

Dr.R.Ramana Reddy

Professor,Dept. of Electronics & Communication Engineering E-mail: profrrreddy@yahoo.co.in, rrreddy.ece@jntua.ac.in

Dr.R.Ramana Reddy

Professor, Dept. of Electronics & Communication Engineering Areas of Specialization: Antennas, EMI/EMC, VLSI & Embedded Systems E-mail: profrrreddy@yahoo.co.in, rrreddy.ece@jntua.ac.in Educational Qualification: M.Tech., Ph.D, MBA. Work Experience: 23 Years International Journals: 55 National Journals: 05 International Conferences: 57 National Conferences: 38 Patents: 05 Granted

International Journal Publications :

- 1. R. Ramana Reddy et al., published a paper titled "Analysis of H-Plane Tee Junction Coupled through an Inclined Slot in the Narrow Wall of a Rectangular Waveguide", in International Journal on Communications Antenna and Propagation (IRECAP). Vol. 01, n.1, February 2011, pg. No73-82.
- R. Ramana Reddy et al., published a paper titled "Design and Analysis of Low Power Generic Circuits in Nano Scale Technology", in International Journal of Electronics and Communication Engineering. ISSN 0974-2166 Volume 5, No. 1(2012), pg. 35-47.
- R. Ramana Reddy et al., published a paper titled "A Low Power DDR SDRAM Controller design" in International journal of computer science and information technologies(IJCSIT) volume 3, issue 3, May - June 2012. ISSN :0975-9646, pp : 4270-4274.
- R. Ramana Reddy et al., published a paper titled "Design of Ultra- low Leakage power Sequential Circuits". in International Journal of Computer Technology and Applications (ISSN 2229-6093), Volume 3, Issue 3, May-June 2012, pp: 1254-1259.
- 5. R. Ramana Reddy et al., published a paper titled "Design & Verification Eight Port Router For Network on Chip" in International Journal of Engineering

Research and Technology Volume 1, Issue 5, July 2012 pp. 1-5.

- R. Ramana Reddy et al., published a paper titled "A novel 1-bit full adder design using DCVSL XOR/XNOR gate and Pass transistor Multiplexers" in International Journal of Innovative Technology and Exploring Engineering (IJITEE) ISSN: 2278-3075, Volume-2, Issue-4, March 2013, pp: 142-146
- 7. R. Ramana Reddy et al., published a paper titled "Conversion of Symmetrical Patterns to Asymmetrical Patterns using Amplitude and Phase Control", in "International Journal of Engineering and Innovative Technology (IJEIT)", Volume 2, Issue 12, June 2013, pp 174-178.
- R. Ramana Reddy et al., published a paper titled "Design of 1 bit full adder / subtractor circuit using a new 5X5 Fault Tolerant Reversible Gate for Multiple Faults Detection and correction". in International Journal of Engineering Science and Advanced Technology(IJESAT)" Issue 3, Volume 3, June-July 2013, pp. 79-84, ISSN: 2250-3676.
- R. Ramana Reddy et al., published a paper titled "Reduction of Side Lobe Levels of Sum Patterns from Discrete Arrays Using Genetic Algorithm" in International Journal of Engineering Research and Applications (IJERA), ISSN: 2248-9622, Vol. 3, Issue 4, Jul-Aug 2013, pp. 1312-1317.
- R. Ramana Reddy et al., published a paper titled "Implementation of Two-Level FH-CDMA with Non-Orthogonal Sequences for High Data Rate and Security", in International Journal of Research in Information Technology (IJRIT), Volume 1, Issue 7, July 2014, pp. 402-407.
- 11. R. Ramana Reddy et al., published a paper titled "Design of New Low Power –Area Efficient Static Flip-Flops" in International Journal of Computer Science and Information Technologies, Vol. 5 (6), 2014, pp. 7609-7613.
- R. Ramana Reddy et al., published a paper titled "Design of New Low Power –Area Efficient Flip-Flops for Sequential Circuits" in International Journal of Applied Science & Technology Research Excellence, Vol. 4, Issue 6, Nov.-Dec. 2014, pp. 13-17.
- R. Ramana Reddy et al., published a paper titled "Sub Threshold Level Shifters and Level Shifter with LEC for LSI's" in International Journal of Engineering and Advanced Technology (IJEAT) ISSN: 2249 – 8958, Volume-4, Issue-2, December 2014, pp. 173-176.
- R. Ramana Reddy et al., published a paper titled "A Reduced Clock Power Flip-Flop for Sequential Circuits" in International Journal of Engineering and Advanced Technology (IJEAT) ISSN: 2249 – 8958, Volume-4 Issue-2, December 2014, pp. 168-172.
- R. Ramana Reddy et al., published a paper titled "Design of High Speed and Low Power 4T SRAM Cell", in International Journal of Scientific and Research Publications, Volume 5, Issue 2, February 2015, ISSN 2250-3153, pp. 1-3.

- R. Ramana Reddy et al., published a paper titled "Implementation of High Reliable 6T SRAM Cell Design" in IOSR Journal of VLSI and Signal Processing (IOSR-JVSP) Volume 5, Issue 1, Ver. II (Jan - Feb. 2015), pp 21-27 e-ISSN: 2319 – 4200, p-ISSN No. : 2319 – 4197. DOI:<u>10.9790/4200-05122127</u>
- R. Ramana Reddy et al., published a paper titled "Implementation of Reliable Power and Delay Efficient Reconfigurable Multi Precision Multiplier" in International Journal of Emerging Technology and Advanced Engineering, Volume 5, Issue 9, September 2015 ISSN 2250-2459,pp 301-307
- R. Ramana Reddy et al., published a paper titled "Design of A New Fused Add Multiplier Operator Using Modified Booth Decoder" in IOSR Journal of VLSI and Signal Processing (IOSR-JVSP) Volume 5, Issue 5, Ver. I, Sept – Oct 2015, pp 21-29, ISSN. 2319-4200.
- R. Ramana Reddy et al., published a paper titled "Design of A New Modified Clock Gated Sense-Amplifier Flip-Flop" in International Journal of Advances in Engineering Research (IJAER) 2015, Vol. No. 10, Issue No. IV, October, e-ISSN: 2231-5152/ p-ISSN: 2454-1796.
- R. Ramana Reddy et al., published a paper titled "Design of A New Power Efficient Explicit Pulsed Dual Edge Triggered Sense-Amplifier Flip-Flop" in International Journal of Advances in Engineering Research (IJAER) 2015, Vol. No. 10, Issue No. IV, October, e-ISSN: 2231-5152/ p-ISSN: 2454-1796, DOI:10.14445/22315381/IJETT-V27P226
- 21. R. Ramana Reddy et al., published a paper titled "Design of Triple Layer Double U Slot Patch Antenna for Wireless Applications" Journal of Applied Research and Technology (Elsevier B.V), Universidad Nacional Autonoma de Mexico (UNAM), Mexico, vol.13, pp.526- 534, Oct 2015, (Indexed in SCI-Expanded and ESCI, Impact factor 0.447 and H-Indexed Free Journal), DOI:10.1016/j.jart.2015.10.006
- R. Ramana Reddy et al., published a paper titled "Design of a Low Power and Area Efficient Flip Flop With Embedded Logic Module", in IOSR Journal of Electronics and Communication Engineering (IOSR-JECE) e-ISSN: 2278-2834,p-ISSN: 2278-8735.Volume 10, Issue 6, Ver. II (Nov -Dec .2015), PP 40-50, DOI:<u>10.9790/2834-10624050</u>
- R. Ramana Reddy et al., published a paper titled "Design of a New Dual Dynamic Flip-Flop with Low Power and Low Area", in International Journal of Engineering Trends and Technology(IJETT) –Volume 29 Number 5 – November 2015 pp-232-239, DOI:<u>10.14445/22315381/IJETT-V29P242</u>.
- R. Ramana Reddy et al., published a paper titled "Design of Processing Element (PE3) For Implementing Pipeline FFT Processor" in International Journal on Cybernetics & Informatics (IJCI) Vol. 5, No. 4, August 2016, DOI:<u>10.5121/</u><u>ijci.2016.5435</u>.

