

# Dr. ASHWINI KOTRASHETTI



## Profile Summary:

I have been an educator for undergraduate engineering for 27 years, specializing in Electromagnetics, Antenna Wave Propagation, Microwave Devices & RF Design and well versed with NAAC & NBA processes. For me, teaching is an intricate blend of classroom instruction, offering guidance, reasoning and empathy, lending support and encouraging independence in students. I strongly believe in the transformative impact of experiential learning in learning application of theory and developing industrial skills and, strive to provide such opportunities to my students. Beyond my personal expertise and research interests in Electromagnetics & Microwave Engineering, I am passionate about Development Engineering, which involves applying engineering skills to design, implement, and manage projects that contribute towards social development. Working on such projects promotes collaborative learning and conscientiousness among students. Making my field accessible to all students and nurturing engineering curiosity is important and rewarding to me. I have been working extensively in the promotion of STEM education among underprivileged students and children with learning disability. Thus, my passion and purpose for education go beyond the classroom, helping me make a real impact on students and curious minds outside of the institution.

## Designation:

Associate Professor & Dean of Student Progress

## IDs

- Google Scholar Link: <https://scholar.google.com/citations?user=izkUwIMAAAAJ&hl=en>
- LinkedIn URL: <https://www.linkedin.com/feed/>
- VIDWAN ID: 458721
- Orcid ID: <https://orcid.org/0000-0002-0895-0065>

## Educational Details:

Sr. No.	Degree	Board / Institution / University	Year
1	Ph.D	Assam Don Bosco University	2019
2	M.E	University of Mumbai	2007
3	B.E	Karnatak University	1997

**Date of Joining DBIT:** 02 July 2002

**Area of Specialization:** RF & Microwave Engineering

**Teaching Experience in DBIT:**

Sr. No.	Position Held	Dates (From-To)
1	Dean (Student Progress)	Since October 2022
2	Head of Department	July 2018 to June 2022
3	IEEE Branch Counselor	Jan 2011 to Dec 2013

**Total Teaching Experience:**

Sr. No.	Institution	Dates	Designation
1	DBIT, Mumbai	June 2019 – Till Date	Associate Professor
2	DBIT, Mumbai	July 2007 – May 2019	Assistant Professor
3	DBIT, Mumbai	June 2002 – June 2007	Lecturer
4	S S Jondhale COE, Dombivili.	September 1997 – June 2002	Lecturer

**Peer Reviewed Journal Papers:**

1. Kotrashetti, Ashwini, B. K. Lande, and Ajay Poddar, "FSS-based Triplate Antenna Design Concept For Wireless Devices," International Journal of Microwave and Wireless Technologies, pp.1-10, 2021. DOI: 10.1017/S1759078721000623
2. A. Kotrashetti, B. K. Lande, "Investigation of Hypermode Characteristics of A Microstrip Patch Antenna," Don Bosco Journal of Science and Engineering, vol. 6, Jan 2018. ISSN: 978-81-87060-56-7

## Peer Reviewed Conference Papers:

1. S. Pinto, N. Ved, S. Manohar, S. Gujarathi, H. Hogade and A. Kotrashetti, "Enabling Spatial Visualization in Students with Learning Disabilities Using Cad Tools," 2024 IEEE International Humanitarian Technologies Conference (IHTC), Bari, Italy, 2024, pp. 1-5. doi: 10.1109/IHTC61819.2024.10855118.
2. K. Aman, B. Hitesh, S. Sambit, C Freda, K. Ashwini, B. Somak, "Design of a Dual Band Monolayer Metasurface Based Bandpass Filter", Tensymp 2022.
3. C. Sadanand, S. Solomon, S. Sambit, C Freda, K. Ashwini, B. Somak, "Design and Analysis of a Compact Metasurface Based Filter for Broadband Performance", Tensymp 2022.
4. Kotrashetti, Ashwini, B. K. Lande, and Ajay Poddar, "FSS-based triplate antenna design concept for wireless devices," International Journal of Microwave and Wireless Technologies, pp.1-10, 2021. DOI: 10.1017/S1759078721000623
5. Shreyas Kulkarni, Keith Barnes, Adish Sthalekar, Aparna Kulkarni, Jithin Isaac, Ashwini Kotrashetti, "LoRaWAN Enabled Solar Photovoltaic Energy Monitoring System," Accepted in 2021IEEE Bombay Section Signature Conference IBSSC2021.
6. Royston Carvalho, Ethan Gomes, Prathik Rao, Larry Pereira, Ashwini Kotrashetti, Sandeep Gupte, " A Comparison of Compensation Networks for Wireless Charger for Electric Vehicles," Accepted in 2021 IEEE Bombay Section Signature Conference IBSSC2021.
7. Sebastian M., Shrishti S., Ashita S., Freda C., Ashwini K., "Design and Development of Mobile Handset Antenna For Optimum SAR For Mobile Communication System", Accepted in fourth IEEE PuneCon International Conference 2021.
8. Freda Carvalho, Ashwini Kotrashetti, "The Effects on Student Competencies using Educational Technology based tools for an Undergraduate Course of Engineering" 8th International Conference on Technology for Education, Dec 2016.
9. Jose J, George S, Bosco L, Bhandari J, Fernandes F, Kotrashetti A, "A review of RF Energy Harvesting Systems in India," International Conference on Technologies for Sustainable Development, Feb 2015. DOI: 10.1109/ICTSD.2015.7095838
10. Daison D, Pratik L, Nigel M, Freda F, Ashwini K, "Design & Development of Sierpinski Carpet, Sierpinski Gasket & Koch Snowflake Fractal Antennas for GSM & WLAN Applications", International Conference on Technologies for Sustainable Development, 2015.
11. Ashwini Kotrashetti, B. K Lande, D Sundararajan, "Intelligent Multiband Mobile Antenna for Software Defined Radio", 19th International Symposium on Antennas & Propagat., Taiwan, Dec 2014.
12. Jaseena Chako, Neha Sebastin, Reshma T, Ashwini Kotrashetti, S Mande, "Design And Optimization Of Microstrip Hairpin-Line Bandpass Filter Using DOE Methodology", IEEE International Conference on Communication, Information & Computing Technology, 2012.
13. Sharan Bhonde, Rudolf D'Silva, Vikram Gupte, Melwin John, Freda Fernandes, Ashwini Kotrashetti, "2.4 GHz Cavity Notch Filter for UWB Radio", Annual IEEE India Conference

