

KL ACCREDITED BY NAAC WITH A++ CATEGORY 1 UNIVERSITY NATIONAL INSTITUTIONAL 2024 RANKING FRAMEWORK RANKED 22 AMONG ALL UNIVERSITIES

45 YEARS OF EDUCATIONAL

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

ANTENNAS AND LIQUID CRYSTALS RESEARCH CENTER (ALRC)



ABOUT

The Antennas and Liquid Crystals Center (ALRC) was established in 2008. The main objective of this state-of-the-art facility is to support research, analysis, modelling, testing and development efforts related to antennas and liquid crystal-based systems. This center is equipped with the latest antenna and microwave design tools like ANSYS Electronics Desktop, CST Microwave Studio, AWR, ADS, ntenna Magus, COMSOL Multiphysics and MATLAB. Thetesting facilities also include Anechoic Chamber, VectorNetwork Analyzers, Spectrum Analyzers, PCB Prototype Machine. Dielectric Probe, Differential Scanning Calorimeter, Liquid Crystal Analysis System, Polarizing Microscope.Computational facilities are available for research in the ALRC includes a network of several high-performance workstations with high-speed 1000 NIBPS network of UNIX and Windows research workstations.

The center is currently supporting research on Low-profile, electrically small and Reconfigurable antennas, Ultra-wideband antennas, Metamaterial surfaces and media. Fractal antennas, Defected ground structured antennas, Filtennas, EBG structures, Flexible and Conformal antennas etc. Liquid crystal polymer-based antennas and Liquid crystal antennas are being used for flexible and tuneable applications- We are working in liquid crystal materials characterization and synthetization also and using Image processing techniques to enhance the textural images and finding the statistical parameters to identi\$' the liquid

VISION

To Provide the state-of-the-art facility, established to support research, analysis, modelling, test and development efforts related to "Antennas" and "Liquid crystal" based systems.

1	П	1
(C		
1	<u> </u>	/

MISSION

To advance the science and technology of advanced antennas and microwave communication systems.

The mission includes designing, developing, and optimizing antenna technologies for a wide range of applications, from telecommunications and broadcasting to radar, satellite, and space communications

The center aims to foster innovation, enhance performance, and improve efficiency in wireless communication systems, while also contributing to education, research, and industry collaboration.



OBJECTIVES

To conduct cutting-edge research in electromagnetic theory, antenna systems, and wireless communication technologies, liquid crystal applications addressing both theoretical and practical challenges.

To promote sustainable and cutting-edge technologies and to address current and future challenges in global connectivity and communication infrastructure.

To partner with industries and academic institutions, facilitating knowledge transfer and technological advancements in Antenna Systems and Liquid Crystals.

THRUST AREAS AND APPLICATIONS

Low-profile, electrically small antennas Metamaterial surfaces and media Ultra-wideband antennas Defected ground structured antennas Fractal antennas Reconfigurable antennas Filtennas EBG structures, Flexible and Conformal antennas

Liquid crystal polymer-based antennas and Liquid crystal antennas

FSS, AMC, Biocompatible Antennas

Liquid crystal materials characterization and synthesis

Application of image processing techniques to enhance the textural images and finding the

	UENCY NGE	COMMUNICATION APPLICATIONS
880 MHz	880 MHz	GSM 950
- 1176.45 MHz/1227.60 MHz/ 1381-05 MHz		GPS L5/L2/L1
1.68 GHz	2.68 GHz	PCS band
1710 MHz	1880 MHz	GSM 1800
1850 MHz	1990 MHz	GSM 1900
1.9 GHz	2.025 GHz	LTE33-37
1920 MHz	2170 MHz	UMTS
1980 MHz	2200 MHz	Mobile satellite service E2S Reverse link
2305 MHz	2400 MHz	LTE 2300
2.4 GHz	2.4835 GHz	ISM2.4G/WLAN/ISM/Bluetooth, GPS, COMPASS, GLONASS, GALILEO (802.11b/g/n: 2.4-2.48 GHz)
2500 MHz	2690 MHz	LTE 2500
3400 MHz	3600 MHz	WiMAX
5.15 GHz	5.875 GHz	WLAN 802.11a/n
5.85 GHz	5.925 GHz	DSRC, V2V V2I 802.11p
3.1 GHz	10.6 GHz	Ultra-Wideband
30 GHz	300 GHz	Millimeter Waves (mmWave)
0.1 THz	10 THz	Terahertz (THz)

