MR. AMOL R. SUTAR Name **ME Electronics** 

Assistant Professor Designation

Electronics and Telecommunication Engineering Department

**Electronics Engineering** 

Date of Joining the

Institute

Email

Education

Branch

Specialization

Areas of Interest

Embedded Systems, Power Electronics

01/08/2006

amol.sutar@famt.ac.in



## **Academic Appointments**

Name of the **Duration** Designation University Institute/ **Industry** 

BE Electronics, ME Electronics, PhD (pursuing)

Finolex Academy

Management and From 01/01/2013 to till date **Assistant Professor** 

Technology, Ratnagiri

Finolex Academy

Management and From 01/08/06 to 31/12/2012 Lecturer

Technology, Ratnagiri

S. N. Systems, Pune From 01/09/2005 to 30/07/2006 **Electronics Engineer** 

# **Total Experience – 17 Years**

## Awards / Honors / Prizes

- 1. Elite Certificate in eight week NPTEL Online Certification course on "Analog Circuits" with 82% score.
- 2. Elite Certificate with Silver Medal in four week NPTEL Online Certification course on "Electri Vehicle Part-1" with 84% score.

3.

## **Research projects**

- 1. A Project Titled An Intelligent Adjustable and Automatic Timer System, Applied for Minor Research Grant to Mumbai University 2017-18.
- 2. Many Electronics based Projects Guided to SE, TE, BE Students of Electronics, Electrical, IT, Mechanical branches, FAMT, Ratnagiri.

# **Seminars/Lecture/Invited Talks Conducted**

- Worked as member of organizing committee member for one day workshop on "Intellectual Property Rights" on 24<sup>th</sup> March 2018 at FAMT Ratnagiri organized by RDCC committee.
- 2. Conducted two day Workshop on "Embedded C Programming and Application Development" as resource person on 04<sup>th</sup> to 7<sup>th</sup> August 2017 at FAMT. Raṭnagiri.
- 3. Conducted two day Workshop on "Programming with Arduino" on 03<sup>rd</sup> and 4<sup>th</sup> March 2017 at Government Polytechnic, Malvan.
- 4. Organized two day workshop on "Raspberry-Pi" on 10<sup>th</sup> and 11<sup>th</sup> Feb 2017 at FAMT Ratnagiri.
- 5. Conducted three day workshop on "Embedded C Programming and Application Development" as resource person on 6<sup>th</sup> August to 8<sup>th</sup> august 2016 at FAMT Ratangiri.
- 6. Conducted three day workshop on "Microcontroller System Design, C Programming and Applications" as resource person on 3<sup>rd</sup> Oct 2015 to 5<sup>th</sup> Oct 2015, at FAMT Ratanagiri.
- 7. Organized a workshop "Robo Hack" as Workshop Coordinator at FAMT Ratnagiri on date 28<sup>th</sup> August 2015.
- 8. Conducted a workshop "Workshop on Robotics", as Rsource Person at FAMT Ratnagiri on date 17<sup>th</sup> October 2014.
- 9. Conducted a workshop "Workshop on Robotics", as Rsource Person at FAMT Ratnagiri on date 17 August 2013.
- 10. Conducted a one day Workshop on "PCB Design and Circuit Implementation" as Resource person at FAMT Ratnagiri, on date 23<sup>rd</sup> July 2008.