- 25. R. Ramana Reddy et al., published a paper titled "Design of Triple-Band CPW Fed Circular Fractal Antenna" in International Journal on Cybernetics & Informatics (IJCI) Vol. 5, No. 4, August 2016, DOI:<u>10.5121/ijci.2016.5401</u>.
- 26. R. Ramana Reddy et al., published a paper titled "Design and implementation of a Reconfigurable FIR Interpolation Filter for Multi-standard Digital Up Converter" International Journal of Advanced Technology and Innovative Research, Vol.8, Issues 14,pp 2891-2897, October-2016.
- 27. R. Ramana Reddy et al., published a paper titled "Implementation of Low Power and High Performance Adder Circuits", International Journal of Innovative Technology and Exploring Engineering (IJITEE) ISSN: 2278-3075, Volume-6, Issue-11, July 2017.
- R. Ramana Reddy et al., published a paper titled "A Miniaturized Hexagonal-Triangular fractal Antenna for Wideband Applications" in *IEEE Antennas and Propagation Magazine*, vol. 60, no.2, pp. 104-110, April 2018. (Impact factor: 3.007), DOI:10.1109/MAP.2018.2796441.
- 29. R. Ramana Reddy et al., published a paper titled, "Asymmetric Triangular Semi-Elliptic Slotted Patch Antennas for Wideband Applications," in Radio engineering Journal, vol. 27, no. 1, pp. 85-93, April 2018. (Impact factor: 1.306) (Journal is a Member of IEEE Communications Society), DOI:<u>10.13164/</u> <u>re.2018.0085</u>.
- R. Ramana Reddy et al., published a paper titled "Tri-band and quad-band dual L-slot coupled circularly polarized dielectric resonator antennas," in International Journal of RF and Microwave CAD-Wiley Periodicals, vol. 28, no. 8, April 2018. (Indexed in SCI-Expanded, Impact factor: 1.306) Citations: 2, DOI: 10.1002/mmce.21409.
- R. Ramana Reddy et al., published a paper titled "Asymmetric and Symmetric Bow-Tie Slotted Circular Patch Antennas for Circular Polarization," in Wiley-Electronics and Telecommunications Research Institute (ETRI) Journal, vol. 40. no. 5, pp. 561-569, Oct. 2018. (Indexed in SCI-Expanded, Impact factor: 1.116), DOI:<u>10.4218/etrij.2018-0008</u>.
- R. Ramana Reddy et al., Paper titled "Design of high speed and low power multiplier using dual-mode square adder" is accepted for publication in *Int. J. Circuits and Architecture Design, March 2019,* 2051-7025, Indian Citation Indexed (ICI), Free Journal. DOI:<u>10.1504/IJCAD.2019.10024523</u>.
- R. Ramana Reddy et al., published a paper titled "Low voltage full swing Fin-FET hybrid full adder," in International Journal of Recent Technology and Engineering (IJRTE) ISSN: 2277-3878, Volume-8 Issue-2, pp. 4253-4263, July 2019, DOI: 10.35940/ijrte.B2468.078219.
- 34. R. Ramana Reddy et al., published a paper titled "Swastik Slotted Hexagonal Patch Antenna With Metamaterial Based Complementary Split Ring Resonator," in ICTACT Journal on Microelectronics. (UGC CARE GROUP-1), vol.

06, Issue-03 , pp. 995-1000, October 2020, ISSN 2395-1680, DOI: <u>10.21917/</u> <u>ijme.2020.0173</u>.

- 35. R. Ramana Reddy et al., published a paper titled "Design And Performance Evaluation Of Radix-2 Decimation In Time FFT Architecture Using Different Adders And Multipliers," in Juni Khyat Journal (UGC CARE GROUP-1), vol. 10, Issue-11, No. 03, pp. 30-39, November 2020, ISSN 2278-4632.
- R. Ramana Reddy et al., paper titled "Wide-band Circularly-Polarized Cylindrical Dielectric Resonator Antennas with Rectangular Curved Slots" is accepted for publication in the IEEE Antennas and Propagation Magazine., Volume: 62, <u>Issue: 6</u>, pp. 65 – 73, December 2020, DOI: <u>10.1109/MAP.2020.3027493</u>, Impact factor: 3.007.
- R. Ramana Reddy et al., published a paper titled "Cylindrical Dielectric Resonator Based Hybrid Spyder Web Circular Patch Antenna," in Juni Khyat Journal (UGC CARE GROUP-1), vol. 10, Issue-12, No. 02, pp. 46-51, December 2020, ISSN 2278-4632.
- R. Ramana Reddy et al., published a paper titled "Implementation Of Radix-2 2 FFT MDC Architecture Using Vedic Multiplier For High-Speed Applications," in Mukt Shabd Journal (UGC CARE GROUP-1), vol. 09, Issue-12, pp. 999-1009, December 2020, DOI:09.0014.MSJ.2020.V9I12.0086781.117954, ISSN NO : 2347-3150.
- 39. R. Ramana Reddy et al., published a paper titled "Multiband High Gain Complementary Split Ring Resonator Based Spyder Fractal Antenna," in Mukt Shabd Journal (UGC CARE GROUP-1), vol. 09, Issue-12, pp. 775-783, December 2020, ISSN NO : 2347-3150, DOI:09.0014.MSJ.2020. V9I12. 0086781.11784.
- R. Ramana Reddy et al., published a paper titled "High Speed Split Radix FFT Processor Using Wallace Tree Multiplier," in Journal of Solid State Technology (Scopus – Indexed), vol. 63, Issue-5, pp. 8937-8947, 2020, ISSN 0038-111X.
- 41. R. Ramana Reddy et al., published a paper titled "Multi-Band Circularly Polarized Corner Truncated Hybrid Cylindrical Dielectric Resonator Antenna," in Zeichen Journal (UGC GROUP-2), vol. 06, Issue-12, pp. 101- 112, December 2020, ISSN 0931-4747, DOI:15.10089.ZJ.2020. V6I3.285311. 2215.
- 42. R. Ramana Reddy et al., published a paper titled "Analysis of the Effect of Feeding Technique on a Millimeter Wave Fractal Patch Antenna," in Juni Khyat Journal (UGC CARE GROUP-1), vol. 11, Issue-04, No. 02, pp. 31-40, April 2021, ISSN 2278-4632.
- R. Ramana Reddy et al., published a paper titled "Circularly Polarized Hybrid Dielectric Resonator Antennas: A Brief Review and Perspective Analysis" in the *MDPI Sensors*, Sensors 2021, <u>https://doi.org/10.3390/s21124100</u>, June 2021.

- R. Ramana Reddy et al., published a paper titled "Monopole Fractal Antenna with L-slots & DGS for Dual band and Wideband Applications," in Mukt Shabd Journal (UGC CARE GROUP-1), vol. 10, Issue-12, pp. 603-611, December 2021, ISSN NO : 2347-3150, DOI:10.0014.MSJ.2021.V10I12.0086781. 112160, <u>https://shabdbooks.com/volume-10-issue-12-2021/</u>
- 45. R. Ramana Reddy et al., published a paper titled "Multi-Band Circularly Polarized Hybrid Cylindrical DRA with Rectangular DGS," in High Technology Letters (UGC CARE GROUP-II), Volume 27, Issue 12, 2021, pp. 611-622, December 2021, ISSN NO : 1006-6748, http://www.gjstx-e.cn/ <u>https://doi.org/</u> <u>10.37896/HTL27.12/4850</u>,
- 46. R. Ramana Reddy et al., published a paper titled "Circular isolation characteristics of UWB-MIMO and multiband antenna foe wireless communication" in Mukt Shabd journal, Volume XI, Issue IX, September 2022, pp : 181-192, ISSN NO : 2347-3150, doi:10.0014.MSJ.2022.V11I09. 0086781.1135518, <u>https://shabdbooks.com/volume-11-issue-9-2022/</u>
- 47. R. Ramana Reddy et al., published a paper titled "Rectangular Patch Antenna with Rectangular Cuts and Slots for Satellite Communication Applications" in Industrial Engineering Journal (UGC CARE GROUP-I), Volume 52, Issue 3, NO.2, March 2023, ISSN : 0970-2555, <u>http://www.journal-iiie-india.com/</u> 1_mar_23/ 22.2.pdf
- 48. R. Ramana Reddy et al., published a paper titled "A Triple Band Slotted Octagonal Patch Antenna for Ku Band Applications," in Mukt Shabd Journal (UGC CARE GROUP-I), Volume XII, Issue III, March 2023, ISSN NO : 2347-3150, pp : 785-797 DOI:10.0014.MSJ.2023.V11I03.0086781.113978,<u>https://shabdbooks.com/index.php/current -issue-3/</u>
- 49. R. Ramana Reddy et al., published a paper titled "Design of a Dual-Band Square Patch Antenna with U- Shaped Stubs & H-slot and DGS for C & X-Band Applications," in Mukt Shabd Journal (UGC CARE GROUP-I), Volume XII, Issue III, pp: 927-938, March 2023, ISSN NO : 2347-3150, DOI:10.0014.MSJ. 2023. V11I03.0086781.113993, <u>https://shabdbooks.com/ index.php/ current-issue-3/</u>
- 50. R. Ramana Reddy et al., published a paper titled "A High-Gain Circularly Polarized Antenna for Multi Band Applications," in Mukt Shabd Journal (UGC CARE GROUP-I), Volume XII, Issue III, March 2023, ISSN NO : 2347-3150, pp: 755-766,DOI:10.0014.MSJ.2023.V11I03. 0086781. 113975, https://shabdbooks.com/index.php/current-issue-3/
- 51. R. Ramana Reddy et al., published a paper titled "A Multiband Rhombus Patch Antenna with Slots for C, X, and Ku Band Applications," in Juni Khyat Journal (UGC CARE GROUP-I), Volume XIII, Issue IV, April-2023, ISSN NO : 2278-4632, <u>http://junikhyatjournal.in/</u>

- 52. R. Ramana Reddy et al., published a paper titled "Triple band Hexagonal Patch Antenna with Slots," in Juni Khyat Journal (UGC CARE GROUP-I), Volume XIII, Issue IV, April-2023, ISSN NO : 2278-4632, , <u>http://junikhyatjournal.in/</u> no_1_Online_23/33_apr.pdf
- 53. R. Ramana Reddy et al., published a paper titled "Triangle Patch Antenna with Square and Circle Shape Slots for Multi-Band Applications," in Juni Khyat Journal (UGC CARE GROUP-I), Volume XIII, Issue IV, April-2023, ISSN NO : 2278-4632, <u>http://junikhyatjournal.in/no 1 Online 23/34 apr.pdf</u>
- 54. R. Ramana Reddy et al., published a paper titled "A Dual-Band Lotus-Shaped Antenna Loaded with CSRR for C and X Band Applications," in Industrial Engineering Journal (UGC CARE GROUP-I), Volume : 52, Issue 4, No. 1, pp: 1-12, April 2023, ISSN: 0970-2555, <u>http://www.journal-iiie-india.com/</u> 1_apr_23 / 1.1. pdf
- 55. R. Ramana Reddy et al., published a paper titled "A Triple Band Circular Patch Antenna with Circular Rings and Defected Ground Structure," in Industrial Engineering Journal(UGC CARE GROUP-I), Volume: 52, Issue 4, No. 1, pp. 13-22, April: 2023, ISSN 0970-2555, <u>http://www.journal-iiie-india.com/ 1_apr_23/ 2.1. pdf</u>