ASSOCIATED MEMBERS



Dr.B.T.P.Madhav Professor, Addl.Dean R&D



G.Srinivasa Rao



Dr. K Kumar Naik Professor



CH.Naga Phaneedra



Dr. Habibulla Khan Professor



G.Obulesu Ydav



Dr. P Paranasaradi Professor



K.S.T.Sai



Dr. Ushadevi Yalavarthi Associate professor

COLLABORATORS



Dr. Alathbah Moath a King Saud University, Saudi Arabia



Dr. Sudipta Das IMPS College of Engineering & Technology, India



Dr. Niamat Hussain Sijong University, South Korea



Dr. Islam Tanvir University of Houseton, Texas



Dr. T Shanmugananthan Central University, Podicherry, India



Dr. El Ghzaoui, Mohammed Ben Abdella University



Dr. Eng Leong Ton, Nanyang Technological University, Singapore



Dr. El alami ali Mouly Ismail University

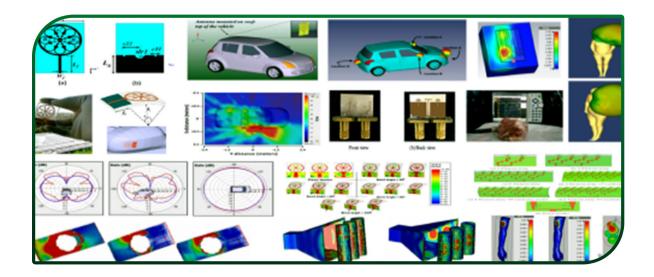


Dr. J Ravi Kumar, NIT Warangal, India

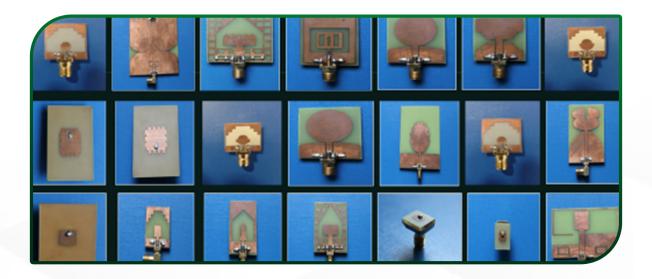


Dr. Soufian Lakrit, University Mohammed Premier, Morocco

RESEARCH WORKS

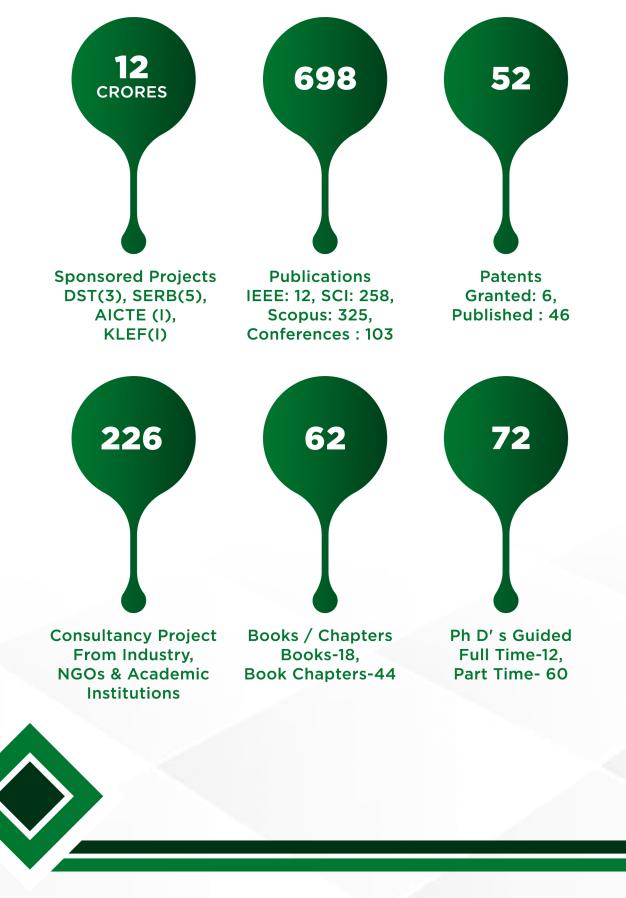


PROTOTYPE MODELS



RESEARCH OUTCOMES

Prototyped Models:586, Workshops Conducted: 28, Conferences Conducted: 8, Guest Lectures Given: 54, Video Lectures: 36