(INDICON), Dec 2011. DOI: 0.1109/INDCON.2011.6139462

14. Hansel Crasto, Ashwini Kotrashetti, "Beam Steering of Patch Antenna Radiation using Mechanical Meta-Structure", International Conference Antenna Test & Measurement Society, 2011.
15. Martina Joseph, Anuja Sarate, Sneha Madhavan, Ashwini Kotrashetti, Freda Fernandes, "Design & Development of Active Antenna for Receiver Systems", International Conference and Exhibition of Women Engineer, Malaysia, Nov 2011.
16. Vishnu Subhash, Alan Vaz, Soumya Soubichen, Sara Kurien, Freda Fernandes, Ashwini Kotrashetti, "Modelling and Characterization of RFID Tag", International Conference on Microwave, Antenna Propagation & Remote Sensing, 2011.
17. Joe Pullikal, Hansel Crasto, Neha Ram, Ashwini Kotrashetti, "Design & Development of Microstrip Patch Antenna for an ISM Band Transceiver System", Proceedings of International Conference and Workshop on Emerging Trends in Technology, pp. 458-461. ACM, 2010.
18. Nieves Crasto, Joe Antony, Ashwini Kotrashetti, Prakash Apte, "Optimization of Low Noise Amplifier operating in the ISM Band using Taguchi Method", ANQ Congress, 2010
19. Joe Anthony, Hansel Crasto, Ashwini Kotrashetti, Prakash Apte, "Patch antenna Optimization using Taguchi Method", ANQ Congress, 2010.
20. Joe Pullikal, Hansel Crasto, Neha Ram, Ashwini Kotrashetti, "Design & Development of Microstrip Patch Antenna", National Conference on New Generation Wireless Communication Technologies, Oct 2009.
21. Ashwini Kotrashetti, D Sundararajan, "Antenna Sampler for Online WiMax BTS Testing", International Conference of Antenna Test & Measurement Society, 2008.

