Name of Teaching Staff : Dr. Anuja A. Odhekar (Ektate)

Designation : Assistant Professor

Department : Electronics & Telecommunication Engineering

: 11.7.2008 Date of Joining the Institution

Email-ID Anuja.odhekar@djsce.ac.in

Office Contact 022-42331212 (Extension: 111227)

https://scholar.google.com/citations?user=zqeD-Google Scholor Link

dEAAAAJ&hl=en



Qualifications with Class / Grade

: 1. Ph.D. in Electronics & Telecommunication Engineering from University of Mumbai.

- 2. M.E. (Electronics & Telecom. Engg.) from Jadavpur University, Kolkata, 1st Class, 81.60%, June, 2006.
- 3. B.E. (Electronics) from University of Pune, 1st Class, 60%, May, 1998.

Total Experience in Years **Teaching: 21 years**

- 1. Assistant Professor, D.J.Sanghvi College of Engineering from 11.7.2008 till date.
- 2. Lecturer, K.K.Wagh College of Engineering, Nashik from 28.1.2000 to 03.10.2006.

Industry: 11 months

PCB Designer, Fine Circuits from 1.12.1998 to 13.10.1999.

Research: 2 years

Scientist in Sameer, Mumbai from 3.10.2006 to 10.7.2008.

Papers Published **International**:

Papers Presented in Conferences

- 1. Anuja Odhekar 'Optimal design for enhancement of circularly polarized bandwidth for microstrip antenna' is selected for National Conference which was held from 9th – 11th December, 2011 organized by Dept. of Radio Science, Jodhpur.
- 2. Anuja Odhekar "Antenna Isolation Consideration and Techniques for Isolation Enhancement of FMCW Radar", National Asian Pacific Regional Conference on Information & Communication Techniques, NCICT - 2010 organised by SVKM, NMIMS University March 5-6, 2010.
- 3. Anuja A. Odhekar, Amit A. Deshmukh et al., "Innovative

- Technique to Realize Circular Polarization Using Sinusoidal Perturbation for Square Microstrip Antenna", presented at 2019 *International Conference on Communication and Cyber-Physical Engineering* at Pune, India.
- 4. Anuja. A. Odhekar, Amit. A. Deshmukh, "Swastika Shaped Diagonal Slots on Square shaped Microstrip Antenna for Circular Polarization", *Proceedings of International conference on Wireless and Communication*, 2019, Lecture Notes on Data Engineering and Communication technologies, Volume 36, pp.49-56,2019 -Scopus Indexed.
- Anuja. A. Odhekar, Amit. A. Deshmukh, "Realization of Broadband Circularly Polarized Antenna using Star Stacked Shape Microstrip Antenna", Proceedings of International conference on Wireless and Communication, 2019, Lecture Notes on Data Engineering and Communication technologies, Volume 36, pp.247-256,2019. -Scopus Indexed.
- 6. Anuja A Odhekar, Amit A. Deshmukh et al., "Novel Design of Square Microstrip Antenna with Circular Slots for Circular Polarization", *INDICON 2018*, IEEE Explorer, 978-1-5386-8235-7/\$31.00 ©2018 IEEE, 16-18 December, 2018, Coimbatore, India-**Scopus Indexed**.
- 7. Anuja. A. Odhekar, Amit. A. Deshmukh, "Proximity Feed Broadband Circularly Polarized Circular Sectoral Microstrip Antenna", 4th International Conference on Computing Communication, Control and Automation, ICCUBIA 2018, 16-18 August 2018, IEEE Explorer, 978-1-5386-5257-2/18/\$31.00 ©2018 IEEE ,Pune, Maharashtra.
- 8. Amit A Deshmukh, Anuja Odhekar et al., "Modified Circular Shape Microstrip Antenna for Circularly Polarized Response", *Proceedings of International conference on Wireless and Communication*, 2019, Lecture Notes on Data Engineering and Communication technologies, Volume 7, 18-19 January 2018, Mumbai, India -Scopus Indexed.
- 9. Amit A. Deshmukh, Anuja. A. Odhekar et al., "Analysis of Circularly Polarized E-shaped Microstrip Antenna", International Symposium on Antenna and Propagation ,2016, IEEE Explorer, pp. 67-71 15-17 December 2016, Cochin, India -Scopus Indexed.
- 10. Anuja. A. Odhekar, Amit. A. Deshmukh, "Modified Psishape Microstrip Antenna for Circularly Polarized Response", presented at *International conference* 2020

IEEE Pune Section, 16-20, December 2020. **-Scopus Indexed**.

