

Faculty CV

1. Name of Faculty: Dr. Jayant Gajanan Joshi
2. Present Position : Lecturer in Electronics (Selection Grade)
3. Address : Department of Electronics and Telecomm. Engg.
Government Polytechnic Nashik, Chehdi (BK),
Samangaon Road, Nashik Road-422011 (MS)
4. Mobile No. : +91 7875276136
5. E-Mail Id : joshij11@rediffmail.com
6. Date of Birth : 2nd June 1969



7. Memberships of professional organizations/Bodies :

- 1) Senior Member of Institute of Electrical and Electronics Engineers (SMIEEE) (Membership No.90741761)
- 2) Member of Institution of Engineering and Technology IET (UK) (MIET) (Membership No.1100818124)
- 3) Member of Institution of Electronics and Telecommunication Engineers (MIETE) (M-150486-
- 4) Member of Institution of Engineers (India) Kolkata (MIE) (M-150486-4)
- 5) Life member of Indian Society for Technical Education (LMISTE-24473)
- 6) Life Member of Instrument Society of India (LMISOI M-1296)
- 7) Listed in the Who's Who in the World.

8. QUALIFICATIONS:

| Sr. No. | Examination | Institute | Board/ University | % of Marks | Class Award | Remark |
|---------|---|--|-----------------------------|------------|--|--------|
| 1 | Ph.D. (Electronics and Communication Engineering) | National Institute of Technical Teachers' Training and Research, Chandigarh-160019 India | Panjab Technical University | | Excellent Thesis awarded by International and National Examiners | |

9. ADDITIONAL SKILLS

- 1) Pioneer at International Level as Designer and Fabricator of "Metamaterial and Wearable Microstrip Antennas" for applications like BAN, MBAN, Wi-Fi, WLAN, Wi-Max, Public safety band.

- 2) **Renowned Designer and Fabricator of “Sensors for measurements of various physical quantities”.**
- 3) **Participating in research and development activities.**
- 4) **Good technical writing skills.**

10. HONORS AND AWARDS

- [1] **Engineering Achievement Award 2021 of The Institution of Engineers (India), Nashik Local Centre on 29th April 2022.**
- [2] **Awarded Certificate of Appreciation for Endless Efforts Towards Society on Engineers Day 2021 by Lions International Club Nashik**
- [3] **Prof. Rajneesh Arora Best Research Paper Award at IEEE Indian Antenna Week 2014 (IAW 2014), Chandigarh, India. Organized by IEEE AP-MTT Joint Chapter of Kolkata section, India in association with NITTTR, Chandigarh & Punjab Technical University, Jalandhar, Punjab.**
- [4] **First Prize for Research Paper at Institution of Engineers (India), Pune Local Centre, Annual Technical Paper Meet 2014. For Research paper titled “Circular Slotted Microstrip Patch Antenna Implanted with Metamaterial MSRR Array,” Annual Technical Journal Institution of Engineers (India), Pune Local Centre, Pune.**
- [5] **Received K SHANKAR Meritorious Paper Award IEEE BS2020** hosted by IEEE Mumbai Section 2020. For Research paper titled “Circularly Polarized Microstrip Antenna using DGS for IRNSS Services” International Conference of IEEE Bombay Section Signature Conference, 4 – 6 December 2020.
- [6] **Received Best Paper Award** at Online International Conference on “Smart Villages : Technology for Sustainable Development” Organized by Govt. Polytechnic Sakoli, 25–26 November 2021.
- [7] **Best Research Paper Award** for the Research Paper titled “Compact Z-Shaped Flexible Microstrip Antenna for UHF ISM Band Application” in AICTE Sponsored First International Conference on “Recent Trends in Engineering Science, Technology and Management (IC-RTETM-2022) Organized by Guru Gobind Singh Polytechnic Nashik (MS), India.

11. ABROAD VISIT:

- 1) Presented a Research Paper titled “Hybrid Dual Band High Gain Antenna,” at IEEE 2009 International Symposium on Antennas and Propagation (ISAP 09), Bangkok, Thailand, Proceedings of ISAP 09, pp. 457-460, October 20-23, 2009 (Research Paper ID-1251).

12.CAREER DETAILS:

| Sr. No. | Organization | Designation | Duration | Period | Work Done in Brief |
|----------------|--------------------------------|---|----------------------|-----------------------|---|
| 1 | Government Polytechnic, Nashik | Lecturer in Electronics (Selection Grade) | 9 years and 6 months | 7/9/2012 to till date | Teaching, Lab development, Curriculum Development, Course/Learning Material development, Industry relations |

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|---|--|---|----------|-------------------------|---|
| 2 | Government Polytechnic, Pune (MPSC Selected) | Lecturer in Electronics (Senior Scale) | 11 years | 24/7/2001 to 31/08/2012 | Teaching, Lab development, Curriculum Development, Course/Learning Material development, Industry relations |
| 3 | Shri Sant Gadge Baba Polytechnic, Bhusawal | Head of Industrial Electronics Engineering Department | 07 Years | 24/7/1994 to 23/7/2001 | Department Administration, Lab development, Teaching, AICTE portfolio |