- 1. Design and development of planar printed antenna prototypes for wireless applications, Lakshmi Engineering Services, Cost: Rs 45,000, Year: 2018
- 2. Development of Planar Antenna Modules for Industrial Wireless Communications,Maharshi Research Consultancy, Cost: Rs 40,000, Year: 2018
- 3. Design & Development of Metamaterial Inspired Conformal Triband Antenna forMicrowave Sensing Applications, Chandrakala Scan Systems, Cost: Rs 40,000, Year:2020
- 4. Fabrication and Analysis of Proximity Coupled Two-Layer Antenna for ISM Band, SASIInstitute of Technology and Engineering, Cost: Rs 2,800, Year: 2020.
- 5. Prototyping and analysis of four port hybrid slot coupler, Lakireddy Bali Reddy Collegeof Engineering, Rs 2,000, Year: 2020
- 6. Design and development of orthogonal MIMO antenna using SRR, Sri Vasavi Engineering College, Rs 2,800, Year: 2020
- 7. Fabrication and analysis of Triple band slot monopole antenna for wireless applications,St Anns College of Engineering and Technology, Rs 5,200, Year: 2020
- 8. Design and analysis of UWB antenna for LTE band wireless communication applications, PBR Visvodaya Institute of Technology and Science Nellore, Rs 3,200, Year: 2020
- 9. Prototyping and analysis of SIW antenna for C band applications, RVR & JC Collegeof Engineering, Rs 3,000, Year: 2020
- 10. Design and analysis of multilayer dual band antenna for satellite applications, BABAInstitute of Technology and Sciences, Rs 2,000, Year: 2020.
- 11. Characterization and testing of UWB antenna for wireless applications, V R SiddharthaEngineering College, Rs 3,400, Year: 2020
- 12. Design and Analysis of Jeans based monopole antenna for GSM, LTE and WLANapplications, Pondicherry Engineering College, Rs 1,700, Year: 2020
- 13. Prototyping and analysis of triple band for off-body communications, RavindraCollege of Engineering, Rs 3,500, Year: 2020
- 14. Design and Analysis of Dual band antenna for WBAN applications, Vishnu Institute of Technology, Rs 3,100, Year: 2020
- 15. Design and analysis of flexible dual band antenna for wearable applications, St Ann'sCollege of Engineering and Technology, Rs 4,000, Year: 2020.
- 16. Fabrication and Analysis of UWB antenna for satellite applications, Gayatri VidyaParishad, Rs 4,000, Year: 2020
- Prototyping and characterization of textile dual-band antenna for wireless applications, Pondicherry Engineering College, Rs 5,100, Year: 2020.

- 18. Fabrication and Testing of Low-Profile Frequency Reconfigurable Monopole Antennafor Vehicular Communications, SRM Institute of Science and Technology, Rs 5,000,Year: 2020
- 19. Prototyping and Testing of Polarization Reconfigurable Antenna for Satellite CommApplications, Siddhartha Engineering College, Rs 4,500, Year: 2020
- 20. Fabrication and Testing of Tapered Slot Antenna for WLAN Applications, JawaharlalNehru Govt Engineering College, Rs 4,500, Year: 2020
- 21. Design and Testing of Pattern Reconfigurable Antenna for WBAN, SiddharthaEngineering College, Rs 4,500, Year: 2020
- 22. Substrate Integrated Waveguide slot antenna, RVR and JC college of engineering, Rs5,200, Year: 2020
- 23. Design and Characterization of dual band filtenna with high efficiency, PBR VisvodayaInstitute of Technology, Rs 5,800, Year: 2021
- 24. Design and Prototyping of multiband metamaterial, Jawaharlal Nehru govt Engineering college, Rs 7,200, Year: 2021
- 25. High gain dual band dielectric resonator bases antenna for satellite communication,Ravindra college of engineering for women, Rs 3,800, Year: 2021
- 26. Flexible polyimide based UWB antenna, Lakireddy Bali Reddy college of engineering,Rs 4,000, Year: 2021
- 27. Jeans based conformal dual band antenna for wearable application, Vishnu instituteof technology, Rs 4,200, Year: 2021
- 28. Design and prototyping of reconfigurable Meta surface of wireless application, SRMUniversity, Rs 4,600, Year:2021
- 29. Design of high gain wheel shaped antenna for wireless application, Pondicherryengineering college, Rs 4,500, Year: 2021
- 30. Design of hybrid model by integrating microstrip patch antenna and slot antennawith RT-duroid substrate for 5G communications, Vikas College of Engineering andTechnology, Rs 5,500, Year: 2021
- 31. Wideband SIW slot antenna, RVR & JC College of Engineering, Rs. 4,500, Year: 2021
- 32. Flexible and compact PDMS based UWB antenna, Lakireddy Bali Reddy College ofEngineering, Rs 4,700, Year: 2021
- 33. Fabrication of Reconfigurable antenna for 5G communications, Siddhartha Engineering college, Rs 8,400, Year: 2021
- 34. Design and prototyping of flexible, multiband metamaterial absorber, JawaharlalNehru Govt. Engineering College, Rs 4,900, Year: 2021.
- 35. Design and analysis of Two MIMO antennas for testing, St. Anns college of engineeringand technology, Chirala, Cost: Rs 1,000, Year: 2017.
- 36. Fabrication and testing of TWO Single Port Antennas for Testing, JNTU Kakinada, Rs1,000, Year: 2017.
- 37. Fabrication and analysis of proximity coupled 2-layer antenna for ISM band, GunturEngineering College, Rs 3,000, Year: 2017.

