Dr. Rajesh Kumar Vishwakarma

Associate Professor

Education: M.Sc Electronics, PhD Electronics

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Areas of Interest: Microstrip for broadband antenna, Multiband & Wideband Antennas, WLAN Antennas, WiFi Antennas, Wideband Antennas for Reconfigurable Radio Terminals, Cellular Antennas, Microstrip antenna for circular polarization, Omnidirectional and wideband circular polarization Antennas

Brief Profile:

Rajesh Kumar Vishwakarma received B.Sc and M.Sc degree in Electronics from DR. R. M. L. Avadh University Faizabad India in 1997 and 1999, respectively. He has four years research experience on topic "Design and development of dual-band microstrip antenna" from department of Electronics Engineering Indian Institute of Technology, Banaras Hindu University, Varanasi in September 2000 to August 2004. He has completed his PhD degree on the topic of "Simulation, design and testing of dual-band microstrip antenna" from School of Studies in Electronics, Pandit Ravishankar Shukla University Raipur India in September 2013. He was also involved as a guest faculty at department of computer science Banaras Hindu University Varanasi during September 2004 to February 2005. He has severed as a faculty member in Electronics Engineering in several institutions during March 2005 before joining in Jaypee Institute of Engineering and Technology Guna in August 2007 as senior lecturer in Electronics and Communication Engineering department. He has organized National Seminar on Impact of Electronics & Communication on rural development in December 2005 at CEC Bilaspur. He has attended thirty National level seminar and conference. He has published about 60 research paper in refereed journals of national and international and conferences. He has also supervised about fifteen UG projects and three PG projects in the area of his interest. He has done some research work in INDIAN SPACE RESEARCH CENTRE (ISRO) Ahmedabad during his research work. He was also observed two times junior research fellowship and eligibility for lectures ship examination (NET) in Banaras Hindu University Varanasi in December 2006 and Lucknow University Lucknow in June 2007 conducted by University Grant Commission New Delhi. He has fourteen years of teaching and research experience.

M.Tech. Supervision: (05)

1. Radha Sharma "Design and development of broadband microstrip antenna," [Awarded in 2012]
2. Shivkant Thakur "Study of microstrip antenna for wideband and multi-polarization," [Awarded in 2013]
3. Anand Sharma, "Design and simulation of ultra wideband (UWB) microstrip antenna," [Awarded in 2014]
4. Vinay Sharma, "Microstrip antenna with defected ground structure (DGS) for multiband operation," [Awarded in 2015]
5. Sakshee Dave," Design and simulation of microstrip antenna for 4/5G Application" [Awarded in 2017]

Ph. D. Supervision: (02)

1. Sanjeev Kumar (143004) Research Work on "Design and simulation of multiband circular polarization microstrip antenna" registered at Jaypee University of Engineering & Technology (JUET), Guna (M.P.) in August 2014. (Awarded 30 March 2019)
2. Deevash Kumar (163A001) Research Work on "Analysis and design of fractal microstrip antenna using meta material" registered at Jaypee University of Engineering & Technology (JUET), Guna (M.P.) in August 2016.

Academic Activities:

1. B.Tech ECE final year project coordinated for two sessions 2012 and 2013
2. Member of UDC (July 2016- June 2017)
3. M.Tech Fellowship Coordinator (2014-16)
4. ECE JUET Chronical Coordinator

Member of Professional Bodies:

1. Life Member of Chhattisgarh Vigyan Bharati Sansthan Raipur
2. Life Member of Antenna Test & Measurement Society of India
3. Life Member of Vigian Jagriti Manch Ambikapur
4. Life Member of Indian Science Congress, Kolkata
5. Life Member of Science India Bhopal

Member of Editorial Board:
1. Journal of Electromagnetic Waves
2. Asian Journal of Engineering and Technology
3. Journal of Mechanical Engineering and Technology
4. Journal of Wireless and Mobile Technologies

Publication@JUET

Publication details google profile link

International Journal

1. Rajesh K. Vishwakarma and Sanjay Tiwari "Experimental study of stacked rectangular microstrip antenna for dual-band" Scientific Research in Engineering, USA, vol.2, No. 2, pp. no 85-90, 2010

2. Rajesh K. Vishwakarma and Sanjay Tiwari "Analysis of rectangular notch antenna for dual-band operations" Scientific Research in Engineering, USA, vol.2, No. 2 , pp. no 91-96, 2010.