## STTPs/FDPs/Workshops Organized:

SPONSORED WORKSHOPS/ EVENTS CONDUCTED	
1.	<b>HAM Radio Workshop by Mumbai Amateur Radio Institute</b> <ul style="list-style-type: none"> <li>– Received funding of Rs 27,000/- for IEEE DBIT MTT-S Student Branch.</li> <li>– 22, 23 March 2024</li> </ul>
2.	<b>2 Half Day Online Symposium on “5G: A Catalyst to Digital Revolution”</b> <ul style="list-style-type: none"> <li>– Intercollegiate Event on 8 &amp; 9 October 2021.</li> </ul>
3.	<b>30 Hours Wireless System Design Workshop</b> <ul style="list-style-type: none"> <li>– Intercollegiate Event on 7, 8, 14 &amp; 15 March 2020</li> </ul> <b>Speakers &amp; Topic:</b> <ul style="list-style-type: none"> <li>Ms. Ashwini Kotrashetti - Impedance Matching networks in RF Design</li> <li>Ms. Freda Fernandes - Simulation with KiCAD and design aspects</li> <li>Mr. Jithin Isaac - Battery choice &amp; management, layout making using KiCAD</li> </ul>
4.	<b>30 Hours Wireless System Design Workshop in association with Acevin Solutions</b> <ul style="list-style-type: none"> <li>– Received sponsorship from IEEE Bombay Section MTT-S Chapter</li> <li>– For Bombay Section students 18, 19 &amp; 20 Jan 2019</li> <li>– Intercollegiate event.</li> </ul>
5.	<b>HAM Radio Workshop by Mumbai Amateur Radio Institute</b> <ul style="list-style-type: none"> <li>– Received funding of Rs. 66,200/- for IEEE DBIT MTT-S Student Branch.</li> <li>– For DBIT students 18 Sept 2015</li> <li>– Intercollegiate event along with Fox Hunt Competition on 25, 26 July 2016.</li> </ul>
6.	<b>One Day Seminar (17 Dec 2013)</b> <b>Speakers &amp; Topic:</b> <ul style="list-style-type: none"> <li><b>Dr. Ulrich Rohde</b>, Chairman of Synergy Microwave Corp., Paterson, NJ and President of Communications Consulting Corp.</li> <li><b>Mr. Michael Driscoll</b>, Northrop Grumman Electronic Systems, USA.</li> <li><b>Dr. Ajay K. Poddar</b>, Associate Professor at University of Oradea, Romania.</li> <li>- For academicians &amp; industry professionals.</li> </ul>
7.	<b>Workshop on RF/ Microwave Design and Fabrication</b> <ul style="list-style-type: none"> <li>– ISTE sponsored - Two Weeks Short Term Training Program.</li> <li>– Intercollegiate event from 30 June 2008 to 11 July 2008.</li> </ul>
NON-SPONSORED WORKSHOPS/ EVENTS ORGANIZED	
1.	<b>Industrial visit to Radar Lab, the LINEAC facility and the EMI/ EMC lab at SAMEER Mumbai</b> -Witnessed the RCS measurements and Radar signal processing on 22 March 2024.
2.	<b>Field Visit to Devlipada, Vasai Taluka</b> <ul style="list-style-type: none"> <li>– To study the Development in Tribal Maharashtra and to explore the initiatives NGOs take to address socio-economic challenges faced by the people - on 12 August 2023.</li> </ul>
3.	<b>Field Visit Sustainable Homes - Team Shunya, IIT Bombay Campus</b> on 22 March 2024.

4.	<b>Authorship Workshop</b> – In association with IEEE India Council – Intercollegiate workshop organized on August 18-22, 2015.
5.	<b>Student Internship Preparation Program</b> – In association with IEEE India Council with IEEE Region 10 – Intercollegiate workshop organized on 10 October 2015.
6.	<b>LINFOMATRIX - Autonomous BOT Line Following Workshop &amp; Competition</b> – Intercollegiate workshop organized on 31 March 2012.
7.	<b>Circuit Simulation &amp; PCB Layout Making Using PROTEUS Software</b> – Intra-collegiate workshop organized on 21 Feb 2012.
8.	<b>Microcontroller Simulation using Keil-U-Vision &amp; Proteus</b> – Included a seminar on Arduino platform – Intra-collegiate workshop organized on 10, 11 Mar 2012.
9.	<b>Technical Paper &amp; Report Writing Aid: “Miktex”</b> – Intracollegiate workshop for faculty & undergraduate students on 15 Feb 2011. – Followed by “ <b>Technical Paper Presentation Competition</b> ” on 8th Oct 2011
10.	<b>Introduction to MATLAB</b> – Intracollegiate workshop for faculty & undergraduate students on 1 Feb 2011.
11.	<b>50 Hours Certification Course on "Basics of Practical Wireless Technologies"</b> – Intercollegiate course on 9 April 2011 to 20 June, 2011 to 28 June, 2011
12.	<b>Two Day Seminar on “The Bridges for Electronics”</b> – Intracollegiate event for faculty & undergraduate students on 12, 13 Sept 2003
<b>EXPERT TECHNICAL TALKS ORGANIZED</b>	

- Dr. Revathy Sundararajan delivered an expert Lecture on "Introduction to Statistical Learning & Applications through Linear Regression", on 10 October 2024.
- Dr. Prasanna Nambiar delivered an expert lecture on the topic of “Mindful Engineering” on 16 August 2024.
- Social activists Mr. Macenzy Dabre and Mr. Suresh Lule delivered a guest lecture on 2 Sept 2024, on the topic, “Real On-Field Scenario Of Rural Planning, Resource Mapping, And Resource Mobilization”.
- Dr. Somak Bhattacharaya, IIT BHU delivered an expert online talk on “Applications for Metasurfaces in HF Regime” for IEEE MTT-S BS on 15 April 2021.
- Dr. Meenakshi Rawat, IIT Roorkee delivered an expert online talk on "Debugging Software Defined Radios - Applications for advanced communication systems" for IEEE MTT-S BS on 31 March 2021
- Dr. Arjun Karmakar, Semi-Conductor Laboratory, Dept. of Space, Govt. of India, Mohali, Punjab, delivered an expert online talk on, “Si-RF Technology” for IEEE MTT-S BS on 29 August 2020.