### **Papers Published**

## Papers Presented/Published in National / International Journals - 12

### International Journals - 08

- 1. Published a paper entitled Performance Evaluation of Boost Converter Fed BLDC Motor Drive System in UGC Care-II The International journal of analytical and experimental modal analysis Volume XIV, Issue IX, September/2022
- 2. Published a paper entitled Experimental Study of Multistage Constant Current Charging with Temperature Awareness Control Method in scopus journal International Journal of Electrical and Electronics Research (IJEER) Volume 10, Issue 3 | Pages 664-669, September/2022
- 3. Presented a paper entitled Design and Implementation of Quasi Z-source Converter Based Battery Charger for Electric Vehiclesin international conference 2023 IEEE 8th International Conference for Convergence in Technology (I2CT) Pune, India. Apr 7-9, 2023 Published in May 2023
- 4. Published a paper entitled On the Advancements in DC Fast Charging Power Converters Technologies for Electric Vehicle in WoS journal Journal of Active and Passive Electronics Devices Vol. 16, pp. 93–108, 2021
- 5. Paper titled "Design and Development of an Intelligent, Adjustable and Automatic Timer System" published in International Journal of Science and Research Technology IJSRT, Vol 3, Issue 10, ISSN 2395-1052, Oct-2017.
- 6. Published a paper in international journal on "Simple and Low Cost IC Tester for Analog and Digital labs", Asian journal of convergence in Technology, AJCT, Vol-II, Issue III, PP, Sept. 2016.
- 7. Published a paper in international journal on "Implementation and Study of BLDC Motor Drive System", IJESRT, ISSN2277-9655, Vol. 5, Issue5, PP 57-64, May 2016.
- 8. Published a paper in international journal on "Performance Analysis of Three Phase induction motor drives for Various PWM Control methods", IJSER, ISSN 2229-5518, Volume 6, Issue 8, PP 1-7, August 2015.

- 9. Published a paper in international journal on "Design of Xilinx (8.1) FPGA Based Five Level (Multilevel) PWM Single Phase Inverter", IJES, ISSN 2319-1805 Volume 2, Issue 5, PP-78-84, May 2013
- 10. Published a paper in international journal on "Advanced Three Phase PWM Inverter Control Using Microcontroller", IOSR-JEEE, ISSN 2278- 1676, Volume 5, Issue 2, PP 21-28, April 2013.
- 11. Published a paper in international journal on "Pulse Width Modulation Implementation using FPGA and CPLD ICs", IJSER, ISSN 2229-5518, Volume 3, Issue 8, PP 1-5 August 2012.
- 12. Published a paper in international journal on "Performance Analysis of Z-source Inverter Fed Induction Motor Drive" IJSER, ISSN 2229- 5518, Volume 3, Issue 5, PP 1-5, May2012.

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

#### **International Conferences - 03**

- 1. Published a paper entitled On the Advancements in DC Fast Charging Power Converters Technologies for Electric Vehicle in international conference- 4th International eConference on Frontiers in Computer & Electronics Engineering & Nano Technology (ICFCEET), on November 19 -20, 2021 organized by SANJEEVAN ENGINEERING & TECHNOLOGY INSTITUTE, PANHALA
- 2. Published a paper entitled Automatic Syrup Storage Control System Using Arduino in international conference— International Conference On Communication and Computing 2022 (ICCC-2022) On Communication and Computing 2022 (ICCC-2022) organized by FAMT, Ratnagiri
- 3. Paper presented titled "EMBEDDED SYSTEM APPLICATIONS IN WIRELESS COMMUNICATION" in international Conference On Emerging Trends in Embedded Systems and VLSI Technology, MIT, Alandi held on 21<sup>st</sup> Dec. 2009 to 23<sup>rd</sup> Dec. 2009

#### National Conferences - 03

- 1. Published a paper entitled Electric mobility: A Power Electronics Perspective in national conference- The National Conference on Emerging Trends in Electric Mobility &Sustainable Development: Opportunities &Challenges organized by RIT Rajaramnagar.
- Paper Presented titled "Performance Evaluation of Single Phase Unipolar and Bipolar PWM Inverter", in national conference Challenging Technology and Rural Development (CTRD2K17) at RMCET Ambav, Held on 22<sup>rd</sup> and 23<sup>th</sup> Dec. 2017
- 3. Paper presented titled "SIMPLE AND LOW COST IC TESTER FOR ANALOG AND DIGITAL LABS" in national Conference RAST 2K16 held in Feb. 2016.