13.SPECIALIZED TRAINING COURSES ATTENDED:

| Course Name | Duration | Place | Training Agency |
|---|-------------------------------------|------------------------------------|---|
| Latest Wireless and Computing Technologies | 14/04/2020 to 18/04/2020 (One Week) | Online | NITTTR, Chandigarh |
| Neural Networks and CNN from | 11-05-20 to 15-05-20 (One Week) | Online | NITTTR, Chandigarh |
| Power Electronics in Power System | 25/05/2020 to 29/05/2020 (One Week) | Online ICT Mode | NITTTR Kolkata |
| Electric Vehicles | 24th to 29th April 2020 | Online mode | The Automotive Research Association of India (ARAI), Pune & Rajarambapu Institute of Technology, Islampur, Sangli |
| Electric Vehicles: Batteries and BMS | 28th May to 01st June 2020. | Online mode | The Automotive Research Association of India (ARAI), Pune & Devise Electronics Pvt. Ltd., Pune |
| Artificial Intelligence & Machine Learning Using Python | 18 - 27 May 2020 | 10 Days Instructor Led Live Online | Finland Labs (A Unit of Revert Technology Pvt. Ltd.) In Association with National Social Summit, IIT Roorkee |
| E-learning program on Instrument and Control System | 28-04-2020 | Online mode | Tata Steel |
| E-learning program on PLC | 07/05/2020 | Online | Tata Steel |
| Webinar on “Innovative Disruptive Technology” | 19th April 2020 | Online | The Magic Data |
| E-learning program on Machine Learning | 07/05/2020 | Online | Tata Steel |

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|---|--|--------------------------------|---|
| Personality Development Through Positive Thinking | July 21-25, 2014 (1 Week) | Government Polytechnic, Nashik | NITTTR, Bhopal |
| Computational and Statistical Methods Applied in Engineering (TEQIP-II sponsored) | July 7-11, 2014 (1 Week) | Jalgaon | Government College of Engineering, Jalgaon |
| Quality Management Standards & Quality technology Tool | March 3-7, 2014(1 Week) | Pune | NITTTR Bhopal Pune Extension Centre |
| Nanoscale Integration Fabrication & Characterization (TEQIP-II sponsored) | October 21-25, 2013 (1 Week) | Surat | SVNIT, Surat |
| Industrial Training of Technical Teachers (Sponsored by Directorate of Technical Education, Maharashtra State and organized by Government Polytechnic, Pune.) | December 21, 2011 to January 21, 2012 (4 Weeks) | Badawe Engineers, Pune | Directorate of Technical Education (DTE), Maharashtra State |
| Recent Trends in Microwave Integrated Circuits (Sponsored by AICTE-MHRD) | July 13 - 17 2010 (1 Week) | Tiruchirapalli | NIT, Tiruchirapalli |

14. RESEARCH ACTIVITIES:

BOOKS Published

- 1) **J. G. Joshi**, “**Electronic Measurements and Instrumentation**,” Khanna Book Publishing Pvt. Limited, New Delhi, India Pages: 329, 2000, ISBN: 978-93-86173-62-1. (**Recommended as Reference Book for AICTE Model Curriculum**)
- 2) **M. D. Singh and J. G. Joshi**, “**Mechatronics**,” Prentice Learning Pvt. Limited, New Delhi, India, Pages: 496, 2006, ISBN- 978-81-203-2986-7. (**Recommended as Reference Book for AICTE Model Curriculum**).
- 3) **J. G. Joshi** and Shyam S. Pattnaik, “**Metamaterial Loaded Antennas for Wireless Communication**,” LAP LAMBERT Academic Publishing, Germany, Pages: 284, 2014, ISBN 978-3-659-22691-5.

BOOK CHAPTERS Published

- 1) **Jayant G. Joshi**, “Some Important Aspects to Enhance the Quality of the Technical Education System for Better Industry-Institute Interaction,” Book Title: “Strategic Role of Tertiary Education and Technologies for Sustainable Competitive Advantage,” Chapter 11, pp. 222-247, 2013, Information Science Reference (an imprint of IGI Global), USA, DOI: 10.4018/978-1-4666-4233-.
- 2) **J. G. Joshi** and Shyam S. Pattnaik, “Metamaterial Loaded Microstrip Patch Antennas” Book Chapter; Book Title: “Encyclopedia of Information Science and Technology,” Third Edition, Category: Networking and Telecommunications, Chapter 613, pp. 6219-6238 2014 Information Science Reference (an imprint of IGI Global), USA. DOI: 10.4018/978-1-4666-5888-2, ISBN13: 9781466658882, ISBN10: 1466658886, EISBN13: 9781466658899.
- 3) **J. G. Joshi** and Shyam S. Pattnaik, “Metamaterial Based Wearable Microstrip Patch Antennas” Book Chapter; Book Title: “Handbook of Research on Progressive Trends in Wireless Communications and Networking,” Chapter 20, pp. 518-556, 2014, Information Science Reference (an imprint of IGI Global), USA. DOI: 10.4018/978-1-4666-5170-8, ISBN13: 9781466651708, ISBN10: 1466651709, EISBN13: 9781466651715.

IEEE BOMBAY SECTION NEWSLETTER CONTRIBUTION SERIES:

1. **Jayant G. Joshi**,: Filtenna: An Adaptable Element in RF and Wireless Communication,” In The Loop IEEE Quarterly Newsletter Bombay Section VOLUME 3, ISSUE, pp.15, FEBRUARY 2022.
2. **Jayant G. Joshi**, “Interdigital capacitor (IDC) : A Multipurpose Electronic Component as a Microstrip Patch Antenna and a Sensor,” In The Loop IEEE Quarterly Newsletter Bombay Section VOLUME 2, ISSUE 3, pp.13-15, JULY 2021.
3. **Jayant G. Joshi**, “Wearable Microstrip Patch Antennas: A Promising Element of Wearable Technology,” In The Loop IEEE Quarterly Newsletter Bombay Section VOLUME 2, ISSUE 4, pp.12, OCTOBER 2021.