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- Dr. Colin Vegas, Teratech Components, Oxford, UK delivered an expert online talk on, “Development in Terahertz technology for Radio Astronomy: Atmospheric Sensing & Imaging”, for IEEE MTT-S BS on 18 September 2020.
  - Mr. Shirish Dharmadhikari, Senior Program Manager, EdgeVerve Systems Ltd. delivered a webinar on 'Road Map for Beginners in the Corporate World' on 5 August 2020.
  - "Mr. Abhinandan Honale (F.R.M, Head – Wealth Management at Samarth Edufin Services Private Limited) delivered an expert talk on "Financial Independence through Financial Planning for Youngsters”, on 28 August 2020.
  - Mr. Sagar Gangurde, Director Indian Programs, Seeds of Peace delivered a webinar on Critical Media Literacy on 27 May 2020.
  - Dr. Yogesh Karandikar, Tantrayukt Technologies delivered an expert lecture on, “Practical FMCW Radar Systems”, at Don Bosco Institute of Technology, Mumbai on 22 Feb 2019.
  - Mr. Abhay Phansikhar, Chairperson, IEEE Bombay Section, Director, Azilen Technologies, Mumbai delivered an expert talk on, “Guidance for Start-Up”, at Don Bosco Institute of Technology, Mumbai on 19 Sept 2019
  - Mr. Abhay Phansikhar, Chairperson, IEEE Bombay Section, Director, Azilen Technologies, Mumbai delivered an expert talk on,” LoRa WAN Technology, Solutions and Ecosystem”, at Don Bosco Institute of Technology, Mumbai on 30 July 2018
  - Mr. Jason Fernandes, Continental Automotive Distance Control, Germany delivered an expert talk on, “Evolution of Radar Technology”, at Don Bosco Institute of Technology, Mumbai on 24 July 2018
  - Dr. Nuno Borges Carvalho, Institute of Telecommunications, University of Aveiro delivered an expert talk on, “Energy Efficient Future Wireless Communications”, IITB, on 26 Nov 2018.
  - Dr. Shiban Koul, Deputy Director, IIT Delhi, delivered an expert talk on, “Benefits of IEEE MTT-S Student Chapter, IITB on 5 Dec 2018.
  - Dr. Juzer Vasi, IIT Bombay, delivered an expert talk on, “Photovoltaics: Project Opportunities for IITB and DBIT”, at Don Bosco Institute of Technology, Mumbai on 2 March 2017.
  - Dr. Kushal Tuckley, Director R & D at AVG Systems Pvt. Ltd, Ambarnath, delivered an expert talk on, “RF Embedded Systems”, on 4 Oct 2017.
  - Dr. Ajay Poddar, Chief Scientist, Synergy Microwave Corp., USA, delivered an expert talk on, “Metamaterial Möbius Strips Casimir Effect: Applications in Sensors, Frequency Sources”, at Don Bosco Institute of Technology, Mumbai, on 22 Dec 2016.
  - Mr. Shivam Iyer, Regional Manager, Commscope Communications Ltd., Mumbai, delivered on “Base Station Antennas & Microwave Antennas”, at Don Bosco Institute of Technology, Mumbai, on 19 July 2016.
  - Dr. Monail Krairiksh, King Mongkut’s Institute of Technology, Bangkok, delivered on, “Non-destructive Evaluation/Sensing of The Physical Qualities of Fruits’, at Don Bosco Institute of Technology, Mumbai on 23 Aug 2016, Shri Ramdeobaba College of Engineering & Management, Nagpur & Priyadharshini Institute of Engineering and Technology, Nagpur on 24 Aug 2016.