#### Number of Workshops, Seminars, STTPs, FDPs Attended - 49

### STTPs and FDPs

- 1. Participated in the FDP "Electric Vehicle Part-I" dated 01/01/2022 to 28/02/2022 organized by NPTEL IIT Madras
- 2. Participated in the FDP "Real-time Embedded and IoT Systems: An Experiential Learning" dated 06/12/2021 to 10/12/2021 organized by AICTE Training And Learning (ATAL) Academy Rajarambapu Institute of Technology, Rajaramnag
- 3. Participated in the FDP "Opportunity and Challenges for Electric Vehicles in the Automotive Industry" dated 26/07/2021 to 30/07/2021 organized by AICTE Training And Learning (ATAL) Academy- National Institute of Technology Sringar

- 4. Participated in the FDP "One week online faculty development program on "Electric Vehicles" dated 2021-07-05 to 2021-07-09 organized by AICTE Training And Learning (ATAL) Academy Vivekanand Education Society's Institute of Technology..
- 5. Participated in the FDP "Electric Vehicles" dated organized by Institute of Technology..
- 6. Participated in the FDP Introduction to Research dated 1/9/2020 to 30/11/2020 organized by IIT, Madras
- 7. Participated in STTP Research Methodology and Intellectual Property Rights dated 24/02/2020 to 29/02/2020 organized by Thakur College of Engineering and Technology, Mumbai
- 8. Participated in the FDP FDP: Exploring the Dimensions of Innovation, Incubation and Emerging Technologies to Embrace Post COVID Changes dated 08/06/2020 TO 12/06/2020 organized by Finolex Academy of Management and Technology, Ratnagiri.
- 9. Participated in eight week NPTEL online course on "Analog Circuits" (secured 82% score in online exam) in the month Feb-March 2018.
- 10. Participated in the FDP NPTEL Online Certification Course on Analog Circuits dated Feb-March 2018 organized by IIT, Bombay
- 11. Participated in STTP One week ISTE Workshop on Power System Analysis dated 12/06/2017 to 15/07/2017 organized by National Mission on Education through ICT (MHRD)
- 12. Attended two week STTP Workshop on "Power System Analysis" at FAMT Ratnagiri I association with IIT Kharagpur. 12<sup>th</sup> June to 15<sup>th</sup> July 2017
- 13. Participated in the FDP Faculty Development Program on Embedded System dated 14/11/2016 to 18/11/2016 organized by I2IT PUNE
- 14. Participated in the FDP Faculty Development Program on Digital Marketing dated 16/10/2016 organized by IT Dept. FAMT Ratnagiri
- 15. Attended Faculty Development Program on "Emebedded Systems" on 14<sup>th</sup> Nov. to 18<sup>th</sup> Nov 2016 at I2IT Pune
- 16. Attended Faculty Development Program on "Digital Marketing" on 16<sup>th</sup> Oct. 2016 at FAMT Ratnagiri.
- 17. Attended one day Orientation Program on "Power Electronics-II" at Shah and Anchor Cutchinii COE1 on date 30 June 2015.
- 18. Attended Two Week ISTE workshop on "Analog Electronics (MHRD)" Conducted by IIT Bombay under the National Mission on Education through ICT, on June 4 June 14, 2013.

#### **Conferences and Seminars**

- 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. Attended three day National Conference On Advances in Heat and Mass Transfer, FAMT Ratnagiri, held on  $30^{th}$  and  $31^{st}$  October 2009.
- 21. Attended three day International Conference On Emerging Trends in Embedded Systems and VLSI Technology, MIT, Alandi held on 21<sup>St</sup> Dec. 2009 to 23<sup>rd</sup> Dec. 2009

### Two Week or One Week Workshops

- 22. Conducted One Week Workshop on "Funding Schemes Available for Research Proposals" Organized by Research Development and Consultancy cell (RDCC) of Finolex Academy of Management and Technology, Ratnagiri from 13<sup>th</sup> February to 23<sup>rd</sup> April 2016
- 23. Attended Two Week ISTE workshop on "Signals and Systems" Conducted by IIT Bombay, at FAMT Ratnagiri on 2 Jan. 2014 to 12 Jan. 2014.