International and National Journals

4. Ketan Jagtap, **Jayant G. Joshi**, “Role of Mechatronics in Agriculture Transformation” International Journal of Innovations in Engineering and Science, Vol.7, No.1, 2022 pp.01-06 eISSN:2456-3463.
5. Vikas Jain, Balwinder S. Dhaliwal and **Jayant G. Joshi**, “Compact Flexible and Wearable Fractal Patch Antenna for Medical Body Area Network Applications,” International Journal of Microwave and Optical Technology, vol.16, no.5, pp. 432-440, 2021
6. Mandar P. Joshi and **Jayant G. Joshi**, “Compact Dual Band Printed Monopole Antenna for ISM and Wi-MAX,” Institute of Engineers (India), Annual Technical Volume of Electronics and Telecommunication Engineering Engineering Division Board, Vol.3, pp. 41–46, ISBN: ISBN 978-81-945201-9-1, 2020.
7. Mandar P. Joshi, **Jayant G. Joshi**, and Shyam S. Pattnaik, “Stub Loaded Rectangular Ring Shaped Tri-Band Monopole Antenna for Wireless Applications,” International Journal of Advances in Microwave Technology (IJAMT), Vol.5, No.2, pp. 227-233, May 2020. DOI: <http://dx.doi.org/10.32452/IJAMT.2020.227233>.
8. **J.G. Joshi** and Shyam S. Pattnaik, “Circular Slotted Microstrip Patch Antenna Implanted with Metamaterial MSRR Array,” Annual Technical Journal Institution of Engineers (India), Pune Local Centre, Pune, vol.38, pp. 122-126, 2014, ISBN:978-81-924990-2-4.

(First Prize at Institution of Engineers (India), Pune Local Centre, Annual Technical Paper Meet)

9. Shyam S. Pattnaik and **Jayant G. Joshi**, "Undergraduate Students' Summer Training on Design, Fabrication, and Testing of Antennas a Case Study for Effective Learning," Forum for Electromagnetic Research Methods and Application Technologies (FERMAT), pp. 1-11, 2014, ISSN 2470-4202.
10. **J. G. Joshi**, Shyam S. Pattnaik, and S. Devi, "Geo-textile Based Metamaterial Loaded Wearable Microstrip Patch Antenna," *International Journal of Microwave and Optical Technology*, vol.8, no.1, pp. 25-33, 2013.
11. **Jayant Gajanan Joshi**, "Industrial Training of a Polytechnic Teacher to Enhance the Industry-Institute-Interaction: A Case Study," *IEEE Technology and Engineering Education (ITEE)*, vol. 8, no.2, pp.6-14, June 2013, ISSN 1558-7908.
12. **J. G. Joshi**, Shyam S. Pattnaik, and S. Devi, "Metamaterial Embedded Wearable Rectangular Microstrip Patch Antenna," *International Journal of Antennas and Propagation, Special issue on Wearable Antennas and Systems*, Hindwai Publication Corporation, vol. 2012, article ID. 974315, pp.1-9, doi:10:1155/2012/974315, 2012.
13. **J.G. Joshi**, Shyam S. Pattnaik, and S. Devi, "Rectangular Slotted Microstrip Patch Antenna with Partially Loaded Metamaterial Ground Plane," *International Journal of Microwave and Optical Technology*, vol.7, no.1, pp. 1-10, January 2012.
14. **J.G. Joshi**, Shyam S. Pattnaik, S. Devi, and S. Raghavan, "Magneto-inductive Waveguide Loaded Microstrip Patch Antenna," *International Journal of Microwave and Optical Technology*, vol.7, no.1, pp. 11-20, January 2012.
15. Kuldip Pahwa, Pushkar Mishra, H. P. Sinha, S. S. Pattnaik, and **J. G. Joshi**, "Design and Development of Diamond Shape Fractal Antenna for Wireless Communication," *International Journal of Microwave and Optical Technology*, vol.7, no.2, pp. 101-106, March 2012.
16. **Jayant G. Joshi**, Shyam S. Pattnaik, Swapna Devi and Mohan R. Lohokare, "Bandwidth Enhancement and Size Reduction of Microstrip Patch Antenna by Magneto-inductive Waveguide Loading," *Journal of Wireless Engineering and Technology*, vol.2, no.2, pp.37-44, April 2011 (doi:10:4236/wet.2011.22006).
17. **J.G. Joshi**, Shyam S. Pattnaik, S. Devi and M.R. Lohokare, "Metamaterial Embedded Electrically Small Planar Loop Antenna," *Journal of Telecommunications*, vol.7, no.1, pp. 7-12, February 2011.
18. **J.G. Joshi**, Shyam S. Pattnaik, S. Devi and M.R. Lohokare, "Frequency Switching of Electrically Small Patch Antenna using Metamaterial Loading," *Indian Journal of Radio and Space Physics*, vol.40, no.3, pp.159-165, June 2011.
19. Anil Kumar Agrawal, Shyam Sundar Pattnaik, S. Devi, and **J.G. Joshi**, "Broadband and High Gain Microstrip Patch Antenna for WLAN," *Indian Journal of Radio and Space Physics*, vol.40, no.5, pp.282-286, October 2011.
20. M.R. Lohokare, S. S. Pattnaik, S. Devi, B.K. Panigrahi, and **J.G. Joshi**, "Modified Biogeography-Based Optimization (MBBO)," *International Journal of Bio-inspired Computation*, vol.3, no.4, pp. 252-266, 2011.
21. **J.G. Joshi**, Shyam S. Pattnaik, S. Devi and M.R. Lohokare, "Electrically Small Patch Antenna Loaded with Metamaterial," *IETE Journal of Research*, vol. 56, no.6, pp.373-379, November- December 2010.
22. M.R. Lohokare, S. S. Pattnaik, S. Devi, B.K. Panigrahi, S. Das, and **J.G. Joshi**, "Extrapolated Biogeography-Based Optimization (eBBO) for Global Numerical Optimization and Microstrip Patch Antenna Design," *International Journal of Applied Evolutionally Computation*, vol.1, no.3, pp.1-29, July-September 2010.
23. **J.G. Joshi**, "Need of Industrial Training In Polytechnic Education System-Some Aspects," *The Indian Journal of Technical Education*, 2006.
24. **J.G. Joshi**, "Mechatronics and its Role in Industrial Sector," *Technical Journal of Institution of Engineers (India), Pune Local Centre*, vol.34, March 2004, pp.38-39.