National Journal :

- 1. R. Ramana Reddy et al., published a paper titled "Flat beams for modern radars," in Research Bulletin , Andhra University, Vol 13, Issue 1, April 2007.
- R. Ramana Reddy et al., published a paper titled "Performance analysis of adder circuits using FinFET ' in I-manager's Journal on circuits and systems, vol. 5, no.3, June-August, 2017, pp. 1-9, DOI:<u>10.26634/jcir.5.3.13811</u>.
- 3. R. Ramana Reddy et al., published a paper titled " Implementation of Extracted Timing Methodology on process monitor for silicon characterization " in Global Journal of Computer Science and Technology, Volume 18, Issue 1, 2018.
- 4. R. Ramana Reddy et al., published a paper titled "Circular Conformal Antenna Array With Enhanced Gain For Airborne Applications" in i-manager's Journal on Communication Engineering and Systems, Vol. 7, No. 4, August - October 2018, pp 27-32.
- 5. R. Ramana Reddy et al., published a paper titled "Automatic Detection of Exudates Using SVM and DCNN Techniques.", in Think India Journal, ISSN 0971-1260, Volume- 22, Issue 4, October 2019, pp. 1655-1662.

International Conferences :

1. R. Ramana Reddy et al., presented a paper titled "Synthesis of Array of crossed slots for sector beams" in an International Conference on Bio-Medical Electronics and Telecommunications (BET-04), Dec-2004, Dept. of ECE, AU

College of Engineering, Andhra University. VSP

- 2. R. Ramana Reddy et al., presented a paper titled "Influence of dipole length on radiation characteristics" in an International Conference on Electromagnetic interference and compatibility (INCEMIC-2006) 2006, Bangalore.
- 3. R. Ramana Reddy et al., presented a paper titled "New Amplitude Distribution for the Generation of Sum Patterns" in an International Conference on Microwaves, Antenna, Propagation and Remote Sensing (ICMARS – 2006), Jodhpur, December 2006.
- 4. R. Ramana Reddy et al., presented a paper titled "Flat beams with phase control," in a 'Progress in Electromagnetics Research Symposium (PIERS 2007)' in Beijing, China, 2007.
- 5. R. Ramana Reddy et al., presented a paper titled "Synthesis of Ripple Free Sector Beams from Array Antennas," in 'North American Radio Science Meeting (URSI – 2007)' Ottawa, Canada, 2007.
- 6. R. Ramana Reddy et al., presented a paper titled "Effect of Phase Quantization on the Radiation Patterns," in 'North American Radio Science Meeting (URSI 2007)', Ottawa, Canada, 2007.
- R. Ramana Reddy et al., presented a paper titled "Comparative Studies on Coupling in coplanar E-H Plane Tee Junctions with Standard and Nonstandard Feed Guides," in 'North American Radio Science Meeting (URSI – 2007)' Ottawa, Canada, 2007
- 8. R. Ramana Reddy et al., presented a paper titled "Effect of length of line source on the overall radiation patterns," in 'Progress in Electromagnetics Research Symposium (PIERS 2007)' Prague, Czech Republic, 2007.
- R. Ramana Reddy et al., presented a paper titled "Modified standard amplitude distribution for the generation of low side lobe patterns of arrays for EMC applications," in 'Progress in Electromagnetics Research Symposium (PIERS – 2007)' Prague, Czech Republic, 2007.
- R. Ramana Reddy et al., presented a paper titled "Comparative Studies on The Effect of Analog and Digital Phase Shifters on Shaped Beam Patterns Generated from Phased Arrays", in Progress in Electromagnetics Research Symposium (PIERS-2008), July 2008, Cambridge, USA
- 11. R. Ramana Reddy et al., presented a paper titled "Admittance Characteristics of Cross-Slot Coupled H-Plane Tee Junction" in Progress in Electromagnetics Research Symposium (PIERS-2008), July 2008, Cambridge, USA.
- 12. R. Ramana Reddy et al., presented a paper titled "Sum Patterns from array of longitudinal slots" presented in an International Conference on Electromagnetic interference and compatibility (INCEMIC-2008) 2008, Bangalore, November 2008.
- 13. R. Ramana Reddy et al., presented a paper titled "Analysis of crossed slot

coupled H-Plane TEE junction for conductance characteristics in an International Conference on Microwaves, Antenna, Propagation and Remote Sensing (ICMARS – 2009), Jodhpur , December 2009.

- 14. R. Ramana Reddy et al., presented a paper titled "Design and Analysis of Low Power Inverter in Nanoscale Technology ", in an International Conference MIPSCCON2011 during April 7-9, 2011 at GMRIT, Rajam
- 15. R. Ramana Reddy et al., presented a paper titled "Dual band CPW-fed Monopole with two L shaped and stair shape slot Antenna for WLAN/WiMAX Applications" in an International Conference on Electromagnetic interference and compatibility (INCEMIC-2012) 2012, Bangalore, held during December 6th & 7th, pp 497-501.
- 16. R. Ramana Reddy et al., presented a paper titled "Design of 1-bit fulladder circuit using Complementary output gate and multiplexers", in International Conference on "RF and Signal Processing Systems, RSPS-2013" 26th – 27 July 2013 at K L University, Guntur.
- R. Ramana Reddy et al., presented a paper titled "Design of Microstrip Antenna Array for Dual Polarized and Double Band Characteristic", in International Conference on Telecommunication Technology & Management (ICTTM-2015), Bharti School of Telecommunication Technology & Management, IIT Delhi, ISBN No: 978099268053, Emerald India Publishing House, April 11-12, 2015pp.72-84.
- R. Ramana Reddy et al., presented a paper titled "Design of Rectangular Ushaped Fork Patch Antenna for UWB and Multiband Applications", in 13th International Conference on Electromagnetic Interference and Compatibility (IN-CEMIC-2015), Andhra University, Visakhapatnam, July 23-24, 2015, pp 565-568. (Published in IEEE Xplore), DOI:10.1109/INCEMIC.2015.8055881.
- R. Ramana Reddy et al., presented a paper titled "Design of Dual-Band Rhombic Dielectric Resonator Antenna for UWB Applications", in 2nd URSI Regional International Conference on Radio Science; JNU-New Delhi Nov 16-19, 2015 pp 47.
- R. Ramana Reddy et al., presented a paper titled "Performance Analysis of Frequency Dependent and Frequency Independent Micro strip Patch Antennas", in ICMEET-2015, GITAM University- Visakhapatnam Dec-18-19 2015, Published in Springer Lecture notes in Electrical Engineering (LNEE) Book series Vol. 372, (ISI Proceedings & Scopus Indexed), DOI:<u>10.1007/978-81-322-2728-1_8</u>.
- R. Ramana Reddy et al., presented a paper titled "Design of a New Multiband Dielectric Resonator Antenna for WLAN/WiMAX Applications., in <u>International</u> <u>Conference on Wireless Communications, Signal Processing and Networking</u> (WiSPNET), 2016,Pages:11 -15 (Published in IEEE Xplore), DOI:10.1109/ WiSPNET.2016.7566079
- 22. R. Ramana Reddy et al., presented a paper titled "Design and Analysis of

Various Slots on Hexagonal Boundary Patch Antennas for Enhanced Gain", in International Conference on Micro-Electronics, Electromagnetics and Telecommunications (ICMEET-2016), Organized by Raghu College of Engineering, Visakhapatnam, During January 6th & 7th, 2017, Published in Springer Lecture notes in Electrical Engineering (LNEE) Book series 2017 (ISI Proceedings & Scopus Indexed), DOI:<u>10.1007/978-981-10-4280-5_7</u>.