- 11. Anuja. A. Odhekar, Amit. A. Deshmukh, "CPW Fed Broadband Circularly Polarized Corner Truncated Slot Antenna", presented at 4th Biennial International Conference on Nascent Technologies in Engineering, organized by Fr. C. Rodrigues Institute of Technology, Vashi, Navi Mumbai, India. -Scopus Indexed.
- 12. Anuja A Odhekar, G Arunkumar, D R Poddar Mutual Coupling Reduction using Metamaterial Structure For Closely Spaced Microstrip Antennas. *IJCA Proceedings on International Conference on Communication Technology* "ICCT(4):9-11, October 2013.
- 13. Nilam T Kadam, Kiran Janwalkar, Anuja A Odhekar," Isolation Enhancement using Thin Wire Metamaterial for Closely Spaced Microstrip Antenna", Proceedings of International Symposium on Antennas and Propagation APSYM 2014, ISBN: 978-93-80098-60-8
 - 14. Kiran. S. Janwalkar, Nilam. T. Kadam, Anuja. A. Odhekar, "Optimization of Microstrip Patch Antenna using Metamaterial ",International Journal of Engineering Research & Technology (IJERT), ISSN: 2278-0181, Vol. 3 Issue 6, June 2014
 - 15. Anuja A Odhekar , Nilam T Kadam, Kiran Janwalkar ," Performance Improvement of Two Closely Spaced Loop antennas and Microstrip Antennas by Shielding Effect of Planar Negative Permeability Metamaterial Structure "ACC Rajagiri 2015.
- 16. Anuja A Odhekar , Amit Deshmukh ," Performance Improvement of Closely Coupled Loop Antenna by Shielding Effect of Planar Negative Permeability SRR and OCSRR and Thin Wire Metamaterial "International Conference on Advances in Electrical, Electronics, Information, Communication and Bio-Informatics (AEEICB16) , IEEE Digital Publication
- . A. Odhekar and A. A. Deshmukh, "Performance improvement of closely coupled Loop antenna by shielding effect of planar negative permeability SRR and OCSRR and Thin Wire Metamaterial," 2016 2nd International Conference on Advances in Electrical, Electronics, Information, Communication and Bio-Informatics (AEEICB), 2016, pp. 535-539, doi: 10.1109/AEEICB.2016.7538347.
- Paper Published In Journal
- Amit A. Deshmukh, Priyal Zaveri, Sanjay Deshmukh, Anuja Odhekar ," Analysis of Circularly Polarized E-shaped Microstrip Antenna ", APSYM 2016
- 18. Nilam. T. Kadam, Kiran. S. Janwalkar, Anuja. A. Odhekar, 2014, Application of Metamaterial to Improve Isolation Between Two Microstrip Antennas, INTERNATIONAL JOURNAL OF ENGINEERING RESEARCH & TECHNOLOGY (IJERT) Volume 03, Issue 05 (May 2014)