25. **J.G. Joshi**, "Project Work in Polytechnic Education System-Some Aspects," *The Indian Journal of Technical Education*, vol.27, no.4, Oct-Dec.2004, pp.109-114.
26. **J.G. Joshi**, "Need of Research and Development Environment in Polytechnics," *The Indian Journal of Technical Education*, vol.22, no.3, July-Sept 1999, pp.47-50.
27. **J.G. Joshi**, "Role of Quality Functions in Technical Education," *The Indian Journal of Technical Education*, vol.20, no.4, pp 47-50, Oct-Dec.1997.

International and National Conferences

28. Vikas Jain, Shubhranshu Pattnaik, Balwinder S. Dhaliwal, and **Jayant G. Joshi**, "Compact Wearable Fractal Patch Antenna and its Performance analysis for BAN," Proceedings of 36th National Convention of E and TC organized by Divisional Board of Institution of Engineers (India) Bathinda Local Centre, Bathinda, 4-5 December 2021, pp.122.
29. Shivam Gaikwad, Mandar P. Joshi, and **Jayant G. Joshi**, "Design of Circular Microstrip Antenna Using Python." Proceedings of 3rd IEEE Bombay Section Signature Conference (IBSSC-2021) Gwalior, 18-20 November 2021.
30. **Jayant G. Joshi**, "Interdigital capacitor (IDC): A Multipurpose Electronic Component as a Microstrip Patch Antenna and a Sensor" IEEE Bombay Section In The Loop A Quarterly News Letter, July 2021-Vol.2-Issue3, pp. 13-15.
31. **Jayant G. Joshi**, "Wearable Microstrip Patch Antennas: A Promising Element of Wearable Technology" IEEE Bombay Section In The Loop A Quarterly News Letter, October 2021-Vol.2-Issue 4, pp.12 .
32. Mandar P. Joshi, Mugdha S. Deole, Sabaa E. Mansoori and **Jayant G. Joshi**, "Capacitively Coupled E-Shaped Broadband Microstrip Antenna," 4th IEEE International Conference on Communication, Information and Computing Technology, Mumbai 25-27 June 2021.
33. Mandar P. Joshi, Umesh S. Gite, **Jayant G. Joshi**, "Circularly Polarized Microstrip Antenna using DGS for IRNSS Services," IEEE Bombay Section Signature Conference, 4-6 December 2020, DOI: 10.1109/IBSSC51096.2020.9332166. (**K SHANKAR meritorious paper Award IEEE BS 2020 IEEE Bombay Section 2020**).
34. **Jayant G. Joshi**, Vaishali J. Joshi, Balwinder Singh Dhaliwal and Shyam S. Pattnaik "Development of Linkage between Agriculture Industries and Technical Institutions (AITIL): A Step towards Implementation of NEP 2020," International Conference on Best Innovative Teaching Strategies(ICON-BITS), Birla Institute of Technology and Science Pilani (Rajasthan), 29-31 July 2021.
35. **Jayant G. Joshi**, Mandar P. Joshi, Balwinder Singh Dhaliwal and Shyam S. Pattnaik "Soil Humidity Measurement using Microstrip Interdigital Capacitor (IDC) and Rectangular Slotted Fingers Interdigital Capacitor (RSFIDC)," Technical Volume of 35th Indian Engineering Congress 2020, The Institution of Engineers (India), Kolkata (IEI) and celebration of Centenary, pp. 947-953, December 18-20, 2020, ISBN 978-81-950662-0-9.
36. **जयंत गजानन जोशी** लेखाचे शीर्षक "परिधानायोग्य आकाशक : बिनतारी दूरसंदेशवहन माध्यमातील नवीन तंत्रज्ञान" मराठी विज्ञान परिषद, (मुंबई) पत्रिका, ऑगस्ट २०२१ पृष्ठ क्र. ११-१४, वर्ष- ५४, अंक- ५. (**Marathi Vidnyan Parishd Patrika, August 2021, pp.11-14 Year-54, Issue-5**).
37. **जयंत गजानन जोशी** लेखाचे शीर्षक "वेअरेबल मायक्रोस्ट्रीप पॅच अँटेनाचे डिझाइन, विकास आणि उपयोग: एक पुनरावलोकन" "अभियंता बंधू 2020" "Abhiyanta Bandhu 2020" The Institution of Engineers (India), Kolkata (IEI) has celebrated 35th Indian Engineering Congress 2020 and Centenary and published a Technical Journal in Regional languages for Engineering Fraternity, under the aegis of its "National Language Promotion Committee" pp. 111-115.
38. **Jayant G. Joshi**, Balwinder Singh Dhaliwal and Shyam S. Pattnaik, "Curriculum Development for Autonomous Technical Institutions under NEP 2020 to Accelerate