- 23. R. Ramana Reddy et al., presented a paper titled "V-Shaped Slits and a Slot Loaded Pentagonal Boundary Patch Antennas for Wideband Applications", IEEE iAIM-2017, International Conference on Antenna Innovations and Modern Technologies (*iAIM-2017*), Bangalore during 24-26 November 2017 and published in IEEE Xplore 978-1-5386-0646-9/17/\$31.00 ©2017 IEEE.
- R. Ramana Reddy et al., presented a paper titled "Circularly Polarized Compact Wideband Slotted Cylindrical Dielectric Resonator Antennas", IEEE iAIM-2017, International Conference on Antenna Innovations and Modern Technologies (*iAIM-2017*), Bangalore during 24-26 November 2017 and published in IEEE Xplore 978-1-5386-0646-9/17/\$31.00 ©2017 IEEE.
- 25. R. Ramana Reddy et al., presented a paper titled "Analysis on the impact of Slot and DGS on Bandwidth & Gain of a Pentagon Patch Antenna", IEEE iAIM-2017, International Conference on Antenna Innovations and Modern Technologies (*iAIM-2017*), Bangalore during 24-26 November 2017 and published in IEEE Xplore 978-1-5386-0646-9/17/\$31.00 ©2017 IEEE.
- 26. R. Ramana Reddy et al., presented a paper titled "Analysis of Effect of Concavity in Linear and Planar Microstrip Patch Antenna Arrays" in International Conference on Micro - Electronics, Electromagnetics and Telecommunications- ICMEET 2K18 conducted during 04th & 05th January, 2018 in GVP College of Engineering(A), Visakhapatnam . Published in Springer LNEE series, DOI:10.1007/978-981-13-1906-8_82.
- 27. R. Ramana Reddy et al., presented a paper titled "Implementation of a Low Cost Beacon Receiver Based on Software Defined Radio", in International Conference on Computing, Communication and Electrical Technology (ICC-CET-2019) during 29th – 30th August 2019, in Hyderabad.
- R. Ramana Reddy et al., presented a paper titled "IoT Based Automated Irrigation System", in 3rd International Conference on Current Research in Engineering & Technology (ICCRET-19) on 15th September 2019, in Tirupati.
- 29. R. Ramana Reddy et al., presented a paper titled "Brain Tumor Detection Using BWT and SVM", in 3rd International Conference on Current Research in Engineering & Technology (ICCRET-19) on 15th September 2019, in Tirupati.
- R. Ramana Reddy et al., presented a paper titled "Dissemination of Emergency Vehicle Information Using VANET", in International Conference on Automation Science and Engineering (ICASE -19) on 22nd September 2019, in Hyderabad.

- R. Ramana Reddy et al., presented a paper titled "Action Recognition in Camouflaged Videos Using SVM Classifier", in International Conference on Automation Science and Engineering (ICASE -19) on 22nd September 2019, in Hyderabad.
- 32. R. Ramana Reddy et al., presented a paper titled "GSM and GPRS based Health Monitoring System", in International Conference on Science Engineering and Technology (ICSET-19), during 27th – 28th September 2019, in Hyderabad.
- 33. R. Ramana Reddy et al., presented a paper titled "Convolution Neural Network Based Dehazing Procedure in Hazy Images", in International Conference on Robotics, Communication Technology, Electronics, and Electrical Engineering (ICRRCCEEE) on 28th September 2019, in Chennai.
- 34. R. Ramana Reddy et al., presented a paper titled "Block Processing on Binarized Images For Contrast Enhancement.", in International Conference on Robotics, Communication Technology, Electronics, and Electrical Engineering (ICRRCCEEE) on 28th September 2019, in Chennai.
- 35. R. Ramana Reddy et al., presented a paper titled "Design Of High Speed Parallel Prefix Adder Using Reversible Logic Gates.", in 5th International Conference on Research Techniques in Engineering & Technology (ICRTET-2019) on 13th October 2019, in Tirupati.
- 36. R. Ramana Reddy et al., presented a paper titled "Millimeter Wave Wide Band Koch Fractal Antennas," in 2nd International Conference on "Machine Learning, Advances in Computing, Renewable Energy and Communication " (MARC – 2020) held at Krishna Engineering College, Ghaziabad during 17th-18 th December 2020. (LNEE,volume 768). Lecture Notes in Electrical Engineering, vol 768. Springer, Singapore. https://doi.org/10.1007/978-981-16-2354-7_53
- 37. R. Ramana Reddy et al., presented a paper titled "Circular Patch Antenna with Rectangular Slots and DGS for UWB and Multiband Applications", in International Conference on Computing, Communication and Power Technology IC3P- 2022, during 7th - 8th January 2022 in Raghu Engineering Institutions, Visakhapatnam.
- 38. R. Ramana Reddy et al., presented a paper titled "A Square Slotted Circular Patch MIMO Antenna with DGS for UWB Applications", in International Conference on Computing, Communication and Power Technology IC3P-2022, during 7th - 8th January 2022 in Raghu Engineering Institutions, Visakhapatnam.
- 39. R. Ramana Reddy et al., presented a paper titled "Realization of FPGA based Burst QPSK Modem for Wireless Communication Applications", in Wireless, Antenna and Microwave Symposium, WAMS 2022, IEEE Conference Record No. #54719, during 5-8 June 2022, National Institute of Technology Rourkela, India.

- 40. R. Ramana Reddy et al., presented a paper titled "Minkowski Fractal Antenna with Circular DGS for Multiband Applications", in Wireless, Antenna and Microwave Symposium, WAMS 2022, IEEE Conference Record No. #54719, during 5-8 June 2022, National Institute of Technology Rourkela, India.
- 41. R. Ramana Reddy et al., presented a paper titled "L-Slots Fractal Antenna with DGS for Dual band Applications", in Wireless, Antenna and Microwave Symposium, WAMS 2022, IEEE Conference Record No. #54719, during 5-8 June 2022, National Institute of Technology Rourkela, India.
- 42. R. Ramana Reddy et al., presented a paper titled "Circularly Polarized Split Cylindrical Dielectric Antenna for Wireless Applications", in Wireless, Antenna and Microwave Symposium, WAMS 2022, IEEE Conference Record No. #54719, during 5-8 June 2022, National Institute of Technology Rourkela, India.
- 43. R. Ramana Reddy et al., presented a paper titled "A multiband rhombus shaped patch antenna with rhombus slots for c, x and ku-band applications.", in Wireless, Antenna and Microwave Symposium, WAMS 2023, IEEE Conference Record No. #57261, during 7-10 June 2023, Pandit Deendayal Energy University, Gandhinagar, Gujarat, India.
- 44. R. Ramana Reddy et al., presented a paper titled "Hexagonal Hybrid DRA Circularly Polarized Antenna for Multiband Applications", in Wireless, Antenna and Microwave Symposium, WAMS 2023, IEEE Conference Record No. #57261, during 7-10 June 2023, Pandit Deendayal Energy University, Gandhinagar, Gujarat, India.
- 45. R. Ramana Reddy et al., presented a paper titled "Rectangular Patch Antenna with Truncated Cuts and Slot for Satellite Communication Applications", in Wireless, Antenna and Microwave Symposium, WAMS 2023, IEEE Conference Record No. #57261, during 7-10 June 2023, Pandit Deendayal Energy University, Gandhinagar, Gujarat, India.
- 46. R. Ramana Reddy et al., presented a paper titled "Metasurface-based triangle patch antenna with moon shape slots for multiband applications", in Wireless, Antenna and Microwave Symposium, WAMS 2023, IEEE Conference Record No. #57261, during 7-10 June 2023, Pandit Deendayal Energy University, Gandhinagar, Gujarat, India.
- 47. R. Ramana Reddy et al., presented a paper titled "Design of dual-band square patch antenna with L-shaped stubs and DGS for C & X-band applications", in Wireless, Antenna and Microwave Symposium, WAMS 2023, IEEE Conference Record No. #57261, during 7-10 June 2023, Pandit Deendayal Energy University, Gandhinagar, Gujarat, India.
- 48. R. Ramana Reddy et al., presented a paper titled "A slotted octogonal patch antenna for multiband and high gain applications", in Wireless, Antenna and Microwave Symposium, WAMS 2023, IEEE Conference Record No. #57261, during 7-10 June 2023, Pandit Deendayal Energy University, Gandhinagar,

Gujarat, India.

- 49. R. Ramana Reddy et al., presented a paper titled "A Circular Patch Antenna with Bottleneck Feed and DGS for C-Band and X-Band Applications", in Wireless, Antenna and Microwave Symposium, WAMS 2023, IEEE Conference Record No. #57261, during 7-10 June 2023, Pandit Deendayal Energy University, Gandhinagar, Gujarat, India.
- 50. R. Ramana Reddy et al., presented a paper titled "Modified plus-Shaped Microstrip Patch Antenna with DGS for the Ultra wide-Band Applications", in Wireless, Antenna and Microwave Symposium, WAMS 2023, IEEE Conference Record No. #57261, during 7-10 June 2023, Pandit Deendayal Energy University, Gandhinagar, Gujarat, India.
- 51. R. Ramana Reddy et al., presented a paper titled "A Leaf Shaped Patch Antenna for Wideband Applications", in Wireless, Antenna and Microwave Symposium, WAMS 2023, IEEE Conference Record No. #57261, during 7-10 June 2023, Pandit Deendayal Energy University, Gandhinagar, Gujarat, India.
- 52. R. Ramana Reddy et al., presented a paper titled "Dual-Sense Polarized Dielectric Resonator Antenna with Metamaterial as Superstrate", in Wireless, Antenna and Microwave Symposium, WAMS 2023, IEEE Conference Record No. #57261, during 7-10 June 2023, Pandit Deendayal Energy University, Gandhinagar, Gujarat, India.
- 53. R. Ramana Reddy et al., presented a paper titled "Lumped-Element based Tunable Bandstop Filter for Airborne UHF Communication System", in Wireless, Antenna and Microwave Symposium, WAMS 2023, IEEE Conference Record No. #57261, during 7-10 June 2023, Pandit Deendayal Energy University, Gandhinagar, Gujarat, India.
- 54. R. Ramana Reddy et al., presented a paper titled "A Moon Shaped Slotted Pentagonal Patch Antenna with DGS for High-Gain and X Band Applications," *2024 IEEE Wireless Antenna and Microwave Symposium (WAMS)*, Visakhapatnam, India, 2024, pp. 01-05, doi: 10.1109/WAMS59642. 2024. 10528170.
- 55. R. Ramana Reddy et al., presented a paper titled "Rectangle Patch Antenna with Slots and Defective Ground Structure for C-band Applications," 2024 IEEE and Microwave Symposium Wireless Antenna (WAMS), Visakhapatnam, India, 2024, pp. 1-5, doi: 10.1109/WAMS59642.2024.10527952.
- 56. R. Ramana Reddy et al., presented a paper titled "Effect of DGS on Slotted Square Patch Antenna for 5G and LTE Applications," *2024 IEEE Wireless Antenna and Microwave Symposium (WAMS)*, Visakhapatnam, India, 2024, pp. 1-5, doi: 10.1109/WAMS59642.2024.10528047.
- 57. R. Ramana Reddy et al., presented a paper titled "Hexagonal Patch Antenna with Slots and DGS for S and C Band Applications," 2024 IEEE Wireless

Antenna and Microwave Symposium (WAMS), Visakhapatnam, India, 2024, pp. 1-5, doi: 10.1109/WAMS59642.2024.10528032.