3. Rajesh K. Vishwakarma and Sanjay Tiwari "Aperture coupled microstrip antenna for dual-band operation," Wireless Engineering and Technology, USA, vol.2, pp. no 93-101, 2011.

4. Rajesh K. Vishwakarma and Sanjay Tiwari "Aperture coupled microstrip antenna for dual-band operation," Wireless Engineering and Technology, USA, vol.2, pp. no 93-101, 2011.

5. Radha Sharma and Rajesh K. Vishwakarma, "Trapezoidal patch with V-shape slot Microstrip antenna for dual band," KIET International Journal of Communication &Electronics," vol.1 , pp. no 48-51, Jan-Feb 2013 (ISSN: 2320-8996).

6. Shivkant Thakur, Rajesh Kumar Vishwakarma, Rohit Gurjar, "A Double L-shaped Slot Loaded Microstrip Antenna for Wideband," International Journal on Communications (IJC) Volume 3 Issue 1, pp. no 6-9, March 2014 (ISSN Print: 2327-1035).

7. Anand Sharma, Rajesh K.Vishwakarma, "Analysis of ultra wide band swastik-slot loaded microstrip antenna for wireless applications," International Journal of Electronics, Electrical and Computational System IJEECS ISSN 2348-117X Volume 2, Issue3 pp. no. 6-11 March 2014 (Impact Factor .675).

8. Reetika, Rajesh Kr. Vishwakarma and K.K.Verma, "Study of the effect of substrate dielectric constants and feed locations on the performance of square patch microstrip antenna," International Journal of Electronics, Electrical and Computational System IJEECS ISSN 2348-117X Volume 2, Issue3 pp. no. 30-36 March 2014 (Impact Factor .675)

9. Rajesh Kumar Vishwakarma and Shalini Agarwal, "Design of butterfly shaped microstrip antenna for multi band operation." Inroads (An International journal of Jaipur National University) Vol. 3. No. 1, pp -no. 124-128, Jan- Jun 2014. Print-ISSN: 2277-4904, Online-ISSN: 2277-4912.

10. Rajesh Kumar Vishwakarma and Shalini Agarwal, "Stacked microstrip antenna for dual band operation." Inroads (An International journal of Jaipur National University) Vol. 3. No. 1, pp -no. 200-203, Jan- Jun 2014. Print-ISSN: 2277-4904, Online- ISSN: 2277-4912.

11. Reetika, Rajesh Kr. Vishwakarma and K.K.Verma, "Comparative study of the performance of microstrip circular patch antenna with and without slots" International Journal of Electronics, Electrical and Computational System IJEECS ISSN 2348-117X Volume 2, Issue3 pp. no. 25-34 April 2014 (Impact Factor .675)

12. Reetika, K.K.Verma and Rajesh K. Vishwakarma "Comparative Performance studies of Arrow shaped and Trisul shaped slotted square patch antenna," International Journal of Engineering Science and Innovative Technology, vol. 3, no 3, pp. 227-234,May 2014.

13. Sanjeev Kumar, Rajesh K. Vishwakarma, Ravi Kumar, "Slotted Circularly Polarized Microstrip Antenna for RFID Application," Radio Engineering Journal ISSN: 1210-2512, vol. 26, no.34, pp. 1025-1032, Dec.2017 Impact factor-0.95 (SCI Indexed).