- Multidisciplinary Research: A Step towards *Atmanirbhar Bharat*” Proceedings of 1st National Conference on UNLOCKING ATMANIRBHAR BHARAT THROUGH NEP-2020, National Institute of Technical Teachers Training and Research (NITTTR), Chandigarh pp. 1-6, 27th November, 2020.
39. **Jayant G. Joshi**, “Chapter 6 Feedback from Participant” Proceedings of Webinar Series “Atmanirbhar Bharat: Transmutation from Privation to Exuberance”, National Institute of Technical Teachers Training and Research (NITTTR), Chandigarh and Bharatiya Shikshan Mandal pp. 64-72, July 27-31, 2020.
 40. Mandar P. Joshi, **Jayant G. Joshi**, and Shyam S. Pattnaik, “Wearable Right Angle Triangular Microstrip Patch Antenna for MBAN Application,” Proceedings of National Conference on Biomedical Engineering (NCBE-2020) sponsored by Department of Scientific and Industrial Research, January 22-24, 2020.
 41. Mandar P. Joshi, **Jayant G. Joshi**, and Shyam S. Pattnaik, “Hexagonal Slotted Wearable Microstrip Patch Antenna for Body Area Network,” Proceedings of 2019 IEEE Pune Section International Conference (PuneCon 2019) MIT World Peace University, Pune, India December 18-20, 2019. (**IEEE Explore**) DOI: [10.1109/PuneCon46936.2019.9105773](https://doi.org/10.1109/PuneCon46936.2019.9105773).
 42. **J.G. Joshi**, and Shyam S. Pattnaik, “Tri-band Wearable microstrip patch Antenna,” Proceedings of International Symposium on Antennas and Propagation (APSYM 2016), Department of Electronics, Cochin University of Science and Technology (CUSAT), Cochin, India, , pp. 109-112, December 15-17, 2016.
 43. **J.G. Joshi** and Shyam S. Pattnaik, “Dual Band Wearable Microstrip Patch Antenna,” Proceedings of IEEE Indian Antenna Week 2014 Workshop on Advanced Antenna Technology (IEEE IAW 2014), 26-30 May, 2014, Hotel JW Marriot, Chandigarh, India. (**Prof. Rajneesh Arora Best Research Paper Award**).
 44. Chirag Arora, Shyam S. Pattnaik, R. N. Baral, and **J.G. Joshi**, “Performance Enhancement of Microstrip Patch Antenna Array using SRR Loading,” Proceedings of IEEE Indian Antenna Week 2014, Workshop on Advanced Antenna Technology (IEEE IAW 2014), 26-30 May, 2014, Hotel JW Marriot, Chandigarh, India.
 45. **J.G. Joshi**, and Shyam S. Pattnaik, “Polyester Based Wearable Microstrip Patch Antenna” Proceedings of 4th IEEE Applied Electromagnetics Conference 2013 (AEMC 2013), 18–20 Dec. 2013, KIIT University, Bhubaneswar, India, 978-1-4799-3267-2/13, DOI:10:1109/AEMC2013.7045103. (**IEEE Explore**)
 46. **J.G. Joshi**, and Shyam S. Pattnaik, “Polypropylene Based Metamaterial Integrated Wearable Microstrip Patch Antenna,” Proceedings of IEEE Indian Antenna Week 2013 Workshop on Advanced Antenna Technology (IEEE IAW 2013), 3-7 June, 2013, Hotel Rama International, Aurangabad, India.
 47. **J.G. Joshi**, “Small Microstrip Patch Antenna Loaded with Metamaterial,” Proceedings of National Conference on Advances in Video, Cyber Learning and Electronics (ADVCE 2012), NITTTR, Chandigarh, India, pp.154 -164, March 1-2, 2012.
 48. Chirag Arora, and **J.G. Joshi**, “L-Shaped Planar Metamaterial Antenna,” Proceedings of National Conference on Advances in Video, Cyber Learning and Electronics (ADVCE 2012), NITTTR, Chandigarh, India, pp.115 -122, March 1-2, 2012.
 49. **J.G. Joshi**, Shyam S. Pattnaik, and S. Devi, “Metamaterial Loaded Square Slotted Dual Band Microstrip Patch Antenna,” Proceedings of IEEE Applied Electromagnetic Conference (AEMC 2011), Kolkata, India, December 18-22, 2011, DOI:10:1109/AEMC 2011.6256835, 978-1-4577-1099-5/11. (**IEEE Explore**) DOI: [10.1109/AEMC.2011.6256835](https://doi.org/10.1109/AEMC.2011.6256835)
 50. **J.G. Joshi**, Shyam S. Pattnaik, and S. Devi, “Metamaterial Loaded Dual Band Microstrip Patch Antenna,” Proceedings of IEEE Indian Antenna Week (IAW2011), Kolkata, India, December 18-22, 2011, DOI:10:1109/IndianAW2011.6264930. (**IEEE Explore**) DOI: [10.1109/IndianAW.2011.6264930](https://doi.org/10.1109/IndianAW.2011.6264930)
 51. **J. G. Joshi**, Shyam S. Pattnaik, and S. Devi, “Metamaterial Loaded Overlapped Microstrip patch Antenna,” Proceedings of National Seminar on Innovations and Applications in Engineering & Applied Sciences (IAEAS 2011), Gurukul Kangri Vishwavidyalaya, Haridwar, India, November 9-10, 2011.