National Conferences:

- 1. R. Ramana Reddy et al., presented a paper titled "Design of line source for low side lobe patterns" in a National Conference on Recent Advances in Electronics and Communication Engineering (RACE-05), May 2005, SRKR Engineering College Bhimavaram.
- 2. R. Ramana Reddy et al., presented a paper titled "Patterns for IFF applications" in a National Conference on Recent Advancements in Microwave Technique and Applications" University of Rajasthan, Jaipur ,2006.
- R. Ramana Reddy et al., presented a paper titled "Effect of Broad Dimension of Rectangular Waveguide on the Normalized Conductance of Open Slot Radiator" in a National Symposium on Antennas and Propagation (APSYM – 2006), Cochin University of Science and Technology, Kochi, 2006.
- 4. R. Ramana Reddy et al., presented a paper titled "Applications of new continuous distributions for discrete arrays," in a National Conference on Advanced Communication Technologies (ACT-06)' Andhra University, 2006
- 5. R. Ramana Reddy et al., presented a paper titled "Effect of electromagnetic fields on bio-systems," in a 'National Conference on Advanced Communication Technologies (ACT-06)' Andhra University, 2006
- 6. R. Ramana Reddy et al., presented a paper titled "Current distribution in wire antenna," in 'Zonal Seminar on Emerging and Converging Technologies (SECT-07)' Andhra University, 2007
- R. Ramana Reddy et al., presented a paper titled "Effect of susceptance part of equivalent shunt parameter of a waveguide open slot radiator on coupling," in National Conference on Signal Processing and Communication Systems (NCSPCS-2008), February 20-21, 2008, RVR&JC, Guntur.
- 8. R. Ramana Reddy et al., presented a paper titled "A New Approach To Minimize Leakage Power In Nano-scale VLSI Adder" in National Conference DEVICE-10, during 13-14 November 2010 at ANITS, Visakhapatnam.
- 9. R. Ramana Reddy et al., presented a paper titled "Influence of slot parameters on admittance characteristics of longitudinal slot in the narrow wall of rectangular waveguide" in National Conference on Electronics and Communication Engineering, during 22-24 December 2010 at Madhav Institute of Technology & Science, Gwalior.
- R. Ramana Reddy et al., presented a paper titled "Effect of susceptance part of equivalent shunt parameter of a waveguide open slot radiator on Coupling and VSWR" in National Conference on Electronics and Communication Engineering, during 22-24 December 2010 at Madhav Institute of Technology & Science, Gwalior.

- R. Ramana Reddy et al., presented a paper titled "Effect of Slot Inclination on Admittance Characteristics of H-Plane Tee Junction "in an National Conference NSMC2011 during 28-29 July 2011 at Guru Nanak Institute Of Technology, Kolkata.
- R. Ramana Reddy et al., presented a paper titled "Design of Microstrip Antenna Array for Generation of Sum Patterns" in National Conference NCETEC-2K11 during 3rd – 4th December 2011 at B.V.C College of Engineering, Amalapuram.
- R. Ramana Reddy et al., presented a paper titled "Effect of slot inclination and width on admittance characteristics of cross slot coupled H Plane Tee junction" in National Conference NCETEC-2K11 during 3rd – 4th December 2011 at B.V.C College of Engineering, Amalapuram.
- 14. R. Ramana Reddy et al., presented a paper titled "Flat beams from arrays using phase control" 'in National Conference on Advances in Communication Technologies (NCACT 2012) during January 9th & 10th , 2012 in GITAM University, Visakhapatnam.
- 15. R. Ramana Reddy et al., presented a paper titled "Design and Analysis of Low Power Inverter and Multiplexer Circuits in Nano Scale Technology" 'in National Conference on Advances in Communication Technologies (NCACT 2012) during January 9th & 10th, 2012 in GITAM University, Visakhapatnam.
- R. Ramana Reddy et al., presented a paper titled "Effect of number of elements, spacing and diameter on the radiation characteristics of Yagi Uda antenna" in National Conference on Advanced Communication & Computer Technologies(ACCT –2012) 6th and 7th July 2012 IETE Visakhapatnam centre.
- R. Ramana Reddy et al., presented a paper titled, "Design of Compact, Low power and High Speed Ripple Carry Adder using Hybrid Logic Circuits", in National conference on Advance in Radar Communications and Network Enabled Technologies (ARCNET-2013) Organized by IETE, VSP at NSTL, Visakhapatnam during 6th _ 7th Sept -2013.
- R. Ramana Reddy et al., presented a paper titled "Reduction of Side Lobe Levels of Sum Patterns from Array of antennas Using Genetic Algorithm", in National conference on Advance in Radar Communications and Network Enabled Technologies (ARCNET-2013) Organized by IETE, VSP at NSTL, Visakhapatnam during 6th _ 7th Sept -2013.
- R. Ramana Reddy et al., presented a paper titled "Design of U-Shaped Patch Antenna for UWB Applications" in IEEE Conference on Emerging trends in Signal Processing And Communication Engineering (ESPACE) Organized by Aditya Institute of Technology and Management On 20th & 21st February, 2015.
- 20. R. Ramana Reddy et al., presented a paper titled "Multiple Output Domino Logic Area Efficient and High Speed 32-bit CMOS Adder" in IEEE Conference

on Emerging trends in Signal Processing And Communication Engineering (ESPACE) Organized by Aditya Institute of Technology and Management On $20^{th} \& 21^{st}$ February, 2015

- 21. R. Ramana Reddy et al., presented a paper titled "Design of a Low Power High Speed Full Adder Cell" in IEEE Conference on Emerging trends in Signal Processing And Communication Engineering (ESPACE) Organized by Aditya Institute of Technology and Management On 20th & 21st February, 2015
- 22. R. Ramana Reddy et al., presented a paper titled "Design of reliable adder circuit with voter element for fault detection and correction using reversible gates" in IEEE Conference on in Emerging trends in Signal Processing And Communication Engineering(ESPACE) Organized by Aditya Institute of Technology and Management On 20th & 21st February, 2015
- R. Ramana Reddy et al., presented a paper titled "Design of Conformal Patch Fed Stepped Triangular DRA for Wireless and UWB Applications" in National Conference on VLSI Design, Signal Processing, Image Processing, Communications & Embedded Systems (VSPICE-2K15), JNTUK, Kakinada Nov. 6-7 2015, ISBN No. 978-93-5235-967-7.
- R. Ramana Reddy et al., presented a paper titled "Design of Dual Layer Aperture Coupled Inverted Double U-Slot Triple Band Patch Antenna for Wireless Communication Applications" in IEEE Indian Antenna Week – 2016, organized by Thiagarajar College of Engineering, Madurai during 6th to 10th June 2016.
- R. Ramana Reddy et al., presented a paper titled "Design Of Processing Elements For Implementing Pipeline FFT Processor" in Two Day National Conference On "Recent Challenges In Electronics And Communication Technology (NCRCECT-2016)" On 1st & 2nd October 2016 At ANITS, Visakhapatnam.
- 26. R. Ramana Reddy et al., presented a paper titled "Dual L-Slot coupled Multiband Cylindrical Dielectric Resonator Antenna" in IEEE Indian Antenna Week – 2017, organized by Defense Institute of Advanced Technology, Pune during 5th to 9th June 2017 and published in IEEE Xplore 978-1-5386-0646-9/17/\$31.00 ©2017 IEEE.
- 27. R. Ramana Reddy et al., presented a paper titled "Design of Pentagonal Dielectric Resonator Antenna for X-Band Applications" in IETE 49th Mid Term Symposium (MTS-2018) conducted during April 8-9, 2018 in AUCE(A), Visakhapatnam.
- R. Ramana Reddy et al., presented a paper titled "Coupled Line and Coupled Line Fractal Microstrip Bandpass Filters " in IETE 49th Mid Term Symposium (MTS-2018) conducted during April 8-9, 2018 in AUCE(A), Visakhapatnam.
- 29. R. Ramana Reddy et al., presented a paper titled "Performance Analysis of Dual Band Triangular Dielectric Resonator Antenna " in IETE 49th Mid Term

Symposium (MTS-2018) conducted during April 8-9, 2018 in AUCE(A), Visakhapatnam.