14. Sanjeev Kumar, Ravi Kumar and Rajesh Kumar Vishwakarma, "Microstrip Fed Highly Compact Bluetooth Integrated Wideband Antenna for Wireless Application", International Journal of Electronics Letters, vol. 7, no.02, pp. 11-18, April.2018

15. Sanjeev Kumar, Ravi Kumar, Rajesh Kumar Vishwakarma and Kunal Srivastava, "An Improved Compact MIMO Antenna for Wireless Applications with Band-Notched Characteristics", AEU-International Journal of Electronics and Communications, ISSN: 1434-8411, vol. 90, pp.20-29, June 2018 Impact factor-1.14 (SCI Indexed)

16. Sanjeev Kumar, Ravi Kumar and Rajesh Kumar Vishwakarma, "A Circular Disc Microstrip Antenna with Dual Notch Band for GSM/Bluetooth and Extended UWB Applications", International Journal of Engineering and Technology (UAE), vol. 7, No.2, issue 16, April, 2018, pp.11-18. ISSN: 2227-524X (Scopus Indexed)

National Journal

1. "A dual-band stacked rectangular microstrip antenna" Indian Journal of Radio & Space Physics New Delhi (India) vol. 39 pp no-163-169, June 2010. (Co-author - Sanjay Tiwari)

International Conference

1. "Rectangular notch microstrip antenna for dual-band operation." International Conference on Recent Advances in Microwave Theory and application MICROWAVE-2008, Department of Physics, University of Rajasthan, Jaipur, on 21-24 Nov 2008, pp. no. 675-667.(Co-author -Ravi Kumar)

2. "Analysis aperture coupled multilayered directional coupler." International Conference on Recent Advances in Microwave Theory and application MICROWAVE-2008,Department of Physics, University of Rajasthan, Jaipur, on 21-24 Nov 2008, pp. no 722-724 (Co-author - Ravi Kumar and Ashutosh Singh)

3. "Design of rectangular stacked microstrip antenna for dual-band" International Conference on Emerging Trends in Electronic and Photonic Devices and Systems (Electro-2009), Department of Electronics Engineering, I.T, BHU Varanasi-221005, 22-24 December 2009. pp. no. 332-334

4. "Rectangular microstrip antenna for dual-band operation" International Conference on Applied Electromagnetic conference, AEMC 14-16 December 2009 in Kolkata

5. "Aperture coupled microstrip antenna for dual-band operation." IEEE AP-S International Symposium on Antennas and Propagation and 2011 USNC/URSI National Radio Science Meeting in Spokane, Washington, USA July-3-8, 2011. [Paper Accepted for presentation] (Co-author - Sanjay Tiwari)

6. Shivkant Thakur1, Rajesh Kumar Vishwakarma and K.K Verma, "L-shaped microstrip antenna for wideband," The International Conference on Communication Systems and network Technologies (CSNT-2013 at Gwalior) on dated 6th to 8th April 2013 (On IEEE Xplore) pp no. 41-43

7. Rajesh Kumar Vishwakarma and K.K Verma, "Electromagnetically coupled square microstrip antenna for dual-band operation," The International Conference on Communication Systems and network Technologies (CSNT-2013 at Gwalior) on dated 6th to 8th April 2013. (On IEEE Xplore) pp no. 44-46

8. Prakash kumar Mishra ,Ritu Raaj, Preeti Maddhyeshia, Rajesh Kumar Vishwakarma, "Design of dual band slot loaded rectangular microstrip antenna for global positioning satellite," The International Conference on Communication Systems and network Technologies (CSNT-2013 at Gwalior) on dated 6th to 8th April 2013. (On IEEE Xplore) pp no. 37-40

9. Dhaval Dhupar, Prateek Chandra, Rahul Anand, Rajesh Kumar. Vishwakarma, "Microstrip antenna with hexagonal slots for UWB applications," The International Conference on Communication Systems and network Technologies (CSNT-2013 at Gwalior) on dated 6th to 8th April 2013. (On IEEE Xplore) pp no. 33-36.