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- Dr. Lawrence Kazmerski, University of Colorado Boulder, with the Renewable and Sustainable Energy Institute, USA, delivered an expert talk on, "Photovoltaics Technology: Where we are; Where we came from; Where we are going!" at Don Bosco Institute of Technology, Mumbai on 27 July 2016.
  - Dr. Sudhakar Rao, Technical Fellow, Engineering & Global Products Division Northrop Grumman Aerospace Systems, Redondo Beach, CA 90278, USA, delivered an expert talk on, "Advanced Antenna Systems for Satellite Communication Payloads", at Tata Institute of Fundamental Research, Colaba, Mumbai, on 2 June 2016.
  - Mr. Ashok Jagatia, Acevin Solutions, Andheri East, Mumbai, delivered an expert talk on, "Recent Trends and Opportunities in Embedded Systems", at K J Somaiya Institute of Engineering and Information Technology, Sion(E) Mumbai on 30 March 2016.
  - Dr. Kushal Tuckley, Chairman & Director R & D at AVG Systems Pvt. Ltd, Ambernath, delivered an expert talk on, "Radars For Atmosphere And Sea Monitoring", at Don Bosco Institute of Technology, Mumbai on 25 Feb 2016.
  - Mr. Anthony Lobo, TCS, Mumbai, delivered an expert talk on, "Sustainable Development", at Don Bosco Institute of Technology, Mumbai on 15 Sept 2015.
  - Dr. Ajay Poddar, Chief Scientist, Synergy Microwave Corp., USA, delivered an expert talk on, "Frequency Generation & Energy Harvesting", Don Bosco Institute of Technology, Mumbai on 13 Aug 2015.
  - Dr. Goutam Chattopadhyay, *Senior Research Scientist*, NASA-Jet Propulsion Laboratory, California Institute of Technology, USA, delivered an expert talk on, "Terahertz Radar for Stand-Off Through-Clothes Imaging", at Tata Power SED, Mumbai on 4 May 2015.
  - Dr. Satyanarayana B., Scientific Officer (G), TIFR delivered an expert talk on, "Engineering Physics: Fundamentals and Modern Applications ", at Don Bosco Institute of Technology, Mumbai on 3 March 2015.
  - Mr. Sandeep Gupte, Consultant to US Energy Company, delivered an expert talk on, "Role of Tower Companies in Telecom Growth & Challenges in Deployment of New Technologies in Rural India", at Don Bosco Institute of Technology, Mumbai on 4 March 2015.

### Conferences Attended:

- IEEE STEM SUMMIT, powered by IEEE TryEngineering from 21-23 October 2024.
- Attended the Thought Leaders Conference 2022 on 25 November 2022.
- International Microwave Symposium (IMS2020) and Microwave Week Virtual Event held from August 4-6, 2020.
- "Confluence 2020" a Virtual Conference of all IEEE Bombay Section Societies/ Chapters on October 24, 2020.
- Virtual 2020 Asia-Pacific Microwave Conference from December 8-11, 2020
- IBSSC 2019, at VMCC - IIT Bombay between July 26 - 28, 2019.
- IMARC 2019 Conference at VMCC, IIT Bombay from December 13-15, 2019.

## **STTPs/FDPs/Workshops Attended:**

### **2024 - 2025**

- One Week AICTE Training And Learning (ATAL) Academy Faculty Development Program on “mmWave Technologies” at Vivekanand Education Society's Institute Of Technology from 13/01/2025 to 18/01/2025.
- Two-day Seminar in Kannada on "Space and Defense" Funded by AICTE-VAANI (Vibrant Advocacy for Advancement and Nurturing of Indian Languages) on "Space and Defense" on 19-20 September 2025.

### **2023-2024**

- Attended L&T National STEM Challenge with four participating students from the Engineering Futures –CrEAST Program on 27 Jan 2024.
- Attended a session on “Towards a Bully – Free Campus” by Fr. Peter Gonsalves on 10 Jan 2024.
- Two Days workshop on “Building Stronger Partnerships”, organized by L&T at the L&T Skill Trainers Academy on 14-15 July 2023.

### **2022-2023**

- Two week AICTE Training And Learning (ATAL) Academy Blended FDP on "Institutional Building-Leadership for Academic Excellence in Higher Education" from at Bharatiya Vidya Bhavan's SPIT, Mumbai during 5 Dec 2022 to – 16 Dec 2022.
- Panel of Conference Organizers (POCO) - 2022 organized by IEEE Membership Development Committee at Mukesh Patel School of Technology Management & Engineering on 30 July 2022.
- Investor Awareness Program on Financial Planning organized by CASI on behalf of HDFC Mutual Funds on 7 October 2023.
- 1 Week ISTE Approved Short Term Training Program on “Advances in Antenna and RFIC/MMIC Design” from 24-28 June 2013, at K. J. Somaiya College of Engineering, Mumbai.

### **2021-2022**

- Webinar on, “Research Trends in 5G-Advanced and Beyond 6G?”, Dr. M H KORI, Vice President IETE, Former Technical Director Alcatel-Lucent Technologies, organized by IEEE MTT-S BS on 11 August 2021.

