

Mrs .Rohini D Palve (Alka L. Khade)

Designation: Associate Professor

Date of Joining: 24/03/1999

Total Experience: 25Years

Education

- Ph.D. Electronics, (August 2024) ,Mumbai University
- M.E(2008),Electronics& Telecommunication ,Terna Engineering College, Mumbai University
- B.E (1994), Electronics, PDVVP College of Engineering, Pune University.

- **Area of Interest**

1. Wireless Communication
2. Image Processing

Expertise to Conduct Courses

1. Wireless Communication

Research Activities (Guidance provided to PG/PhD students and any grant received)

Guided PG Projects some of the titles are as

Image Segmentation using Fast SRG Algorithm (Guide)

Virtual Mouse Control Gaze Tracking. (Guide)

Remote monitoring system based on embedded web server (Guide)

Context aware sensor grid for agriculture (Guide).

PIC 18 based PC as an oscilloscope (Guide)

Content Based Image Retrieval using Block Truncation Coding (Guide)

Indian car number plate recognition using Support Vector Machine (Co-Guide)

Robust Copy Move Forgery Detection. (Co-Guide)

Cut Detection and Rerouting in Wireless Sensor Network (Co-Guide)

Collaborative Joint Search on Mobile Device with Location and Maps. (Co-Guide)

Faculty Development Programs (FDP) Attended/Conducted/Organized (STTP/WS/Seminars)

- FDP on Recent Advances in Antennas for Wireless Communications held on 27th July to 31st July 2021.
- Three days online STTP on “MICROWAVE APPLICATIONS USING HFSS” Organized by The Department of Electronics and Telecommunication Engineering in association with IETE-RAIT From 26TH TO 28TH MARCH 2021.



- FDP on Security Issues & Role of Cryptography in Communication” held between 22nd - 26th June, 2020, organized by Department of Electronics and Communication, UMIT, SNTDWU, Mumbai.
- FDP on “Srujan-The way Ahead” based on “The Effective Techniques of Teaching and E-Commerce” from 1st June to 5th June 2020 organized by Saraswati Institute of Technology
- Innovation, Entrepreneurship and its Relevance in Industry 4.0 Practices in the Post Covid-19 Situation” conducted by Mechanical Engineering Department, Terna Engineering College on 25 May to 29 May 2020.
- Faculty Development Program on "Research, Funding Projects & IPR " jointly organized by IQAC, R & D Cell & Dept. of Electronics & Telecommunication under the banner of IETE and Institution's Innovation Council (IIC) of K. C. College of Engineering on and Management Studies and Research, Thane (E) from 7th - 10th May, 2020.
- 3 days online workshop on "Education 4.0”, organized by Atharva College of Engineering. On 28th - 30th April 2020.
- One week lecture series on, “Recent Trends on RF and its Applications” organized by IEEE APS Chapter Jaipur on 26/06/20 to 30/06/20.
- One day workshop on MATLAB Simulation held by TEC on 3/1/19.
- STTP on Hands on Routing and Switching held by TEC in 2/7/18 to 6/7/18
- Expert Talk on Overview of Nanosatellites on 5/4/18
- Mendeley presentation held in TEC on 6th January 2018
- One week ISTE approved STTP on Hands on python Training held by TEC on 1st January to 5th January 2018
- One Day National Seminar on Advances in Communication sponsored by IETE &ISTE at Saraswati COE on 22nd March 2017
- One Week ISTE approved STTP On Cyber Security And Digital Forensics held by TEC in 3 to 7 January 2017
- National Level Workshop On Accreditation & Outcome Based Education held by TCS and TEC on 15th 16th December 2016
- Two days workshop on Antenna Design held by IEEE TEC in September 2014.
- Two weeks workshop on Signals and System conducted by IIT Khargpur in January 2014.
- Two weeks workshop on Analog Electronics conducted by IIT Khargpur in June 2013
- Two weeks workshop on Introduction to research methodology conducted by IIT Bombay in June 2012
- One week STTP on wireless network and security ,January 2011
- One week STTP on Image Processing, July 2009.
- One week STTP on VLSI and embedded system, August, 2008.
- One week STTP on Advance Communication System, July 2008.
- One week STTP on Recent trends in electronics and instrumentation, January, 2008.