10. Ananti Gupta, Anjani Kumar, Amit Verma , Rajesh Kr.Vishwakarma, "Rectangular microstrip antenna with feed angle variation" AICTE sponsored international conference on instrumentation, communication, electrical & electronics organized by department of

electronicsshri, Vaishnav institute of technology and science, Indore, Madhya Pradesh, India, January 23 - January 25, 2014, PP No. 45

11. Rajesh Kr.Vishwakarma, Shalini Agarwal, Mukesh Kumar, Pratibha Shrivastava, "Design of butterfly shaped pyramidal-slotted microstrip antenna for multiband operation," AICTE sponsored international conference on instrumentation, communication, electrical & electronics organized by department of electronics Shri, vaishnav institute of technology and science, Indore, Madhya Pradesh, India, January 23 - January 25, 2014, PP No. 46

12. Anand Sharma, Rajesh K. Vishwakarma,"Microstrip antenna with swastik slot for UWB applications," 9th International conference on Microwave, Antenna Propagation & Remote Sensing (ICMARS2013) Organized by International Centre for Radio Science Jodhpur,India dated on 11-14 December 2013.(Paper is accepted for oral presentation)

13. Rajesh K. Vishwakarma, Shalini Agarwal, Mukesh Kumar, Pratibha Shrivastava,"Design of butterfly shaped pyramidal-slotted microstrip antenna for multiband operation," AICTE sponsored international conference on instrumentation, communication, electrical & electronics organized by department of electronics Shri, vaishnav institute of technology and science, Indore, Madhya Pradesh, India,23-25 January 2014, pp. 46

14. Vinay Sharma and Rajesh K. Vishwakarma, "Microstrip antenna with defected ground structure (dgs) for multiband operation, " International conference on recent cognizance in wireless communication & image processing on 16-17 Jan 2015 Jaipur India Organized by Poornima Institute of Engineering and Technology Jaipur. published in Springer pp. 879-888.

15. Prithu Roy,Rajesh K. Vishwakarma, Akshay Jain,Rashmi Singh,Prashant Bansal,"An Elliptical Patch Wideband Antenna with Circular Polarization for K-band, " International Conference on Microwaves Antenna, Propagations and Remote Senesing.ICMARS-2015 Orizinized by The International Centre for Radio Science (ICRS) 15th-17th December 2015 in Jodhpur, Rajasthan, India [Paper accepted for oral presentation]

16. Sanjeev Kumar,Rajesh K. Vishwakarma, Ravi Kumar, K. K Verma, "A Single Layer and Co-axil Feed Circularly Polarized Microstrip Antenna for RFID Application," International Conference on Microwaves Antenna, Propgation and Remote Senesing. ICMARS-2015 Orizinized by The International Centre for Radio Science (ICRS) 15th-17th December 2015. in Jodhpur, Rajasthan, India.

17. Prithu Roy, Akshay Jain, Prashan Bansal, Rajesh Kr. Vishwakarma and K K Verma ,"An elliptical patch antenna for X-band Radar applications" International Conference on Emerging Trends in Electrical, Electronics & Sustainable Energy System date on (11th -12th March) 2016 Organized by department Electrical and Electronics Engineering, Kamla Nehru Institute of Technology Sultanpur- 228118 vol. 1 pp.195-198.

18. Prithu Roy, Rajesh Kr. Vishwakarma Akshay Jain, Rashmi Singh," Multiband Millimeter wave antenna array for 5G communication" International Conference on Emerging Trends in Electrical, Electronics & Sustainable Energy System date on (11th -12thMarch) 2016 Organized by department Electrical and Electronics Engineering, Kamla Nehru Institute of Technology Sultanpur- 228118 vol. 1, pp. 208-211.

19. Sanjeev Kumar, Rajesh Kumar Vishwakarma, Ravi Kumar and Devesh Sharma, "A compact printed monopole antenna with symmetrical I and rectangular shaped slots for bluetooth/WLAN/WIMAX applications", IEEE conference, ICICIC, Indore, India-2017.