### **2020-2021**

- Workshop on, “Intellectual Property Creation: Why, What and How?”, Dr. Alok Nath De, CTO, Samsung R&D Institute, India & Corporate Vice President, Samsung Electronics, South Korea., Professional Activities Committee of IEEE India Council Webinar on 4 June 2021.
- Webinar on, “Applications for Metasurfaces in High Frequency Regime” by Dr. Somak Bhattacharyya, IIT BHU, organized by IEEE MTTS BS on 15 April 2021.
- Webinar on "Debugging Software Defined Radios - Applications for advanced communication

systems" by Dr. Meenakshi Rawat, IITR organized by IEEE MTT-S BS on 31 March 2021.

## **2019-2020**

- 1 Week training on “Electric Vehicles: Batteries and BMS” conducted by The Automotive Research Association of India (ARAI), Pune & Devise Electronics Pvt. Ltd., Pune from 28 May to 1 June 2020.
- 1 Week training on, “Learn to Design your Solar Home Systems” conducted by Energy Swaraj Foundation from 21st May to – 25 May 2020.
- 1 Week training program on “Recent Trends in E-Mobility”, conducted by Society for Automotive Engineers (SAE) India Southern Section from 10 -14 June 2020.
- Training programs on, “Session on Hangout with Emerging Innovative Entrepreneur”, organized by MHRD'S Institution Innovation Council (IIC).
- 1 Day Training on, “Virtual Labs: Effective Tool for Teaching and Learning”, Virtual Labs: Effective Tool for Teaching and Learning on 10 July 2020
- Achieved certification for two courses 2020; "Design Thinking for Innovation" by University of Virginia and "Electrodynamics" by Korea Advanced Institute of Science & Technology, on Coursera platform.
- Webinar on “Technology backbone for growth in rural communities”, organized by IEEE Standards Association on 28 May 2020.
- Webinar on, “Space Observation on Detoxing of Earth during COVID-19”, IIRS-ISRO, 30 April 2020.
- Training on, “Sessions in the areas of Innovation, IPR, Entrepreneurship, and Start-ups”, MHRD’s IIC-MIC from 28 April to 22 May 2020.
- Webinar on, “Women in STEM”, IEEE Bombay Section on 17 April 2020.
- Webinar on, “AICTEdge to Maintain Quality of Technical Education”, Media AICTE, 7 May 2020.
- Half-Day Session on, “Emerging Technologies for Employability for Engineering”, Agimus Technologies Christiani Sharpline Technical Training an Indo-German Venture Company and CAPS LOCK Singapore, 2 July 2020.
- Webinar on, “5G as a Driver for Industry Digitalization”, Dassault Systems, on 7 July 2020.
- Webinar on, “Smart Building & Smart Workplace”, ISHRAE Thane Chapter on 4 July 2020.
- Webinar on, “Ecosystem Restoration with IEEE HAC” IEEE HAC on 5 June 2020.
- 40 Hour training programme on, “ABCDE-Any Body Can Do Entrepreneurship”, organized by DBIT PIC Team in collaboration with Navyuvak Entrepreneurs at DBIT, February 10-14, 2020.
- “Train The Trainer Workshop - Developing Co-creative Mindset Applying Design & Systemic Approaches for Innovation in Educational Institutions”, held from September 16-18, 2019 at DBIT – a collaborative initiative between PrePearl Training Development, Pillet & Partners Switzerland and LIIGHT of Switzerland & Caribbean Islands.

- Attended orientation programs conducted by University of Mumbai for the subjects of Electromagnetic Engineering, Random Signal Analysis in Sem V, Radar Engineering, Antenna Wave Propagation for Sem VI.

### **Participation in SWAYAM MOOCs/NPTEL/Certification Courses Attended:**

- Swayam course - Self-paced course on “Linear to Circular Economy”.
- A 5 Weeks course with Coursera on “Electrodynamics: An Analysis” by Korea Advanced Institute of Science & Technology.
- A 5 Weeks course with Coursera on, “Design Thinking for Innovation”, by University of Virginia.
- A 4 Weeks course with Coursera on, “Self Awareness and the Effective Leader”.
- A 1 Week course with Coursera on, “Increase Student Buy in with Google Slides”.

### **Trainings Undergone in Industry/ Joint Research Publications:**

- Interned at Tantrayukt Technologies from 19 February to 22 March 2018 under the guidance of Dr. Yogesh Karandikar.

### **Professional Body Memberships:**

- IEEE Senior Member
- IEEE MTT-S
- APS & SIGHT Senior Member
- ISTE Life Member
- IETE Member

### **Invited Talks/Resource Person in STTPs / FDPs:**

#### **2021-2022**

- Invited speaker at 2021 R10-POCO Virtual Workshop on 21 August 2021 on the topic, “Financial planning, Sponsorships and Collaboration with IEEE MTT-S”
- Invited speaker at the 27th National Conference on “Sensors in Automation” on 19-20 November 2021 to speak on “RADAR Sensors”.
- Delivered lecture on, “How to write a Proposal?” for TE EXTC as part of the Research & Review Program in Sept 2021.