- One week STTP on DSP & its Applications in Communication, Control & Biomedical Engg. July, 2006

Patent

- [1] Shubhangi Mangesh Verulkar, Mahadu Annarao Trimukhe, Alka Laxman Khade and Rajiv Kumar Gupta, “Quad-Element MIMO antenna,” Design patent Granted and Published, Design No.:382977-001, Class: 14-03, The Patent Office Journal No. 27/2023 Dated 07/07/2023.

Papers Presented/Published

1. Alka Khade, Mahadu Trimukhe, Shubhangi Verulkar, and Rajiv K. Gupta, “Dual Band MIMO Antenna with High Isolation for GSM and WLAN Applications,” Progress in Electromagnetics Research C, Vol. 136, pp.189-198, 2023.
2. Alka Khade, Mahadu Annarao Trimukhe, Shishir Digamber Jagtap, and Rajiv Kumar Gupta, “A Circular Sector with an Inverted L Shaped Monopole Antenna for Tri-Band Applications,” Progress In Electromagnetics Research C, Vol. 118, pp.177-186, 2022.
3. Alka Khade, Mahadu Trimukhe, Shubhangi Verulkar, and Rajiv K. Gupta, “Miniaturization of Printed Rectangular Monopole Antenna by using Slots for Triple Band Applications,” Progress In Electromagnetics Research C, Vol. 130, pp.155–167, 2023
4. Shubhangi Verulkar, Alka Khade, Mahadu Trimukhe, and Rajiv K. Gupta, “Dual Band Split Ring Monopole Antenna Structures for 5G and WLAN Applications,” Progress In Electromagnetics Research C, Vol. 122, pp.17-30, 2022.
5. Shubhangi Verulkar, Alka Khade, Mahadu Trimukhe, and Rajiv K. Gupta, “Compact Wideband Four Elements MIMO Antenna for 5G Applications,” Progress In Electromagnetics Research C, Vol. 137, pp.199-209, 2023
6. Ashlesha Sawant, Alka Khade, Umesh Mantale “Uncertainty Analysis of Engineering Problems Using Fuzzy Set Theory”, Conference on Technologies for Future Cities, Pillai College of Engineering on January 8-9, 2019
7. Rashmi Shinde, Rahul Shaw, Yash Arolkar, Prajakta Kolekar, Prof. Alka Khade ‘Android Application for Suburban Railway Ticketing System(SRT)’ International Journal of Advanced Research in Computer Engineering & Technology (IJARCET), Volume xx, Issue xx, Month 20xx, ISSN: 2278 – 1323
8. Vipul R. Mahajan, Alka Khade “A Survey: Content Based Image Retrieval using Block Truncation Coding” International Journals of Advanced Research in Computer Science and Software Engineering ISSN: 2277-128X (Volume-7, Issue-12) December 18
9. 5G: A REVOLUTION IN MOBILE NETWORKS
Deepika Sahu¹, Tejas Nagpure², Priyanka Maru³, Anuradha More, Alka Khade International Journal of Technical Research and Applications e-ISSN: 2320-8163, www.ijtra.com Special Issue 41 (AVALON) (March 2016), PP. 1-4
10. Smita Dahegaonkar, Alka Khade, Dr. Seema Bidey “A survey on Collaborative Joint Search On Mobile Device with Location and Maps” International Journal of Innovative Innovative Reserch in computer and Communication engineering, volume 4, Issue 2, February 2016