National Conference

1. "Rectangular notch antenna for dual-band operation"Third Annual Conference (ATMS-2010) Antenna Test & Measurement Society, 11th-13th February, 2010 New Delhi pp. no. 79-81

2. "Dual-band stacked rectangular microstrip antenna for mobile application," (ATMS-2010) Antenna Test & Measurement Society, 11th -13th February, 2010 New Delhi pp. no. 137-139. (Co-author - Sanjay Tiwari)

3. "Notch microstrip antenna for dual- band operation," National Conference on Recent Trends & Challenges in internet Technology (RTCIT-2010) Organized by Department of CSE & IT NIT Bhopal (MP) 19-20 March 2010 pp. no.144-146. (Co-author - Sanjay Tiwari)

4. "Microstrip antenna for dual-band operation," National Conference on Recent Advances in Materials Science & Engineering [RAMSE2010] Organized by Jaypee University of Engineering and Technology, Raghogarh Guna, on 23-24, October 2010,pp. no. 97 (Co-author - Sanjay Tiwari)

5. "Dual-frequency aperture coupled microstrip antenna" National Seminar on Ferroelectrics & Dielectrics, [NSFD-XVI] 2010 Organized by GGDU in Bilaspur, on 2-4 Dec. 2010 PP. no. 11 (Co-author - Sanjay Tiwari)

6. Shashank Gupta, Shivam Mishra, Rajesh Kr Vishwakarma and K.K Verma "Rectangular microstrip antenna in S band" National Conference on recent advances in microwave Engineering, Organized by Department of Electronics MITS Gwalior, on 16-17 Dec. 2011.pp. 01.

7. Rajesh K. Vishwakarma and Sanjay Tiwari, "Air gap aperture coupled microstrip antenna for dual-frequency" National Conference on recent advances in microwave Engineering, Organized by Department of Electronics MITS Gwalior, on 16-17 Dec. 2011.pp. 60.

8. Rajesh Kr Vishwakarma, Nadia Shaheen, Navodit Aggarwal, Arjun Sharma, K.K Verma and Sanjay Tiwari, "Slot loaded fork shaped antenna for Bluetooth and dual-bandApplications," Proceeding of National Conference on Emerging Trends in Electrical Instrumentation & communication Engineering (ETEIC-2012) jointly Organized by Anand Engineering College, Agra & Institute of Engineers (India) Aligarh Centre pp no.143-145 on 6th & 8th Apr.2012.

9. Rajesh K. Vishwakarma and Sanjay Tiwari, "Aperture coupled microstrip antenna for dual-band" Proceeding of National Conference on Emerging Trends in Electrical Instrumentation & communication Engineering (ETEIC-2012) jointly Organized by Anand Engineering College, Agra & Institute of Engineers (India) Aligarh Centre pp no.137-142 on 6th & 8th Apr. 2012.

10. Rajesh Kumar Vishwakarma, "Square microstrip antenna for dual-band operation," National Conference on Environmental Sustainability and society: The Growing Paradigm Shift (ESS 2013) Organized by Jaypee University of Engineering and Technology, Raghogarh Guna, on 30-31, March 2013, pp. no. 68 (Paper presented)

11. Rajesh K. Vishwakarma and Vinay Sharma," Multiband microstrip antenna with defected ground structure (DGS)," National conference on recent advances in microwave Engineering during 28 Feb-01March 2015 Organized by department of Electronics Engineering , Madhav Institute of Technology & Science, Gwalior India Paper Presented [Paper ID RAMWE126]

12. Sanjeev Kumar, Rajesh K. Vishwakarma and Ravi Kumar, "Fractal O-shape UWB Antenna, " National conference on recent advances in microwave Engineering during 28 Feb-01March 2015 Organized by department of Electronics Engineering , Madhav Institute of Technology & Science, Gwalior India Paper Presented [Paper ID RAMWE125]

13. Akshansh Kumar, Rajesh K. Vishwakarma, Neha Kumariand and Poonam, "Comparison of impedance bandwidth for different size of equilateral triangular slot in square patch, " National conference on recent advances in microwave Engineering during 28 Feb-01March 2015 Organized department of Electronics Engineering , Madhav Institute of Technology & Science, Gwalior India Paper Presented [Paper ID RAMWE124]