- R. Ramana Reddy et al., presented a paper titled "Rhombic Slotted Pentagonal Patch Antenna for GPS Applications" in *IEEE Indian Conference on Antennas and Propagation (IEEE-InCAP 2018)*, 16-19 Dec. 2018, Hyderabad, DOI:10.1109/INCAP.2018.8770830.
- R. Ramana Reddy et al., presented a paper titled "Compact Multi-Layer Circularly Polarized Hexagonal-Spiral Antenna for Wireless Applications" in *IEEE Indian Conference on Antennas and Propagation (IEEE-InCAP 2018)*, 16-19 Dec. 2018, Hyderabad, **DOI:** 10.1109/INCAP.2018.8770926.
- R. Ramana Reddy et al., presented a paper titled "Multi Wideband Hexagonal-Spiral Microstrip Bandpass Filter for Wireless Applications" in *IEEE Indian Conference on Antennas and Propagation (IEEE-InCAP 2018)*, 16-19 Dec. 2018, Hyderabad, DOI:<u>10.1109/INCAP.2018.8770707</u>.
- R. Ramana Reddy et al., a paper titled "Minkowski Inter-Digital Dual-Band Pass Fractal Filter for GSM Applications" is accepted for presentation in *IEEE Indian Conference on Antennas and Propagation (IEEE-InCAP2019)*, scheduled during 19-22 Dec. 2019, Ahmedabad, DOI : 10.1109/In-CAP47789.2019.9134607.
- R. Ramana Reddy et al., a paper titled "Performance Analysis of Conical Dielectric Resonator Antenna with Various Feeding Techniques" is accepted for presentation in *IEEE Indian Conference on Antennas and Propagation (IEEE-InCAP2019)*, scheduled during 19-22 Dec. 2019, Ahmedabad, DOI:<u>10.1109/ InCAP47789.2019.9134670</u>.
- R. Ramana Reddy et al., a paper titled "Multi-Band Rectangular Hybrid Antennas Loaded with Inter-Digital Structure Slot" is accepted for presentation in *IEEE Indian Conference on Antennas and Propagation (IEEE-InCAP2019)*, scheduled during 19-22 Dec. 2019, Ahmedabad DOI:<u>10.1109/InCAP47789.</u> <u>2019.9134493</u>.
- 36. R. Ramana Reddy et al., presented a paper titled "The High Gain Moon shape slotted Pentagonal Patch Antenna for X-Band Applications" in a National Conference on Smart Electronics: Engineering the Future of Intelligence (NCSEFI-2024) on 20-04-2024, Annamacharya University, Rajampet, AP.
- 37. R. Ramana Reddy et al., presented a paper titled "Analysis of effect of slots and DGS on Rectangle Patch Antenna" in a National Conference on Smart Electronics: Engineering the Future of Intelligence (NCSEFI-2024) on 20-04-2024, Annamacharya University, Rajampet, AP.
- R. Ramana Reddy et al., presented a paper titled "Square Patch Antenna with slots and DGS for 5G and LTE applications" in a National Conference on Smart Electronics: Engineering the Future of Intelligence (NCSEFI-2024) on 20-04-2024, Annamacharya University, Rajampet, AP.

Patents :

- A Compact Hexagonal-Triangular Fractal Antenna for Wideband Applications. Patent No. 421939, Granted on 16-02-2023. Application No. 201641043763 Dt. 22-12-2016, Published in journal no 12/2018 on 28-03-2018 in the official journal of the patents office Indian Patents journal.
- 2. A New PCB Based Antenna for IoT Applications. Patent No. 460459, Granted on 18-10-2023. Application No. **201641043764** Dt. **22-12-2016**, and Published in journal no 12/2018 on 28-03-2018 in the official journal of the patents office Indian Patents journal.
- A Modified Bow-Tie Slotted Circular Patch Antenna. Patent No. 534184, Granted on 22-04-2024. Application Number: 201741034823 Dt. 29.09.2017, and Published in journal no 12/2018 on 28-03-2018 in the official journal of the patents office Indian Patents journal.
- A Quad-band Asymmetric Dual L –Slot fed Dielectric Resonator Antenna (DRA) with Circularly Polarized Bands. Patent No. 517989, Granted on 29-02-2024. Application Number : **201741035252** Dt. **05.10.2017**, and Published in journal no 12/2018 on 28-03-2018 in the official journal of the patents office Indian Patents journal.
- Curvy Rectangular Slotted Substrate Integrated Cylindrical DRA with Wide CP Bandwidth and Enhanced Gain. Patent No. 528309, Granted on 15-03-2024. Application Number : **201741035257** Dt. **05.10.2017**, and Published in journal no 12/2018 on 28-03-2018 in the official journal of the patents office Indian Patents journal.

Consultancy done :

1. Done a consultancy project worth Rs. 2 Lakhs for design of New Sub 1 Giga Hertz PCB Based Antenna for IoT Applications for Phytec Embedded Pvt. Ltd, Banglore.

Funded Projects :

- 1. Coordinator for the Project "Bhuvan Panchayat Asset Mapping " sanctioned by NRSC, Hyderabad, Project cost Rs. 7,86,000 /-
- 2. Principle Investigator for the Project Titled "Adaptive Traffic Control System" Sanctioned under Internal R&D Scheme, MVGR College of Engineering. Sanctioned amount- Rs. 3,55,000/-

Textbooks Written:

- 1. **Antennas and wave Propagation** for School of Distance Education, Andhra University.
- Electronics I Lab Manual for School of Distance Education, Andhra University

3. Network Theory, Spectrum publications, 2020

MOOCS Courses Certified

- 1. Completed and certified a course Titled "Introduction to Electronics" under Coursera offered by Georgia Institute of Technology, USA. Aug 2016.
- 2. Completed and certified the IUCEE OBE Course conducted by K.L.E. Technological University Faculty August to December 2016
- 3. Completed and certified a course Titled "Digital Systems: From Logic Gates to Processor" under Coursera offered by Universitat autónoma de Barcelona, Spain , Jan 2017

Awards or Recognitions

- Received Bharat Ratna Mother Theresa Gold Medal Award on 16th Dec 2017 given by Global Economic Progress& Research Association, New Delhi.
- Received Recognition Award for outstanding service and contributions to InCAP 2018 in 2018 IEEE Indian Conference on Antennas & Propagation (InCAP) on 18th December, 2018, Hyderabad.
- 3. Received Recognition Award for the leadership and contributions to the success of WAMS 2022, in 2022 IEEE Wireless Antenna & Microwave Symposium on 7th June, 2022, NIT Rourkela.
- 4. Received Best Paper Award in Wireless Track for the paper titled "Realization of FPGA based Burst QPSK Modem for Wireless Communication Applications", in Wireless, Antenna and Microwave Symposium, WAMS 2022, during 5-8 June 2022, NIT Rourkela, India.
- Received Special Recognition Award for the leadership as the Technical Program Committee Chair of WAMS 2023, in 2023 IEEE Wireless Antenna & Microwave Symposium on 9th June 2023, Pandit Deendayal Energy University, Gandhinagar, Gujarat.

Expert Lecture Delivered:

- Delivered a lecture on "Design methodologies of Amplitude Distributions for array antennas" in QIP Short-term course on "Fundamentals of RF Engineering for modern wireless systems during 25-30, May 2009 conducted by IIT-Kharagpur.
- 2. Delivered a lecture on "Design methodologies of Array Antennas" in JNTU Vizianagaram on 9th march 2010.
- 3. Delivered a lecture on "Antennas & Design methodologies for generations of required patterns" in GMR Institute of Technology, RAJAM on 12-08-11.
- 4. Delivered a lecture on "Advanced antennas for wideband applications" in two day work shop on Advanced Antenna Technology in Dadi Institute of

Engineering & Technology during Sept. 22nd & 23rd 2015.

- 5. Delivered a lecture on "Electronic Instrumentation" 9th January, 2018 in MR PG College Vizianagaram.
- 6. Delivered a lecture on "Blooms taxonomy" on 22 June, 2018 in MR College of Education, Vizianagaram.
- 7. Delivered a lecture on "Role of Professional chapters in Technical Education " in Sri Venkateswara Engineering College Kadapa on 18 February 2020.
- 8. Delivered a lecture on "Best practices in preparing research proposal/paper" for SV Colleges Tirupati and Kadapa on 09 May 2020.
- Delivered a lecture on "Challenges and opportunities in the design of advanced Antenna's for practical Applications" in a three day national level online FDP on "Research Trends in Signal Processing, Antennae, VLSI and IoT", organized by Sri Vasavi Engineering College, Tadepalligudem during 28-30, May 2020.
- 10. Delivered a lecture on "Beam shaping, Wideband and Multiband Antennas" in AICTE sponsored online STTP on "Antenna Design and Analysis using Mathematical solvers" organized by AITAM Tekkali during 7-12, September 2020.
- 11. Delivered a Keynote lecture on "Beam Shaping, Wideband and Multiband CP Antennas " in AICTE Sponsored International E-CONFERENCE (ICETEM-2020) on "Emerging Trends in Engineering and Management" organized by Sri Vasavi Engineering College, Tadepalligudem during 19-20, February 2021.
- 12. Delivered a lecture on "Design of Portable, IoT and Reconfigurable Antennas using Machine learning approach" in DST-SERB Sponsored five day hands-on Workshop on "Design of Portable, IoT Enabled Reconfigurable Antennas for Healthcare Monitoring - A Machine learning approach " organized by Sri Vasavi Engineering College, Tadepalligudem during 22nd to 26th August 2022.
- 13. Delivered a lecture on "Design of Portable Antennas for Wideband Applications using Machine learning approach" in IEEE APS & WAMS Society Sponsored one day International Workshop on " Advances in Wireless Communications and Antenna Technologies for Space, Vehicular and Ground Applications " organized by Raghu Institute of Technology and Raghu Engineering College, Visakhapatnam on 12th June 2023.
- 14. Delivered a lecture on "Design of Portable Antennas for Wideband Applications using Machine learning approach" in IEEE APS & WAMS Society Sponsored one day International Workshop on "Recent Advances in Wireless Communications and Antenna Technologies for Space, Air and Ground Applications " organized by Department of ECE, Vignan's deemed to be University, Guntur on 14th June 2023.
- 15. Delivered a Keynote address on "Design of Portable Antennas for Wideband

Applications using Machine learning approach" in International Conference on Emerging Technologies in Engineering and Science (ICETES-2023) organized by DVR & Dr. HS MIC College of Technology, Kanchikacherla, on 11th August 2023.