- 38. Prototyping and Analysis of Planar Log-periodic dipole, SRKR Engg CollegeBhimavaram, Rs 1,000, Year: 2017.
- 39. Design and Development of Circular patch antenna with EGB and Defect Ground, Spoorthy Engg College Hyderabad, Rs 2,000, Year: 2017.
- 40. Design and analysis of flexible dual band antenna for wearable applications, SRKREngg College Bhimavaram, Rs 1,000, Year: 2017.
- 41. Fabrication and analysis of Array Antenna, Inhouse Consultancy Work, Rs 1,000, Year:2017.
- 42. Design and Development of Power divider, NRIIT, Vijayawada, Rs 1,000, Year: 2017.
- 43. Prototyping and analysis of Metamaterial Antennas, DMSSVH college of Engg,Machilipatnam, Rs 1,000, Year: 2017.
- 44. Design and development of UWB antenna with triple Notch, JNTU Kakinada, Rs2,000, Year: 2017.
- 45. Prototyping and analysis of circular patch antenna with cpw, St. Anns college of engineering and technology, Chirala, Rs 1,000, Year: 2018.
- 46. Prototyping and analysis of circular patch antenna with cpw, St. Anns college of engineering and technology, Chirala, Rs 1,000, Year: 2018.
- 47. Fabrication and Analysis of Multiband MIMO antenna, VR Siddhartha College of EnggVijayawada, Rs 1,000, Year: 2018.
- 48. Characterization and testing of UWB antenna for wireless applications, InhouseConsultancy Work, Rs 1,500, Year: 2018.
- 49. Fabrication and analysis of Array Antennas, SRKR Engg College Bhimavaram, Rs1,500, Year: 2018.
- 50. Prototyping and Analysis of single band 2.4Ghz resonant antenna, JNTU Kakinada, Rs1,000, Year: 2018.
- 51. Fabrication and Analysis of Dual band antenna, Vignan's College of Engineering forWomen, Guntur, Rs 2,000, Year: 2018.
- 52. Design and development of dual band antenna and UWB antenna, Shri Vishnu Collegeof Eng Bhimavaram, Rs 1,000, Year: 2018.
- 53. prototyping and analysis of dual band antenna, St. Anns college of engineering andtechnology, Chirala, Rs 1,000, Year: 2018.
- 54. Fabrication and analysis of UWB antenna with Notch band, JNTU Kakinada, Rs 2,000,Year: 2018.
- 55. Design and development of Wide band and dual band antenna, Inhouse ConsultancyWork, Rs 1,000, Year: 2018.
- 56. Fabrication and analysis of WIMAX antenna, Inhouse Consultancy Work, Rs 1,000, Year: 2018.
- 57. Design and Analysis of Jeans based Monopole antenna for GSM, LTE &WLANApplications, Pondicherry Engg. College, Pondicherry, Rs 1,700, Year: 2018.
- 58. Design and analysis of multilayer dual band antenna for satellite applications, BABAInstitute of Technology and Sciences, Rs 2,000, Year: 2018.