11. Dipali Sonwane, Alka Khade, Dr. Seema Bidey "Cut detection and rerouting in wireless sensor networks" IJETTCS Journal ISSN 2278-6856, volume 4, issue-2, April 2015.
12. Smita Dahegaonkar, Alka Khade "Building Images with Inpainting" Equinox 2014 International Conference at Terna Engineering College.
13. Shilpa Veerasekaran, Prof. Alka Khade, Prof. V.B Gaikwad "Using Persuasive Technology in Click Based Graphical Passwords" in International Journal of Emerging Trends & in Computer Science (ISSN 2278-6856), Volume 3, Issue 2, March - April 2014.
14. Sonali Sonavane Alka Khade V. B. Gaikwad "Novel Approach for Localization of Indian Car Number Plate Recognition System using Support Vector Machine" International Journal of Advanced Research in Computer Science and Software Engineering (IJARCSSE), ISSN: 2277 128X, Volume 3, Issue 8, pp-179-183, August 2013
15. Rohini A Maind, Alka Khade "Robust Copy Move Forgery Detection" International Journal of Advanced Innovative Research, Vol. 2, No. 8, pp. 202-206, August-2013.
16. Sonali Sonavane, Alka Khade, V. B. Gaikwad "Localization & Segmentation of Indian Car Number Plate system: A Projection based Multistage Approach" International Journal of Scientific & Engineering Research (IJSER), ISSN 2229-5518, Volume 4, Issue 8, pp. 1258-1261, August-2013
17. Sonali Sonavane, Alka Khade, V. B. Gaikwad "Blob coloring based Indian car number plate recognition using Support Vector Machine" at Equinox-2013, 4th National Conference on Nascent Trends in Information & Communication Technologies, March-2013.
18. Upendra Patil, Praveen Veer, Alka Khade "Image Segmentation Using Fast SRG Algorithm" at International Conference at Y.T.I.T. Karjat, Dist- Raigad in the Special Issue of ICETTA-2013 In Association with International Journal of Innovative Technology and Creative Engineering (IJITCE).
19. Upendra Patil, Praveen Veer, Alka Khade "Virtual Mouse Control Using Gaze Tracking" at International Conference at Y.T.I.T. Karjat, Dist- Raigad in the Special Issue of ICETTA-2013 In Association with International Journal of Innovative Technology and Creative Engineering (IJITCE).
20. Alka Khade, Sonali Sonavane "Comparative study of Data Mining Techniques for Image Classification" at International Conference on Electronics, Electrical and Computer Science, Sept-2012.
21. Vikas Kshirsagar, Smita Kulkarni, Alka Khade "PIC 18 based PC as an oscilloscope" at National Level Conference on technology for physically challenged on 13 Oct 2012
22. Sneha Mane, Alka Khade, Kanchan Gorde "Remote monitoring system based on embedded web server" at National conference held at Vidyalkar Institute of Technology. pp 12-15, On April 2012.
23. Aparna Kadam, Dr. K.T.V.Reddy, Alka Khade "Smart agriculture model using sensor network with context aware grid computing" at National conference held at Vidyalkar Institute of Technology. pp 28-32 On April 2012
24. Aparna Kadam, Dr. K.T.V.Reddy, Alka Khade "Performance evaluation of a Wi-Max IEEE 802.16e standard based on BER" at International conference held at ICRS, Jodhpur pp 181 on Dec 2011
25. Aparna Kadam, Dr. K.T.V.Reddy, Alka Khade "Context aware sensor grid for agriculture" at International conference held at ICRS, Jodhpur pp 211-213 on Dec 2011

26. Alka Khade ,B.G.Hogade, V.B.Gaikwad “Secret communication via image hiding in image by pixel value differencing” at International Conference and Workshop on Recent Trends in Technology 2010 heon 23-24 February 2010 at Thakur College of Engg. pp 437-438, published in ACM Digital library.
27. Alka Khade ,B.G.Hogade, V.B.Gaikwad “Data hiding in gray scale image using pixel value differencing” at International Conference on Communication, Computer & Instrumentation 09 at VESIT ,Chembure,pp 136-141 on 2-3 Jan 2009.
28. Alka Khade ,B.G.Hogade “Steganography: Hiding data within the data” at National Conference on Recent Trends in Wired and Wireless Communications at SIES Graduate School of Technology, pp 101-104, 13-14 March 2008.

Activities at TEC

1. Currently working as a Dept Level NAAC Co-Oridinator.
2. Worked as C.C for University Examination SH 2019.
3. Organizing committee member in 4th International Conference Of Engineering Confluence and Lofti Zadeh Center of Excellence at TEC on 26/9/18 to 28/9/18
4. Worked as an Academic Program coordinator.
5. Judge for paper presentation at AVALON-2016 & AVALON-2017 National level project Competition & technical paper presentation held in Terna
6. Worked as PG Coordinator 2014-15.
7. Discipline Committee member for Resonance 2015
8. Reception committee member for Convocation Ceremony January 2015 January 2016& January 2017
9. Reception committee member for International Conference Equinox-2014 , Equinox-2015& Equinox-2017 and organization committee member Equinox-2022,Equinox-2023
10. Judge for paper presentation at AVALON-2013 National level project competition & technical paper presentation held in Terna.
11. Worked as a CAP In charge for college CAP & University CAP
12. Worked as a Reporting Officer.
13. Worked as S.S for University Examination many times.
14. Worked as a Co-Oridinator for one week STTP on Image Processing.
15. Worked as organizing committee member for one week STTP on VLSI & embedded system
16. Worked as a Lab In charge.
17. Worked as a Class-Advisor.
18. Worked as In charge Time Table Committee.