- 24. Attended Two Day workshop on "Introduction to Robotics" Organized by Department of Physics Mumbai University on date 30<sup>th</sup> Nov. 2012 & 1<sup>st</sup> Dec. 2012
- 25. Attended one Week Workshop on "International workshop on low cost wireless computer networking" conducted by Electronics Department IIIT Pune on date January 11 to January 15, 2010.
- 26. Attended 3 week Workshop on "Embedded Using Linux ARM & keil" Organized by Electronics Department, Finolex Academy of Management and Technology, Ratnagiri. March 2007.

### Workshops

- 27. Participated in the workshop "Basics of Electric Vehicles and its design process" dated 27/10/2022 to 29/10/2022organized by EduXLabs, Mechanica IIT Madras
- 28. Participated in the workshop Research Methodology (RM) dated 22/5/2021 to 22/5/2021 organized by Sree Vidyanikethan Engineering College, Tirupati
- 29. Participated in the workshop How to write research paper dated 29/3/2021 organized by VIIT, Punee
- 30. Participated in the workshop Artificial Intelligence in Telecommunication dated from 28th to 30th June, 2021 organized by FAMT Ratnagiri
- 31. Conducted the workshop Embedded C Programming and Applications Development using 8051pC dated 14/09/2019 to 15/09/2019 organized by FAMT Ratnagiri
- 32. Participated in the workshop One day workshop on Python dated 22/06/2019 organized by IIT, Bombay
- 33. Participated in the workshop One Day Coordinators' Workshop on eSim dated 27/07/2019 organized by IIT, Bombay
- 34. Coordinated in the workshop one day workshop on eSim workshop dated 21/09/2019 organized by IIT, Bombay
- 35. Participated in the workshop One Day Coordinators' Workshop on Arduino dated 18/01/2020 to 18/01/2020 organized by IIT, Bombay
- 36. Coordinated in the workshop One Day Workshop on Arduino dated 18/02/2020 to 18/02/2020 organized by IIT, Bombay
- 37. Participated in the workshop Two day Workshop on Intellectual Property Rights dated 15/03/2018 to 16/03/2018organized by Research and Development Cell FAMT
- 38. Conducted the workshop Three day workshop on "Embedded C programming and Application Development" dated 14/09/2019 to 15/08/2019 organized by A. R. Sutar, V.V. Nimbalkar Electronics Dept.
- 39. Participated in the workshop Workshop on Python Programming dated 22-Jun-19 organized by IIT BOMBAY
- 40. Participated in the workshop Three day Science Exhibition dated 07/12/2017 to 09/12/2017organized by S. D. Gadre English Medium School , Chiplun
- 41. Participated in the workshop Two day Workshop on Intellectual Property Rights dated 24/03/2018 to 25/03/2018organized by Research and Development Cell FAMT
- 42. Conducted the workshop Three day workshop on "Embedded C programming and Application Development" dated 04/08/2017 to 07/08/2017organized by A.R.Sutar, V.V. Nimbalkar Electronics Dept.
- 43. Conducted the workshop Programming With Arduino dated 03/03/2017 to 04/03/2017organized by ARS,JJM,SAS: Government Polytechnic, Malvan
- 44. Participated in the workshop Two day Workshop on "Raspberry-Pi" dated 10/02/2017 to 11/02/2017 organized by A.R.Sutar, Electronics Dept. FAMT, Ratnagiri: Robokart Mumbai
- 45. Conducted the workshop Three day workshop on "Embedded C programming and Application Development" dated 06/08/2016 to 08/08/2016organized by A.R.Sutar, V.V. Nimbalkar Electronics Dept.

- 46. Conducted the workshop Microcontroller system design, C-Programming and Applications dated 03/10/2015 to 05/10/2015organized by A.R.Sutar, V.V. Nimbalkar Electronics Dept.
- 47. Attended 2 Day ISTE Workshop for Teachers on "Aakash for Education" Conducted by IIT Bombay under the National Mission on Education through ICT from 10<sup>th</sup> to 11<sup>th</sup> November 2012.
- 48. Attended one day workshop on "Total Quality Management in Technical Education" organized by ISTE local chapter FAMT, Ratnagiri on 24<sup>th</sup> January 2009
- 49. Attended Two Day workshop on "Simulation of electronic circuits & Power Electronics systems using SEQUEL" Conducted by IIT Bombay at FAMT Ratnagiri on 31<sup>st</sup> Oct. 2009 to 1<sup>st</sup> Nov.2009.