#### **2020-2021**

- Gave an interview on DBIT & EXTC Department to Collegedunia on March 2021.
- Delivered expert online talk on “Experiences of working on SIGHT projects” for IEEE Bombay Section Sight AG on 28 April 2021.

- Delivered expert online talk on, “Smart Antennas & MIMO Antennas”, for SIES College of Graduate Studies & Management, Nerul, Navi Mumbai on 27 November 2020.

## 2019-2020

- Delivered expert online talk on, “Empowering Girls in ICT”, on occasion of International Girls in ICT Day’ organized by Swedish Consulate, Mumbai on 23 Apr 2020.
- Delivered expert talk on, “Multiple Input Multiple Output Antennas”, at Computer Department of Don Bosco Institute of Technology, Mumbai on 27 November 2019.

## 2015-2019

- Delivered expert talk on, “Trends in Cellular Antennas”, at SIES College of Graduate Studies & Management, Nerul, Navi Mumbai on 5 April 2019.
- Delivered expert talk on, “Smart Antennas” at Sayadhri Valley College of Engineering & Technology, Rajuri, Pune Dist., Maharashtra on 1 Oct 2016.
- Delivered expert talk on, “Microwave Filters- Design to Implementation”, Priyadharshini Institute of Engg. & Technology, Nagpur, Maharashtra. Nagpur University on 15 Jan 2016.
- Delivered expert talk on, “Yashwantrao Chavan College of Engineering, Maharashtra, Nagpur University on 15 Jan 2016.
- Delivered expert talk on, “Shri Ramdeobaba College of Engineering & Management, Nagpur, Maharashtra. Nagpur University on 16 Jan 2016.
- Delivered expert talk on, “Priyadharshini Institute of Engg. & Technology, Nagpur, Maharashtra. Nagpur University on 16 Jan 2016.
- Delivered Colloquial Talk on, “Antenna: A Vital Communication Link”, at Don Bosco Institute of Technology, Mumbai on 10 Oct 2015.
- Delivered an expert talk on, “Microwave Filters”, S. B Patil College of Engineering, Indapur, Dist-Pune, Maharashtra, Pune University, on 3 July 2015.

## Achievements/Awards/Recognitions:

- Invited to be a selection panel member to interview candidates at Society for Applied Microwave Electronics Engineering and Research (SAMEER), Autonomous Society of Ministry of Electronics and Information Technology (MeitY), Government of India for the post of
  - Scientist – B on 1 and 15 September 2023.
  - Research Scientist (Electronics) on 6 July 2023.
  - Scientist (Ele/RF/Microwave) on 22 and 23 December 2022.
  - Research Scientist (Electronics and RF) on 19 and 20 Apr 2022.
- Reviewer for IEEE Transactions on Microwave Theory and Techniques since 2022.
- Reviewer for IEEE Journal of Research since 2017.
  - Recipient of IEEE project grants worth ₹28 Lakhs (2017- 22).
  - Recipient of L&T CSR funds worth ₹ 90.8 Lakhs (2021 - 25).

## Interactions with Professional Institutions:

- Chair, IEEE Bombay Section MTTTS Chapter (Jan 2021 to 2023)
- Vice-Chair, Inter Society Liaison
- Committee, IEEE BS (Jan –Dec 2020)
- Joint Treasurer, IEEE Bombay Section (Jan 2018 to Dec 2020)
- Secretary, IEEE Bombay Section MTTTS Chapter (April 2013 to Dec 2020)
- EXECOM Member, IEEE Bombay Section (April 2013 to Dec 2017)
- WIE Chair, IEEE Bombay Section. (Jan 2016 to Dec 2018)
- Faculty Advisor to DBIT-IEEE MTT-S Student Chapter (Nov 2014-till date),
- Chair, IEEE DBIT SIGHT (Aug 2017-till date)
- IEEE DBIT Branch Councilor (Jan 2011 to Dec 2012).
- Organizing committee member of IEEE Region10 International Conference TENSYPMP 2022.
- Organizing committee member of 7th edition IEEE MTT-S's flagship conference in India, IMaRC 2019.
- Chair of Women In Microwaves in IEEE MTT-S International Microwave and RF Conference (IMARC) 2019.

## Other Achievements & Responsibilities:

- Reviewer for the following International Conferences:
  - 2023 Asia-Pacific Microwave Conference (APMC 2023), Taiwan.
  - 2023 IEEE International Symposium on Antenna & Propagation (ISAP2023), Malaysia.
- Reviewer for Asia Pacific Microwave Conference since 2016.
- Track Chair for IEEE Region-10 International Conference Tensymp2022.
- Reviewer for 2021 Cross Strait Radio Science & Wireless Technology Conference, Shenzhen, China.
- Reviewer for Asia Pacific Microwave Conference since 2016.
- Reviewer for IEEE IBSSC Conference since 2015.
- Reviewer of textbook on 'Electrical Networks', Tata McGraw Hill Publications
- Initiated the Alumni Sponsorship Program in the Department of EXTC for students in need.
- Initiated the Alumni Mentorship program for EXTC students.

