted by Priyadarshini College of Engineering Nagpur, during 18<sup>th</sup> 22<sup>nd</sup> May, 2020.
- 15. Attended FDP on **"Outcome Based Education: A Step towards Excellence"** conducted by Government College of Engineering Karad, during 11<sup>th</sup> 15<sup>th</sup> May, 2020.
- 16. Attended FDP on **"Perspectives in Linear Control System"** conducted by VJTI Mumbai, during 7<sup>th</sup> 12<sup>th</sup> January, 2020.
- 17. Attended FDP on **"Embedded System & IOT"** conducted by NITTTR, Chandigarh in association with Ministry of Human Resource Development, Govt. of India, during 27<sup>th</sup> 31<sup>st</sup> January, 2020.
- 18. Attended ATAL Academy online FDP on "Recent Advances in Control Systems" conducted by Madan Mohan Malaviya University of Technology Gorakhpur, during 18<sup>th</sup> 22<sup>nd</sup> October, 2021.
- 19. Attended ATAL Academy online FDP on "ROBOTICS: The Machine Power for Industrial Automation" conducted by Sri Eshwar College of Engineering, during 15<sup>th</sup> 19<sup>th</sup> November, 2021.
- 20. Attended ATAL Academy online FDP on **"Sensors Applications through Internet of Things"** conducted by University BDT College of Engineering Belagavi, during 20<sup>th</sup> 24<sup>th</sup> September, 2021.

- 1. Attended One Week STTP on **"Renewable Energy & Utilization"** conducted by Sandip Institute of Engineering and Management Nashik, during 26<sup>th</sup> 30th May, 2020.
- 2. Attended Two-week ISTE STTP on **"Electrical Power System"** conducted by IIT, Kharagpur, during 12th June 15th July 2017.

### **Number of Professional Certification Programs – 31**

#### **NPTEL Courses**

Completed NPTEL course on "Control Engineering" held in July, 2017.

# **Coursera Certification Programs**

- Completed Certification Program on "Internet History, Technology and Security" conducted by University of Michigan, during 1<sup>st</sup> – 23<sup>rd</sup> May, 2020.
- 2. Completed Certification Program on **"Building Arduino Robots & Devices"** conducted by Moscow Institute of Physics & Technology, during 1<sup>st</sup> 10<sup>th</sup> May, 2020.
- 3. Completed Certification Program on **"Interfacing with the Raspberry pi"** conducted by University of California, during 1<sup>st</sup> 22<sup>nd</sup> May, 2020.
- 4. Completed Certification Program on **"Interfacing with the Arduino"** conducted by University of California, during 1<sup>st</sup> 22<sup>nd</sup> May, 2020.
- 5. Completed Certification Program on **"AI for Everyone"** conducted by deeplearning.ai, during 1<sup>st</sup> 22<sup>nd</sup> May, 2020.
- 6. Completed Certification Program on **"Safety in the Utility Industry"** conducted by University of Buffalo, during 1<sup>st</sup> 21<sup>st</sup> May, 2020.
- 7. Completed Certification Program on **"Embedded Hardware and Operating Systems"** conducted by EIT Digital, during 1<sup>st</sup> 20<sup>th</sup> May, 2020.
- 8. Completed Certification Program on "Natural Gas" conducted by University of Buffalo, during 1<sup>st</sup> May 2<sup>nd</sup> June, 2020.
- 9. Completed Certification Program on "Programming for Everybody (Getting Started with Python)" conducted by University of Michigan, during 1<sup>st</sup> 12<sup>th</sup> May, 2020.
- 10. Completed Certification Program on "Machine Learning Foundations: A Case Study Approach" conducted by University of Washington, during 1st 10th May, 2020.
- 11. Completed Certification Program on **"Control of Mobile Robots"** conducted by Georgia Institute of Technology, during 1<sup>st</sup> 9<sup>th</sup> May, 2020.
- 12. Completed Certification Program on **"Embedded Software and Hardware Architecture"** conducted by University of Colorado Boulder, during 1<sup>st</sup> 12<sup>th</sup> May, 2020.
- 13. Completed Certification Program on **"Electrical Power Systems"** conducted by University of Buffalo, during 1<sup>st</sup> 13<sup>th</sup> May, 2020.
- 14. Completed Certification Program on "Introduction to Internet of Things and Embedded Systems" conducted by University of California, during 1<sup>st</sup> 15<sup>th</sup> May, 2020.
- 15. Completed Certification Program on "Managing Machine Learning Projects with Google Cloud" conducted by Google Cloud, held in October, 2021.
- 16. Completed Certification Program on "Introduction to TensorFlow for Artificial Intelligence, Machine Learning and Deep Learning" conducted by deeplearning.ai, held in October, 2021.

### **Other Certification Programs**

- 1. Completed Certification Program on "Neural Networks and Deep Learning" conducted by Great Learning Academy, held in October, 2021.
- 2. Completed Certification Program on "Data Science Projects" conducted by Great Learning Academy, held in October, 2021.
- 3. Completed Certification Program on **"Face Detection with OpenCV in Python"** conducted by Great Learning Academy, held in September, 2021.