52. Shyam S. Pattnaik, **J.G. Joshi**, S. Devi, and M.R. Lohokare, "Electrically Small Rectangular Microstrip Patch Antenna Loaded with Metamaterial," Proceedings of 9th International Symposium on Antennas, Propagation and EM Theory (ISAPE 2010), Guangzhou, China, pp. 247-250, November 29-December 2, 2010, DOI:10.1109/ISAPE 2010.5696445. (**IEEE Explore**)
53. **J.G. Joshi**, Shyam S. Pattnaik, S. Devi and M.R. Lohokare, "Metamaterial Antenna for Aircrafts Ice Detection Sensor," Proceedings of National Symposium on New Horizons in Avionics Display Systems (NHADS-2010), CSIO, Chandigarh, October 23, 2010.
54. **J.G. Joshi**, Shyam S. Pattnaik, S. Devi and M.R. Lohokare, "Microstrip Patch Antenna Loaded with Magneto-inductive Waveguide," Proceedings of Twelfth National Symposium on Antennas and Propagation (APSYM 2010), Department of Electronics, Cochin University of Science and Technology (CUSAT), Cochin, India, pp.101-105, December 14-16, 2010.(This antenna structure is published in the IEEE Antennas and Propagation Magazine vol. 53, no.1, pp.123-126, February 2011, under the "Report on APSYM'2010: National Symposium on Antennas and Propagation, Cochin, India, December 14-16, 2010").
55. Chirag Arora, **J.G. Joshi**, Shyam S. Pattnaik, and S. Devi, "Textile Based Metamaterial Antenna Using Off Set Split Ring Resonator and Extended Stubs," Proceedings of Twelfth National Symposium on Antennas and Propagation (APSYM 2010), Department of Electronics, Cochin University of Science and Technology (CUSAT), Cochin, India, December 14-16, 2010.
56. S. Devi and **J.G. Joshi**, "Metamaterial Loaded Electrically Small Microstrip Patch Antenna for WLAN," Proceedings of National Seminar on Wireless Communication and Mobile Computing, Department of Electronics and Telecommunication, Ajay Binay Institute of Technology, Cuttack, India, pp.13-17, October 8-9, 2010.
57. **J. G. Joshi**, Shyam S. Pattnaik, S. Devi, and M.R. Lohokare, "Research on Antenna at ETV Centre," Proceedings of National Conference on Advances in Video, Cyber Learning and Electronics (ADVCE 2010) NITTTR, Chandigarh, India, pp. 207-210, February 18-19, 2010.
58. S.S. Pattnaik, **J.G. Joshi**, Swapna Devi, and M.R. Lohokare, "Hybrid Dual Band High Gain Antenna," Proceedings of IEEE 2009 International Symposium on Antennas and Propagation (ISAP 09), Bangkok, Thailand, pp.457-460, October 20-23, 2009.
59. **J.G. Joshi**, S.S. Pattnaik, and Swapna Devi, "Hybrid Split Ring (HSR) Planar Metamaterial Antenna," Proceedings of International Radar Symposium India-2009 (IRSI-09), Bangalore, India, pp.557-560, December 8-11, 2009.
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61. **J.G. Joshi**, S.S. Pattnaik, S. Devi, and M.R. Lohokare, "Extended Rectangular Split Ring (ERSR) Planar Metamaterial Antenna," Proceedings of 12th International Symposium on Microwave and Optical Technology, 2009 (ISMOT 09), New Delhi, India, pp.261-264, December 16-19, 2009.
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64. Meenakshi Batra, S.S. Pattnaik, **J.G. Joshi**, and S. Devi, "Design of Planar Left-Handed Metamaterial using Triangular Split Structure," 12th International Symposium on Microwave

and Optical Technology 2009 (ISMOT 09), New Delhi, India, pp.606-609, December 16-19, 2009.

65. **J. G. Joshi**, "Monitoring of Nitrogen Dioxide Gas using MEMS Microsensor," Proceedings of National Conference on Signal Processing & Automation (NCSPA-07), Department of Instrumentation, Padmashree Dr. D Y Patil Institute of Engineering and Technology, Pimpri, Pune, India, pp.99-100, September 7-8, 2007.
66. **J. G. Joshi, and C. R. Joshi**, "Industrial Case Studies- Need For Faculty Members in Engineering Education System," Proceedings of 37th ISTE Annual Convention and National Seminar on Excellence in Technical Education through Innovation, Manipal Institute of Technology, Manipal, India, 2007, pp.47.
67. **J. G. Joshi**, "Measurement of Soil Electrical Parameters using Aluminium Electrodes," Proceedings of 11th National Seminar on Physics and Technology of Sensors (SENSORS-11) Department of Electronic Science, Pune University, India, pp.C18-1 to C18-5, February 27-March 1, 2006.
68. **J. G. Joshi, and C. R. Joshi**, "Industry-Institute Interaction through Interdisciplinary Subjects in the Curriculum of Engineering Education System-Some Aspects," Proceedings State Level ISTE Convention, Government Polytechnic, Aurangabad, India, 2006.
69. **J. G. Joshi**, "Measurement of Vibrations using MEMS Accelerometer," Proceedings of National Conference on Modern Trends in Electronics and Communication Systems, (MTECS-05), Aligarh Muslim University, Aligarh, India, 2005.
70. **J.G. Joshi, and M.D. Singh**, "Microcontroller Based Microelectromechanical System using Barium Titanate Microsensor," *Proceedings of International Conference on Instrumentation*, (INCON 2004), PIET (COEP), Pune, India, pp.51, 2004.
71. **J. G. Joshi**, "Mechatronics and Scope of MEMS in Mechatronics," Proceedings of National Conference on Emerging Trends in Mechatronics, MIT, Aurangabad, India, pp. 75-78, 2004.
72. **J. G. Joshi, and R.V. Yenkar**, "A Novel Approach to Industry-Institute Partnership," Proceedings of Sixth Annual Convention of Maharashtra and Goa Section of ISTE, Dr. Babasaheb Ambedkar Technological University, Lonere, India, pp.184-188, December 14-15, 2001.