## **Professional Membership**

1. Indian Society of Technical Education (I.S.T.E)

# **College Exam Duties**

- 1. Worked as a Senior Supervisor of Engineering May 2023 Summer Exam
- 2. Worked as a Senior Supervisor of Engineering and MCA 2014 Summer Exam.
- 3. Carried out exam related duties such as Moderator, Examiner and External Examiner for conducting theory, practical and oral exam as appointed by Board of Examination, Mumbai University.
- 4. Worked as departmental Exam In-charge of unit tests 2012-13.

### Other Experience

#### **College Level Committees**

- 1. Working as a Departmental project coordinator. Institute time table head.
- 2. Working as a Institute time table head.
- 3. Working as a convener of OBC Cell committee
- **4.** Worked as a TNP Departmental Coordinator of Electronics Department, Finolex Academy of Management and Technology, Ratnagiri.
- **5.** Working as a Departmental R&D Coordinator, Finolex Academy of Management and Technology, Ratnagiri.
- 6. Worked as faculty in-charge of ESTA Committee.
- **7.** Worked as departmental organizing committee member in 2nd National Conference on "Recent Advances in Science and Technology"
- **8.** Worked as a Coordinator of Avishkar 2016-17 for college level round and District level Round, conducted successfully.
- 9. Working as a department coordinator and member for NAAC Criteria 3 committee

# Judge Panel / Staff Selection Committee / Subject Expert

- 1. Worked as a **Judge** for intradepartmental project competition 2017-18 organized by Electronics and telecommunication Department, FAMT Ratnagiri.
- 2. Worked as a Judge for state Level Technical Paper Presentation competition in Electrfocus2k17 organized by Electronics Department, FAMT Ratnagiri
- 3. Worked as a **Judge** for intradepartmental project competition 2016-17 organized by Electronics and telecommunication Department, FAMT Ratnagiri.

## **Projects / Software Development**

- 1. Participated in **Science Project Exhibition** held on 7 to 9<sup>th</sup> December 2017 in Pparshuram Education Society's S. D. Gadre English Medium School, Chiplun.
- 2. Principal investigator of project titled "An Intelligent, Adjustable and Automatic Timer System" under minor research project scheme of Mumbai University 2017-18.
- 3. Designed and developed an **Automatic Alarm System** for Institute, Working successfully.
- 4. Designed and Developed Experimental kit of **Three Phase Inverter System** for conducting practical of Power Electronics subject.

# **Subject Taught**

Sr. No.	Name of the Subject	Year/Branch/Semester	Experience
1.	Power Electronics – II	B.E. Electronics (Sem - VII)	6 Year
2.	Power Electronics – I	T.E. Electronics (Sem - VI)	6 Year
3.	Embedded Systems and Real Time Programming	B.E. Electronics (Sem - VIII)	3 Year
4.	Electromagnetic Fields and Waves	T.E. Electrical (Sem - V)	4 Year
5.	Principals of Communication Engineering	SE Electrical (Sem - IV)	2 Year
6.	Wireless Communication	B.E. Electronics (Sem – VII)	3 Year
7.	Electronics Devices and circuits	S. E. IT (Sem - III)	4 Year
8.	Electrical Network analysis and Synthesis	S.E. Electronics (Sem - III)	2 Year
9.	Electronics Devices and circuits	S. E. Electronics (Sem - III)	1 Year
10.	Electric Vehicle Drives and Energy sources	TE Honours/Minor course	1 Year

11.	Electronics Instrumentation and control System	S. E. E&TC (Sem - III)	1 Year
12.	Research Methodology	B.E. Electronics (Sem – VII) ILOC	1 Year
13.	MEMs Technology	B.E. Electronics (Sem – VIII) DLOC	1 Year