- Established collaborations resulting into MoUs with
  - RUR Greenlife Pvt. Ltd. (since 2023)
  - L&T Ltd, Mumbai (since July 2021);
  - QDnet Technologies, Mumbai (since Oct 2018).
  - RadioJitter, Bengaluru (Feb 2019);
  - iRoboKids, Mumbai (2019 - 2021);
- Established research collaborations with IIT-BHU, Varanasi since 2021 in the field of Metasurface Designs.
- Have been serving as panel member for interviews of Junior Research Scientist and Research Scientist (Electronics) and Scientist-B at Society for Applied Microwave Electronics Engineering and Research (SAMEER).

### Consultancy Projects Received from External Agencies:

1. Provided consultancy for network speed testing to Quectel-Global IoT Solutions, Mumbai, 2024.
2. Range Extension for LoRa System, VAA Technologies, 2023.
3. Antenna Testing for Sixth Energy Pvt. Ltd, Bengaluru, 2019.
4. Antenna design consultancy and Testing for Sixth Energy Pvt. Ltd, Bengaluru, 2018.
5. A Log Periodic Antenna for EMI /EMC applications for QDnet Technologies, Mumbai, 2017.
6. Design & development of antenna for IoT Systems for Sixth Energy Pvt. Ltd, Bengaluru, 2016.
7. Design & development of range extension antenna of Wirelessly Controlled Street Lighting System for Acevin Solutions, Mumbai, 2015.
8. High Power Directional Coupler for antenna testing in GSM band, a sponsored project for Motorola, 2009.
9. 5.8 GHz miniaturized printed BPF for a SCADA system sponsored by GIS Nucleus India Pvt. Ltd., Mumbai, 2007.

### Sponsored Projects/ Research Projects Received from External Agencies:

- “Engineering Futures – CrEAST Program” a funded project of **₹90.8 Lakh** to promote STEM education among students (age 12 to 15) of low-income schools & children with learning disabilities from 2021 to till date. Received funding of ₹5 Lakh (July - Dec 2021), ₹14.8 Lakh (July 2022 - Mar 2023), ₹37 Lakh (July 2023 - Mar 2024), ), ₹34 Lakh (July 2024 - Mar 2025).
- Grantee of IEEE MTT-S/SIGHT Joint Funding of **₹4 Lakh** for the project "LoRaWAN Enabled Remote Solar PV Energy Monitoring System". Project was showcased at the International Microwave and RF Conference (IMaRC) 2019.

- Grantee of the IEEE HAC project grant of **₹18.7 Lakhs** in 2017 for the project “Comprehensive Development of Tribal Community of Walvanda”.
- Co-Grantee of IEEE HAC Events funded project of **₹3.5 Lakh**, “Inculcating Healthy and Sustainable Menstrual Hygiene Practices Among the Tribal Woman of Walvanda” in 2018.
- Principal Investigator & recipient of minor research grant of **₹50 Thousand** from Mumbai University in 2014 - 15 & 2018 - 19.
- Grantee of IEEE WIE grant of **₹33 Thousand** in 2016 for an outreach STEM program.

### **Institute Development/Department Responsibilities Handled:**

- Dean (Student Progress)–Oct 2022 to Till Date at DBIT.
- HOD, Department of Electronics & Telecommunication Engineering, DBIT from July 2018 to June 2022.
- Program Coordinator for L&T CSR Department sponsored “Engineering Futures – CrEAST” program from 2021 to July 2024. I have designed the course of “meriUrja” for the program and am the faculty coordinator for the same.
- Research Mentor for the RF/Microwave research group
- Instituted IEEE MTT-S Student Chapter, IEEE WIE, IEEE SIGHT, IEEE RAS in DBIT IEEE SB
- Faculty Advisor to DBIT-IEEE MTT-S Student Chapter (Nov 2014-till date), Chair, IEEE DBIT SIGHT (Aug 2017-till date) and Branch Councilor (Jan 2011 to Dec 2012).
- Faculty in-charge of Sustainability Innovation & Entrepreneurship Student Club (2021 to 2023).
- Organizing committee member of International Conference on Technologies for Sustainable Development (ICTSD) 2015.
- Have served in the role of project coordinator, senior supervisor, class teacher etc., over the years before taking charge as HOD.

### **PG / Ph.D. Guidance:**

- Ph.D guide at Assam Don Bosco University, Guwahati.

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