Projects Presented in Student Poster and Project Presentation Contest and Workshops

73. **J. G. Joshi**, Shyam Sundar Pattnaik, and S. Devi, "Metamaterial Loaded Wearable Microstrip Patch Antenna," Workshop on Recent Trends in RF Technologies, organized by IEEE MTTS Student Branch Chapter, Department of Electronics Engineering, Rajasthan Technical University, Kota, February 26-27, 2011.
74. Chirag Arora, **J. G. Joshi**, Shyam Sundar Pattnaik, and S. Devi, "Offset Cut Circular Split Ring Resonator with Extended Stubs as Planar Wearable Metamaterial Antenna," Workshop on Recent Trends in RF Technologies, organized by IEEE MTTS Student Branch Chapter, Department of Electronics Engineering, Rajasthan Technical University, Kota, February 26-27, 2011.
75. **J. G. Joshi** and Shyam Sundar Pattnaik, "Cloth Based Wearable Metamaterial Antenna," Organized by IEEE MTT-S Delhi Section and IEEE MTT-S IIT Delhi Student Branch Chapter, held at Institute of Engineering and Technology, Alwar, India, December 16, 2009.

15. Reviewer for international Journals

1. Working as a reviewer for the renowned International Journals and Magazines like IEEE, Elsevier, IETE, IEEE International Symposiums and Conferences.

16. WORK DONE IN THE AREA OF TECHNICAL EDUCATION

1. Rigorously working on imparting multidisciplinary skills amongst students.
2. Regularly participating in National Education Policy (NEP 2020) to contribute various policies to be adopted in technical education. (Participating in their Conferences & Seminars)
3. Regularly publishing various articles (in Journals and Newsletters by IEEE, ISTE etc.) based on teaching practices and methodologies in engineering and technical education system.
4. Visiting and conducting Case Studies at various industries at personal level.

17. WORKSHOP/ COMPETITION ORGANISZED/ARRANGED

1. Technical Program Committee Member for IEEE International Region 10 Symposium TENSYP 2022 (July 2022).
<https://www.ieeebombay.org/tensymp2022/technical-programme-committee/Conference>
2. Coordinator for Nashik District Level Online the Research Paper Competition organized on the occasion of 75th Anniversary of Indian Independence.

18. PROJECT GUIDANCE

1. It is the correlation of Seminar and Project work of Third Year Diploma in Electronics and Telecommunication Engineering. This Seminar and Project work has been carried out in academic year 2020-21. As a Seminar guide, I had assigned a Seminar on “Graphene Based Capacitors” to a candidate of Third Year Electronics and Telecommunication Engineering. On successful completion of the Seminar presentation and related Term work in ODD Semester the candidate has submitted the detailed Seminar Report.

Further, in EVEN Semester the Project has been allotted to same candidate along with a Project group comprising three candidates. The title of Project was “**Design and Development of Capacitors using Various Dielectric Materials for Electronic Applications**”.

This group has successfully fabricated different capacitors using various dielectric materials such as Polypropylene, Polyester, Paper, Graphene etc. All the capacitors were fabricated and tested within the four walls of institute laboratory. The results are found to be in good agreement. These capacitors conceptualized in seminar work have been fabricated under project work by the candidates. This work has been appreciated by IEEE Mysuru Sub-section of IEEE Bangalore Section.

19. EXPERT LECTURES/TALKS

| Sr. No. | Training/Workshop Details | Topic and Schedule |
|---------|--|--|
| 1. | AICTE ATAL-FDP Academy's One Week Faculty Development Programme Research Methodology and Optimization Techniques (RMOT-2021) Organized by Govt. Polytechnic Nashik | Writing of Research Paper 17/12/2021 during 10.30 am to 12.30 pm. |
| 2. | “Complete Radio Learning Workshop” organized by Radio Vishwas 90.8 Community Radio Nashik | Technical expert in Telecommunication on 27/10/2021 during 10.00 am to 11.00 am. |
| 3. | Pimpri-Chinchwad College of Engineering, Pune (PCCoE), Department of Electronics and Telecommunication Engineering | Wearable Microstrip Patch Antenna Technology, |