BOS Member:

- 1. Member of Board of Studies in faculty of ECE, JNTUA, Anantapur
- 2. Member of Board of Studies in faculty of ECT, JNTUK, Kakinada
- 3. Former Member of Board of Studies in faculty of EIE, JNTUA, Anantapur
- 4. Former BoS Member of PG Courses, Department of ECE, JNTUK, Kakinada,

Short-term Courses/Workshops Attended

- 1. Workshop on "Digital Integrated Circuits Applications using VHDL" during 21-26, June 2004 at SNIST, Hyderabad.
- Workshop on "Latest Technologies in Electronic Communications (WOLTEC-05)" during 12-13, March 2005 at M.V.G.R. College of Engineering, Vizianagaram.
- 3. Workshop on "Microwave measurement" during 10-12, August 2005 at Dept. of ECE, NIT Warangal.
- 4. Workshop on "Electromagnetic modeling of composite metallic and dielectric structures" during 17-21, October 2005 at IIT-Kharagpur.
- Workshop on "Electromagnetic Interference (EMI), Electromagnetic Compatibility (EMC) and Electromagnetic Pulse (EMP)" during June 26th to July 7th 2006 at IIT-Kharagpur, sponsored by AICTE.
- Workshop on "Latest Technologies in Electronic Communications (WOLTEC-07)" during 12-13, March 2007 at M.V.G.R. College of Engineering, Vizianagaram
- Short term course on "Advanced Electromagentics and Applications (STAEM – 07)" during 18-21, May 2007 at Dept. of ECE, AU College of Engineering, Visakhapatnam.
- 8. Workshop on "Microwave Electronics (WOME-2007)" during 21-23, June 2007 organized by Dept. of ECE, SVECW,
- 9. QIP Short-term course on "Microwave and EMI measurement" during 9-20, July 2007 at IIT-Kharagur.
- 10. Workshop on "Electromagnetics (WE-07)" during 12-13, October 2007 organized by Dept. of ECE, ANITS, Visakhapatnam.

- 11. A Two –Day Faculty Development Programme on "Electromagnetics in Telecommunications (EMIT 07)" during December 27-28, 2007, conducted by Dept. of ECE, SRR Engineering College, Khammam.
- 12. Workshop on "Latest Technologies in Electronic Communications (WOLTEC-08)" during 14-15, February 2008 at M.V.G.R. College of Engineering, Vizianagaram
- Workshop on "Electromagnetic Applications (WEMA-2K8)" during 8-9, March 2008 organized by Dept. of ECE, B.V.C.Engineering College, Amalapuram.
- 14. Workshop on "Instructional Design and Delivery System " Organized by M.V.G.R. College of Engineering, Vizianagaram during 21-05-08 to 23-05-08.
- 15. Short Term course on "RF and Microwave Measurement Fundamentals for modern electronic systems" conducted by IIT-Kharagpur during 09-06-08 to 22-06-08.
- 16. Workshop on "Recent Development in information and communication technologies" during 12-13, September, 2008 in AITAM, Tekkali.
- 17. Workshop on Advance radar systems on 30th October, 2008, conducted by Dept. of ECE, SRR Engineering College, Khammam.
- 18. ISOI National Workshop on "Micro and Nano Systems / Embedded System Design using Micro-controllers". Organized by A.U.C.E, Andhra University and ISOI, IIS Bangalore, during 6th and 7th December, 2008.
- 19. QIP Short-term course on "Fundamentals of RF Engineering for modern wireless systems during 25-30, May 2009 conducted by IIT-Kharagur .
- 20. Workshop on QIP Short-term course on "Technology CAD (TCAD) for VLSI Design" during May 31-June 6, 2009 conducted by IIT-Kharagur.
- 21. "MISSION 10 X workshops" conducted at MVGR College of Engineering during June 04 to 11, 2010.
- 22. Workshop on "Mission 10X Learning Approach for Practitioners" in MVGR College of Engineering, Conducted by Wipro Mission10, Bangalore during 17th -18th Sept-2010.
- 23. Workshop on "Building Competitiveness in Higher Education: The TQM Way" on 1st July 2011 at, Visakhapatnam organized by CII Visakhapatnam in association with CII Institute of Quality (CII–IQ) Bangalore.
- 24. Faculty Development program in Embedded Systems conducted by ThinkLabs, SINE, IIT Bombay for three weeks during August – September, 2011 in MVGR College of Engineering.
- 25. "Workshop on Latest Technologies in Electronic Communications (WOLTEC-11)" during 22nd -23rd, December 2011 at M.V.G.R. College of Engineering, Vizianagaram

- 26. "Teachers Training Programme in Digital Communications" during 25th& 30th June 2012 at MVGR College of Engineering, organized by AP State Council of higher education, in association with JNTU Kakinada.
- 27. Workshop on "Digital Communication Laboratory" 21st July 2012 at MVGR College of Engineering. Vizianagaram.
- 28. "Workshop on LabVIEW of National Instruments" during 1st to 3rd November 2012 at MVGR College of Engineering. Vizianagaram as part of Indo-US collaboration of Engineering Education (IUCEE)
- 29. Workshop on "VLSI Design using Mentor Graphics Tools", on 3rd & 4th January 2013 at MVGR College of Engineering. Vizianagaram.
- 30. "NI LabVIEW Training Program" during Aug 19th to 23rd, 2013 at MVGR College of Engineering. Vizianagaram.
- 31. Workshop on "MATLAB for Engineering Applications" conducted in EEE Department, MVGR College of Engineering during Sept 2nd - 6th , 2013
- 32. Workshop for "Training Resource Persons on Outcome Based Education Phase I" conducted by NBA Nodal Centre, JNTUK University College of Engineering, Vizianagaram on 13th Sept. 2013.
- 33. Workshop for "Training Resource Persons on Outcome Based Education Phase II" conducted by NBA Nodal Centre, JNTUK University College of Engineering, Vizianagaram during 26th – 28th Sept. 2013.
- 34. Two Day National Workshop on "Nuclear Energy for National Development" jointly organized by Bhabha Atomic Research Center and MVGR College of Engineering at MVGR College of Engineering during 23 and 24th January 2014.
- 35. Workshop on "Academic Leadership Workshop for Heads of the Department" at Wipro Technologies, Bangalore during 3rd to 6th March 2014.
- 36. Workshop on "Cyber Physical System Using NI LabVIEW", on 10-04-2014 at MVGR College of Engineering. Vizianagaram.
- 37. Short Term Course on "Analog and Mixed signal circuit design using mentor graphics tools" during 13th-19th June 2014 at MVGR College of Engineering. Vizianagaram.
- 38. FDP on "NI LabVIEW for Teaching and Research Applications" during 23rd 27th June 2014 at MVGR College of Engineering. Vizianagaram.
- 39. International course on "Small Satellite Missions" organized by Center for Space Science and Technology Education in Asia and the Pacific(CSSTEAP) and Jointly conducted by ISRO Satellite Centre, Bengaluru and Indian Institute of Remote Sensing, Dehradun during November 10TH -21ST 2014

- 40. "International Workshop on Embedded Systems" organized by Department of ECE, MVGR College of Engineering, Vizianagaram during 3rd to 5th Jan 2015.
- 41. Workshop on "Advances in Digital Signal Processing" during 19th 20th Feb. 2016, Co-Sponsored by IEEE Vizag Bay Sub Section, MVGR IEEE Student Branch (01921) & Departments of ECE and EEE, MVGR College of Engineering.
- 42. IEEE Indian Antenna Week 2016, Workshop on Advanced Antenna Technology organized by Thiagarajar College of Engineering, Madurai during 6th to 10th June 2016.
- 43. FDP on "Advanced Digital Signal Processing and Applications" during 8th 13th November, 2016 jointly organized by E & ICT, NIT Warangal and MVGR(A).
- 44. Workshop on Internet of Things by Phytec Embedded Pvt. Ltd at Department of ECE, MVGR College of Engineering(A) during 28th November to 3rd December 2016.
- 45. Workshop on "Design and Analysis of Antennas using HFSS " in association with Entuple, Bangalore during 20th to 22nd June 2017.
- 46. Workshop on "Advanced Antennas & Applications, WAA -17" during 28th Nov – 2nd Dec. 2017 in Department of ECE, MVGR, in association with IEEE Antenna Propagation Society
- 47. Workshop on Signal Processing Via Python in association with IEEE Vizag Bay Sub-section on 28th July, 2018 in Department of ECE, MVGR.
- 48. Attended mini POCO 2018, Mini- Panel of Conference Organizers, on 20th May 2018, in Visakhapatnam, Andhra Pradesh, organized by IEEE Hyderabad section in collaboration with IEEE region 10 and IEEE India council.
- 49. Attended AP International Conference and Workshop on Transformations in Engineering Education (APICTIEE 2018), during July 15-17, 2018, in SRM University, Amaravati, AP.
- 50. Faculty Development Programme on DNA of Mixed Signal IC Design for portable Systems from 20th 25th May, 2019 in NIT Warangal. Organized by E&ICT Academy, NIT Warangal.
- 51. Faculty Development Programme on Outcome Based Education (OBE) from 27th 01st June, 2019 in Dadi Institute of Engineering and Technology, Anakapalle. Organized by E&ICT Academy, NIT Warangal.
- 52. One week AICTE MHRD sponsored online STTP on "Design and Simulation of Miniature Antenna for IoT Applications" Organized by MVGR College of Engineering(A), Vizianagaram during 29th June to 04th July , 2020.
- 53. One week AICTE MHRD sponsored online STTP on "Design of Miniature Antenna for 5G and IoT Applications (DMAIA-2020)" Organized by MVGR

College of Engineering(A), Vizianagaram during 10th August to 15th August, 2020.