14. Rajesh K. Vishwakarma and Deepika, "Electromagnetically coupled Square microstrip antenna for dual-band operation," National Research Seminar on Space Science and Environment on 20-21, November 2015, Organized by department of Physics Rajeev Gandhi Govt. P.G. Collage Ambikapur C.G pp. 17-18

15. Rajesh K. Vishwakarma, Dolly Kumari, Deepika, Manish Tripathi, "Pyramidal-slotte microstrip antenna for multiband operation" National conference on Recent Advances in Electronics & Communication Engineering dated on (4-5th March 2016), Organized by Madhav Institute of Technology & Science, Gwalior- 474 005.

16. Ruchi Sharma, Rajesh K. Vishwakarma, Shekhar Sharma, Shivendra Srivastava, Shobhit Mishra "Multi Band T-Slot Circular Microstrip Patch Antenna" National conference on Recent Advances in Electronics & Communication Engineering dated on (4-5thMarch 2016), Organized by Madhav Institute of Technology & Science, Gwalior- 474 005.

17. Rajesh K. Vishwakarma attended National Conference as a Chair Session in National conference on Recent Advances in Electronics & Communication Engineering dated on (4-5thMarch 2016), Organized by Madhav Institute of Technology& Science, Gwalior-474 005.

18. Rajesh K. Vishwakarma, K.K Verma, "Inverted S-Shaped Microstrip Patch Antenna for GPS Application" National seminar on recent advances in material science and electronics on 27-28 February 2019, Organized by Physics & Electronics Department, Dr RML Avadh University, Faizabad [Paper Presented]

19. Rajesh K. Vishwakarma, K.K Verma, "H-Shaped Microstrip Antenna for RFID Applications" National seminar on recent advances in material science and electronics on 27-28 February 2019, Organized by Physics & Electronics Department, Dr RML Avadh University, Faizabad [Paper Presented]

Workshop Attended

1. "Symposium on quantum information" Organized by Jawaharlal Nehru University, School of physical Science, New Delhi [16-17 Mar. 2007]
2. 46th orientation course Organized by UGC Academic Staff College Banaras Hindu University Varanasi-221005 [7 June to 4 July 2007] (Completed)

3. National Workshop on Advanced Optoelectronic Materials and devices (AOMD-2007) Organized by Centre for research in Microelectronics (CRME), Department of Electronics Engineering, Institute of Technology, Banaras Hindu University Varanasi [27-29 Dec. 2007]
4. Workshop attended Organized by Jaypee University of Engineering and Technology, Raghogarh Guna, on Topic Image Processing and Digital Communication dated on [06-10 Jun, 2011]
5. Workshop attended Organized by Defence Laboratory Jodhpur, IIR Bombay and Zeus Numerix on Computational Electromagnetics and RCS Prediction for stealth Applications dated on [24-28 Sept. 2012]
6. Attended Sixth Science Conclave organized by Indian Institute of Information Technology Allahabad dated on [08-14 Dec. 2013]
7. Attended Seventh Science Conclave Indian Institute of Information Technology Allahabad [08-14 Dec. 2014]
8. National Workshop attended on Advancements in Network Communication and Security Jaypee University of Engineering and Technology, Guna [07-09 Dec. 2015]
9. National Workshop attended on "High-performance VLSI Architectures for Digital Signal Processing Applications: Design and Implementations", Jaypee University of Engineering and Technology, Guna [09-11 Sept.2016]
10. Short Term Course attended on Design of microwave antennas and passive components Indian Institute of Technology BHU Varanasi [19-24 Dec., 2016]
11. National Workshop attended on Application of MATLAM in Science and Engineering by Jaypee University of Engineering and Technology, Guna[11-12 Feb.2017]
12. One Week Short Term Course on Numerical Methods in Electromagnetics by Madhav Institute of Technology and Science, Gwalior. [27-31] Jan. 2018