- 4. Completed Certification Program on "Artificial Intelligence Projects" conducted by Great Learning Academy, held in September, 2021.
- 5. Completed Certification Program on **"Introduction to Ethical Hacking"** conducted by Great Learning Academy, held in September, 2021.
- 6. Completed Certification Program on "Advanced Cyber Security Threats and Governance" conducted by Great Learning Academy, held in September, 2021.
- 7. Completed Certification Program on **"Python Fundamentals for Beginners"** conducted by Great Learning Academy, held in September, 2021.
- 8. Completed Certification Program on **"Python for Machine Learning"** conducted by Great Learning Academy, held in September, 2021.
- 9. Completed Certification Program on "Introduction to Cyber Security" conducted by Great Learning Academy, held in September, 2021.
- 10. Completed Certification Program on **"Introduction to Machine Learning with Sound"** conducted by Cognitive Class, held in October, 2021.
- 11. Completed Certification Program on **"Machine Learning with Python"** conducted by Cognitive Class, held in October, 2021.
- 12. Completed Certification Program on **"Machine Learning with R"** conducted by Cognitive Class, held in October, 2021.
- 13. Completed **49 Learning hours** for various certification programs conducted by IBM Skills Build, held in October, 2021.
- 14. Earned Learning Badge for **"Cyber Security Fundamentals"** conducted by IBM Skills Build, held in October, 2021.

### **Professional Membership - 03**

- 1. **Life membership** of Indian Society of Technical Education (I.S.T.E) (Membership Number: 66614) from 2009.
- 2. **Reviewer** in IET Generation, Transmission and Distribution Journal.
- 3. Member Editorial Board of IJIET Journal.

### **College Exam Duties - 03**

- 1. Worked as an **Assistant CAP coordinator** for the **summer 2014** paper assessment at **FAMT ENGG. CAP.**
- 2. Worked as an Additional Senior Supervisor of 2017 Winter Exam.
- 3. Carried out exam related duties such as **Paper Setter, Moderator, Examiner and External Examiner** for conducting theory, practical and oral exam as appointed by Board of Examination, Mumbai University.

# **Other Experience - 19**

### **College Level Committees**

- 1. Working as Department Coordinator of **Training and Placement Cell** of Finolex Academy of Management and Technology, Ratnagiri.
- 2. Working as Department Coordinator of **Research, Development and Consultancy Committee** of Finolex Academy of Management and Technology, Ratnagiri.
- 3. Working as Department Coordinator of **Intellectual Property Rights Cell** of Finolex Academy of Management and Technology, Ratnagiri.
- 4. Worked as Department Coordinator of **Innovation and Entrepreneurship Development Cell** of Finolex Academy of Management and Technology, Ratnagiri.
- 5. Working as Department Coordinator of **Department of Lifelong Learning and Extension department** of Finolex Academy of Management and Technology, Ratnagiri.
- 6. Worked as Department Coordinator for **NAAC Criteria 1 committee**.

- 7. Working as Coordinator of many social events such as **Electrical Safety Awareness** Campaign, Digital Transaction Awareness Campaign, Fort Cleanup drive, Bhatye Beach Cleanup drive, College Campus Cleanup drive etc. since 2016.
- 8. Worked as Chief Editor of Proceedings of the 2nd National Conference on "Recent Advances in Science and Technology" in Feb. 2016.
- 9. Worked as Departmental Organizing **Committee Member** in 2nd National Conference on **"Recent Advances in Science and Technology"** in Feb. 2016.
- 10. Worked as Organizing Committee Member in "Inter-Collegiate Cross-Country Races (M&W) 2016-17" organised by Finolex Academy of Management and Technology, Ratnagiri in August. 2016.
- 11. Worked as Coordinator for **College and District Level AVISHKAR Research Project Convention** Organized in FAMT on 4<sup>th</sup> and 19<sup>th</sup> October 2016.
- 12. Worked as Department **Project coordinator** in A.Y. 2016 17 and 2017-18.
- 13. Worked as Co-coordinator for **College Level AVISHKAR Research Project Convention** Organized in FAMT on 1<sup>st</sup> November 2018.
- 14. Worked as Coordinator for 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.

## **Judge Panel / Staff Selection Committee / Subject Expert**

- 1. Worked as a **Judge** for Brainwaves 2k14 "**Word War Debate Competition"** organized by Finolex Academy of Management and Technology, Ratnagiri.
- 2. Worked as a **Judge** for Brainwaves 2k15 "**Project presentation competition"** organized by Finolex Academy of Management and Technology, Ratnagiri.
- 3. Worked as a **Judge** for Brainwaves 2k17 "**Technical paper presentation competition"** organized by Finolex Academy of Management and Technology, Ratnagiri.
- 4. Worked as a **Judge** for Elektra 2k17 to 2k19 "**Technical paper presentation** competition" organized by EESA, Department of Electrical Engineering.
- 5. Worked as a **Judge** for Techspring 2k19 "**Technical power point presentation competition"** organized by ASCENT, Department of EXTC Engineering.

## **Subjects Taught - 10**

Sr. No.	Name of the Subject	Year/Branch/Semester	Experience
1.	Electrical Power System	S.E. ELECT (Sem - IV)	1 Year
2.	Electrical Machines - I	S.E. ELECT (Sem - III)	1 Year
3.	Industrial Electronics	S.E. MECH (Sem - IV)	2 Years
4.	Electrical and Electronics Engineering	S.E. CHEM (Sem - III)	3 Years
5.	Principles of Control System	S.E. ETRX (Sem - IV)	2 Years
6.	Linear Control System	S.E. ETRX (Sem - IV)	2 Years
7.	Control System – I	T.E. ELECT (Sem - VI)	8 Years
8.	Control System - II	B.E. ELECT (Sem - VII)	10 Years
9.	Flexible AC Transmission Systems	B.E. ELECT (Sem - VIII)	6 Years
10.	Basic Electrical Engineering	F.E. ALL (Sem - I)	10 Years