- 54. One week online short term course on Antenna and Microwave Fundamentals, Theory, Modeling, Test and Applications for Space, Air and Ground Systems held from 26th - 30th Sept 2020, organized by Dept of Electrical Engineering, National Institute of Technology, Rourkela and Sponsored by IEEE Antenna and Propagation Society, Kolkata chapter and TEQIP-III.
- 55. Workshop on 'Advanced Antennas for Space and Industrial Applications: Design, Modeling, Hardware and Test' organised by AP-S & MTT-S Kerala Chapter, IEEE IIST SBC, MTT-S and AP-S, & GECBH, Thiruvananthapuram on 2nd & 3rd December, 2020.
- 56. International Symposium on Antennas and Propagation (APSYM 2020), Organized by the Department of Electronics, CUSAT on December 14-16, 2020.
- 57. Faculty Development Programs (FDP) on "Frugal Innovation and Social Entrepreneurship", organized by National Institute of Technology Mizoram, during January 25-30, 2021.
- 58.NEP Orientation and Sensitization Programme organized by the Malaviya Mission Teacher Training Centre at IIITDM Kancheepuram, Chennai during May 20-30. 2024.

Projects Guided:

- Guided 1 and guiding 4 research scholars for Ph.D.
- Guided 33 M. Tech Projects .

Workshops organized/Member of Organizing Committee:

- Member of organizing committee in an International Conference on Bio-Medical Electronics and Telecommunications (BET-04) conducted by Dept. of ECE, AU College of Engineering, Andhra University, Visakhapatnam, during December 9-10, 2004
- Member of organizing committee in a National Workshop, "Workshop on Latest Technologies in Electronic Communications (WOLTEC-05)" conducted by M.V.G.R. College of Engineering, Vizianagaram, during 12-13, March 2005
- Secretary of a National Conference on Advanced Communication Technologies (ACT – 06) conducted by Dept. of ECE, AU College of Engineering, Andhra University, Visakhapatnam, during December 8-9,2006
- Co-convener of a Zonal Seminar on Emerging and Converging Communication Technologies (SECT – 07) conducted by Dept. of ECE, AU College of Engineering, Andhra University, Visakhapatnam, during February 10-11,2007

- 5. Member of organizing committee of a National Workshop, "Workshop on Latest Technologies in Electronic Communications (WOLTEC-07)" conducted by M.V.G.R. College of Engineering, Vizianagaram
- Member of organizing committee of "An Awareness program in energy saving in using electric/electronic home appliances for house wives (PESEHA)" conducted by Dept. of ECE, AU College of Engineering, Andhra University, Visakhapatnam, during 28-2-2007
- 7. Member of organizing committee of "Training Program for ITI Candidates (Electronics, Computers, Electrical and Instrumentation Trade) to Provide Self-Employment and Entrepreneurship in the Design and Fabrication of Electronic Adapter Circuits (PEAC)" conducted Dept. of ECE, AU College of Engineering, Andhra University, Visakhapatnam, during 12-13, March, 2007
- 8. Member of organizing committee of "Short term course on Advanced Electromagnetics and applications (STAEM-07)" conducted by Dept. of ECE, AU College of Engineering, A U, Visakhapatnam, during 18-21, May, 2007
- 9. Co-Convener PRAKIRANA- 08 Organized by IEEE student's chapter MVGR College of Engineering, Vizianagaram.
- Member of organizing committee of National conference on "advances in signal processing (NCASP – 09) jointly organized by Dept. of ECE, AU College of Engineering, Andhra University, Visakhapatnam, IETE Visakhapatnam and Bleking Institute of Technology Sweden during 20th and 21st Nov 2009.
- 11. Convenor, A National level students' technical fest (NIMBUS-10) Organized by IEEE students chapter, SPACE, Dept. of ECE, MVGR College of Engineering, Vizianagaram on 12th March 2010.
- 12. Convener, A Two day national level Workshop on Latest Technologies in Electronic Communications (WOLTEC-11) during 22nd -23rd, December 2011 at M.V.G.R. College of Engineering, Vizianagaram
- Coordinator, Teachers Training Programme in Digital Communications 25th & 30th June 2012 at MVGR College of Engineering, organized by AP State Council of higher education, in association with JNTU Kakinada.
- Organizing Committee Member of Technical conference on "Advanced Communication & Computer Technologies " (ACCT – 2012) organized in NSTL Visakhapatnam during 6th and 7th July 2012 by IETE Visakhapatnam centre.
- 15. Convener, Workshop on Digital Communication Laboratory 21st July 2012 at MVGR College of Engineering. Vizianagaram.
- Convener, Workshop on LabVIEW of National Instruments 1st to 3rd November 2012 at MVGR College of Engineering. Vizianagaram as part of 2012 Indo-US collaboration of Engineering Education (IUCEE)
- 17. Convener, Workshop on VLSI Design using Mentor Graphics Tools, 3rd & 4th

January 2013 at MVGR College of Engineering. Vizianagaram.

- Convener, International Workshop on Embedded Systems organized by Department of ECE, MVGR College of Engineering, Vizianagaram during 3rd to 5th Jan 2015
- 19. Convener, Wipro Mission 10X Engineering Faculty workshop at MVGR College of Engineering. Vizianagaram during 28th to 30th Jan 2015.
- Organized Two day Workshop on "Advances in Digital Signal Processing" during 19th 20th Feb. 2016, Co-Sponsored by IEEE Vizag Bay Sub Section, MVGR IEEE Student Branch (01921) & Departments of ECE and EEE, MVGR College of Engineering.
- 21. Convener, Wipro Mission 10X Engineering Faculty workshop at MVGR College of Engineering. Vizianagaram during 2nd to 4th March 2015.
- Convener FDP on "Advanced Digital Signal Processing and Applications" during 8th 13th November, 2016 jointly organized by E & ICT, NIT Warangal and MVGR(A).
- Convener, Workshop on Internet of Things by Phytec Embedded Pvt. Ltd at Department of ECE, MVGR College of Engineering(A) during 28th November to 3rd December 2016.
- 24. Convener, Workshop on "Design and Analysis of Antennas using HFSS " in association with Entuple, Bangalore on 20th to 22nd June 2017
- 25. Convener, Workshop on "Advanced Antennas & Applications, WAA -17" during 28th Nov – 2nd Dec. 2017 in Department of ECE, MVGR, in association with IEEE Antenna Propagation Society.
- 26. Convener, Workshop on Signal Processing Via Python in association with IEEE Vizag Bay Sub-section on 28th July, 2018 in Department of ECE, MVGR.
- 27. Member of the special session committee and technical review committee for IEEE Indian Conference On Antennas and Propagation, InCAP 2018, in Hyderabad during December 16-19, 2018
- 28. Member of technical programme committee and sponsorship & publicity committee, ICISGT-2019: IEEE International Conference On Intelligent Systems And Green Technology in Visakhapatnam during 10-11 May 2019.
- 29. Member of the TPC , Sponsorship and Exhibition committee for IEEE Indian Conference On Antennas and Propagation, InCAP 2019, organized during December 19-22, 2019 in Ahmedabad.
- 30. Member of the Organizing Committee for Wireless, Antenna & Microwave Symposium, WAMS 2022, scheduled during June 5-8, 2022 in NIT Rourkela.
- 31. Member of the Executive Committee for Wireless, Antenna & Microwave Symposium society.
- 32. TPC Chair for Wireless, Antenna & Microwave Symposium, WAMS 2023, scheduled during June 7-10, 2023 in PDEU, Gandhinagar, Ahmedabad.

33. Co- General Chair for Wireless, Antenna & Microwave Symposium, WAMS 2024, scheduled during February 29 to March 3, 2024 in REC, Visakhapatnam.

Reviewer

- IEEE Transactions on Antennas and Propagation.
- IEEE Antennas and Propagation Magazine
- IEEE Antennas and Wireless Propagation Letters
- IEEE Access
- Elsevier Journal
- International Journal of Wireless & Mobile Networks ERA Indexed
- International Conference InCAP 2018, 2019
- International Conference ICMEET 2015, 2017
- International Conferences INCEMIC-2016
- International Symposium WAMS 2022
- International Symposium WAMS 2023

Professional Memberships

- Senior Member of IEEE
- > Fellow of IETE, New Delhi.
- > Fellow of Institution of Engineers (India), Kolkata
- > Life member of Society EMC Engineers (India).
- Life member of ISTE
- Life member of ISOI
- > Life Senior member of WAMS Society.