| | | |
|-----|--|---|
| | | 13/11/2021 at 11.30 am to 1.00pm |
| 4. | One Week National Level Short Term Course (STC) on “Flexible and Wearable Antennas for Next Generation Applications” August 02-06, 2021 organized by Electronics & Communication Engineering Department of National Institute of Technical Teachers’ Training and Research (NITTTR) Chandigarh, India. (Participants were Research Scholars, Faculty Members of Engineering Colleges and Polytechnics, Research Guides/Mentors of Various Universities and Laboratories) | Textile Based Wearable/Flexible Antennas: Fabrication and Testing Case Studies. (* Tutorial) Date:05/08/2021 Time: 11:30 AM to 1:00 PM |
| 5. | Pravara Institution of Electronics and Telecommunication Engineers Professional Activity Centre (IETE PAC) Webinar Series Organized by Pravara Rural Engineering College, Loni (MS), India. (Participants were Research Scholars, IETE Office bearers, Officials of Defence and Military, Research Guides/Mentors of Various Universities and Laboratories) | Flexible and Wearable Microstrip Patch Antennas for Wireless and Mobile Communication (Expert Talk) Date:31/07/2021 Time: 10:00AM to 12:00 PM |
| 6. | One Week State Level Faculty Development Programme (Online FDP) on “Research Aspects in Manufacturing Science” (RAMS-21)” 30 th March to 3 rd April 2021 organized by Government Polytechnic Nashik India Approved by Maharashtra State Board of Technical Education (MSBTE) Mumbai, India. | Role of Sensors in Automation (Expert Talk) Date:03/04/2021 Time: 11 AM to 1:00 PM |
| 7. | One Week Online National Level Faculty Development Programme (FDP) on “Advances in SCADA & 5 G Technology” July 5, 2021 to July 9, 2021 organized by Pravara Rural Education Society's Sir Visvesvaraya Institute of Technology, Nashik in association with IETE. | Wearable Microstrip Patch Antennas Date:09/07/2021 Time:10 am to 12 pm |
| 8. | MVPSs KBT College of Engineering, Nashik | Online Expert Lecture for Students and Faculty Members on topic “Microstrip Patch Antennas for Wireless and Mobile Communication: Design Fabrication and Analysis” Date:16/10/2021. |
| 9. | One Week AICTE Training And Learning (ATAL) Academy (National Level) FDP on “Flexible and Wearable Antennas: Recent Advancements, Fabrication Techniques and Applications” October 12-16, 2020 organized by Electronics & Communication Engineering Department, National Institute of Technical Teachers’ Training and Research (NITTTR) Chandigarh, India. (ICTO-SP-18) | Fabrication Techniques for Textile Material Based Antennas (* Workshop on Fabrication Technology) Date:13/10/2020 Time: 12:0 Noon to 1:30 PM |
| 10. | STTP on “Emerging Research Trends in Electronics, Telecomm & Applied Fields” Organized by MIT College of Engineering, Pune in Association with IEEE Communication Society Chapter & Renu Electronics Pune | “Metamaterial and Wearable Microstrip Patch Antenna” 12/12/2014 |
| 11. | Institution of Engineers (India) Sponsored MECHASTREAM-2013 Lecture Series Organized by Dept. of Mech. Engg. Govt. Polytechnic Nashik | “Micro-Electromechanical Systems (MEMS) on 29 th July 2013 during 29 th July-30 th July 2013 |

20. WORK DONE AT INSTITUTION/ONORGANIZATIONAL LEVEL

1. Developed Lab Manuals and sensors in Instrumentation and Measurement Lab.
2. Guiding various multidisciplinary projects at institute level.
3. Write-Off Committee member at institute level.
4. Involved in various committees assigned by DTE(MS), MSBTE and Examination Cell

21. WORK DONE FOR SOCIETY

1. Published article on **“Wearable Antenna Technology”** and spreading this technology in regional language **Marathi** through leading Magazine **Marathi Vidyan Parishad Patrika, Mumbai** India.
2. Radio Vishwas Community Radio 90.8 has broadcasted an interview of Dr. Jayant G. Joshi on the topic **“Wearable Antenna Technology”** under event **“Dilkhulas Gappa”** in regional language Marathi.
3. Working as **Nodal Officer (Nashik Region (Nashik Region at Regional Office DTE Nashik)) of Springboard Infosys training scheme** of Govt. of Maharashtra State-Infosys. It is an on-line Training scheme offered by Infosys for Students and Faculty members of Diploma, Degree and PG professional education.
4. Working as **Coordinator** (from last 4 years) of Govt. of Maharashtra State, Ministry of Higher and Technical Education (**Nashik Region at Regional Office DTE Nashik**) **Scholarship for Higher Education in Foreign Countries for Meritorious Students Scheme for open category students.**
5. **Coordinator of Spoken Tutorials (MOOCS Tutorials IIT Mumbai)** Training on **“Arduino based systems”** sponsored by **Indian Institute of Technology (IIT) Mumbai**. Also organized this hands-on workshop for Polytechnic Students and Faculty Members of (**Nashik Region**).
6. Delivered a Introductory Lecture on **“Artificial Intelligence”** to the Students at Clifford International School Nashik.
7. Conducted Oxygen Cylinder Inspection at various hospitals in Nashik during COVID 19 period. The activity was assigned by Hon. Collectorate office Nashik.
8. Performing duties in conduction of MPSC and UPSC examinations assigned by Hon. Collectorate office Nashik.
9. Performing duties in conduction of various elections assigned by Hon. Collectorate office Nashik.

22. CONSULTANCY AND OTHER WORK

1. Worked as a Technical Expert in the Committee of Office of Commissioner of Police to decide technical specifications of Cameras for Traffic Police of Nashik City.
2. Worked as a Committee member to Scrap of Electronic equipment's at Department of Agriculture, Nashik, Igatpuri Office.

SIGNATURE