- 1. Anuja. A. Odhekar, Amit. A. Deshmukh, "Reconfigurable and Stacked Dual Sense, Dual Frequency Circularly Polarized Corner Sliced Microstrip Antenna," International Journal of Microwave and Optical Technology, volume 15, pp. 113 -121, March 2020 - Scopus Indexed.
- 2. Anuja. A. Odhekar, Amit. A. Deshmukh, "Variation of Slot Cut and Stub Loaded Square Microstrip Antenna for Circular Polarization," Wireless Personal Communications, Springer, https://doi.org/10.1007/s11277-019-06878-x, pp. 661-667, October 2019-Scopus Indexed.
- 3. Amit. A. Deshmukh, Anuja A Odhekar et al., "Gap Coupled Design Star Shape Microstrip Antenna for Dual Band and Wide Band Circular Polarized Response," International Journal of RF and Microwave, Computer Aided engineering, volume 29, Issue 5, pp. 131 - 137, May 2019-Scopus Indexed.
- 4. Anuja. A. Odhekar, Amit. A. Deshmukh, "Circularly Polarized Microstrip Antenna Deploying Boundary Fractal Geometry," International Journal of Microwave and Optical Technology, volume 16, no2, pp. 157 – 167, March 2021-Scopus Indexed.
- 5. Amit. A. Deshmukh. Anuja A. Odhekar, "Dual Band Circularly Polarized Modified Ψ-shape Microstrip Antenna," Progress in Electromagnetic Research C, volume 115, pp.161-174, September 2021-**Scopus Indexed**.

Patents

- Books Published / IPRs / : 1. Fundamentals of microwave Engineering (University of Mumbai, Semester
 - 2. Advanced microwave Engineering (University of Mumbai, Semester VIII)
 - 3. Microwave & Radar Engineering. (Gujrat Technical University, Semester,
 - 4. Microwave & Radar Engineering (University of Mumbai, Semester VII)
 - 5. RF Design Engineering (University of Mumbai, Semester VIII)
 - 6. Electromagnetics and Antenna (University of Mumbai, Semester VI)

Professional Memberships: ISTE

: Awarded 'Best Paper of the Session" at 4th International Conference on Awards

Computing, Communication, Control and Automation -2018

Grants fetched : Grant from the University of Mumbai of Rs 40,000/- for Under Graduate

Project.

Interaction with

Professional Institutions

Resource person at Xavier college of Engineering and K K wagh College of Engineering

Subject Taught

UG Level

Microwave Engineering, RF Design, Optical Communication and Network, Satellite Communication and Networks, Principle of Communication Engineering, Electromagnetic Engineering and Wave Propagation.

PG Level

Microwave Devices

Project Guided

UG Level

- 1. IoT based Career Bridge
- 2. Radio frequency absorber using Metamaterial
- 3. Biometric Access Control through Real time Facial Recognition
- 4. Design of directive MSA using EBG for SAR reduction
- 5. Brail display & Mobile application for visually impaired
- 6. Voice controlled wheelchair with health monitoring system
- 7. Implementation of Wireless Gesture Controlled Robotic ARM
- 8. Passenger Bus Alert system for easy navigation of blind person
- 9. Reduction of mutual coupling between trans-receiver microstrip antenna using SRR and CSRR metamaterial.
- 10. Real Time location tracking system integrated with google maps.
- 11. Image capturing and processing using hand gesture.
- 12. Implementation of coin machine using segmentation with GSM security.
- 13. Antenna Optimization using Genetic Algorithm.

PG Level

- 1. Antenna Optimization using Metamaterial.
- 2. Antenna Isolation using SRR based Metamaterial.

Pedagogy Development

https://www.youtube.com/watch?v=dM7prwxXfX0

https://www.youtube.com/watch?v=R9XStVfQINc

https://www.youtube.com/watch?v=wfABbRNJqQo

https://www.youtube.com/watch?v=SvanwTt2YFE

https://www.youtube.com/watch?v=DetcxljRCro

https://www.youtube.com/watch?v=eeLCNeT_naA

Institute/Department IETE-SF Branch Councilor

Responsibility handled: NAAC Criteria 2 Department Level Coordinator

NBA Criterion 4 Department Level Coordinator

Joint-Convener (CO-curricular) Admission Committee Member

Alumni Coordinator from Department

Recommended Students for Higher Education:

Name of the Student Corresponding University

Shreya Gupta Purdue University

Bhavya Sekhani University of California, Berkeley

Dhoot Ayush Arizona State University

Ridhhi Mehta Georgia Institute of Technology

Sumedh Bandodkar University of Maryland Mihir Sanjay Shah Rutgers Business School

Chintan Mody Northeastern University, Boston, MA Deepen parmar Washington University in St Louis

Bhumi Bhanushali Carnegie Mellon University

Kathan Mehta The Virginia Tech Graduate School