- 59. Prototyping and Analysis of 4-port hybrid slot coupler, Lakireddy Bali Reddy collegeof Engineering, Rs 2,000, Year: 2019.
- 60. Fabrication and Analysis of UWB antenna for satellite applications, Gayatri VidyaParishad, Rs 2,000, Year: 2019.
- 61. Fabrication and analysis of proximity coupled 2-layer antenna for ISM band, SasiInstitute of Engg. & Technology, Tadepalligudem, Rs 2,800, Year: 2019.
- 62. Prototyping and analysis of SIW antenna for C-band applications, RVR & JC collegeof engineering, Guntur, Rs 3,000, Year: 2019.
- 63. Design and analysis of UWB Antenna for LTE band Wireless applications, PBRVisvodaya Institute of technology& science, Nellore, Rs 3,200, Year: 2019.
- 64. Prototyping and analysis of Triple band antenna for off-body communications,Ravindra college of engineering for women, Kurnool, Rs 3,500, Year: 2019.
- 65. Design and testing of multiband antenna for Wi-Fi, WiMAX and WLAN applications,St. Anns college of engineering and technology, Chirala, Rs 5,800, Year: 2019.
- 66. Prototyping and characterization of textile dual band antenna for wireless applications,Pondicherry Engg. College, Pondicherry, Rs 5,100, Year: 2020.
- 67. Design and Analysis of FSS at 5.8GHz, Jawaharlal Nehru Govt Engineering Collage,Sunder Nagar, Mandi (H.P), Rs 4,600, Year: 2020.
- 68. Prototyping and Analysis of semicircular patch antenna for ISM Band applications, Jawaharlal Nehru Govt Engineering Collage, Sunder Nagar, Mandi (H.P), Rs 4,700, Year: 2020.
- 69. Design and prototyping of Millimeter wave band antenna for 5G Application UsingDGS, Vishnu Institute of Technology, Vishnu Puram, Bhimavaram, West Godavari(Dist.), A.P., Rs 4,400, Year: 2020.
- 70. Design and Fabrication of compact tapered log periodic -Antenna for sub 6 GHz5G Applications, Vishnu Institute of Technology, Vishnu Puram, Bhimavaram, WestGodavari (Dist.), A.P, Rs 5,400, Year: 2020.
- 71. Design and analysis of 4-port MIMO Antenna for wireless applications, VIT, Bhopal,Karikalan, Sehore, M.P, Rs 4,900, Year: 2020.
- 72. Fabrication and analysis of reconfigurable multiband monopole antenna for wearableapplications, SRM Institute of Technology, Ramapuram, Chennai, T.N, Rs 4,800, Year:2020.
- 73. Fabrication and testing of low-profile frequency Reconfigurable monopole antennafor wireless communications, S.R.M Institute of Science & Technology, Ramapuram, Rs 5,000, Year: 2020.
- 74. Design and Testing of Tapered slot Antenna for WLAN Application, Jawaharlal NehruGovernment Engineering Collage, Sundernagar, Rs 4,500, Year: 2020.

- 75. Prototyping and Testing of Polarizations reconfigurable antenna for satellitecommunications, V. R Siddhartha engineering collage, Vijayawada, Rs 4,500, Year:2020.
- 76. Design and Testing of Pattern reconfigurable antenna for WBAN, V. R Siddharthaengineering college, Vijayawada, Rs 4,500, Year: 2020.
- 77. SIW slot Antenna, RVR & JC college of engineering, Guntur, Rs 5,200, Year: 2020.
- 78. Design & Characterization of dual band filtenna with high efficiency, PBR VisvodayaInstitute of technology & science, Nellore, Rs 5,800, Year: 2020.
- 79. Design & prototyping of multiband metamaterial absorber, Jawaharlal NehruGovernment Engineering Collage, Sundernagar, Rs 7,200, Year: 2020.
- 80. High Gain Dual band dielectric Resonator based antenna for satellite communications,Ravindra college of engineering for women, Kurnool, Rs 3,800, Year: 2020.
- 81. Jeans based conformal dual band antenna for wearable applications, Vishnu Instituteof Technology, Vishnu Puram, Bhimavaram, West Godavari (Dist.), A.P, Rs 4,200, Year:2020.
- 82. Design and prototyping of reconfigurable Meta surface for wireless applications, SRMInstitute of Technology, Ramapuram, Chennai, T.N, Rs 4,600, Year: 2021.
- 83. Design of high Gain wheel shaped antenna for wireless applications, PondicherryEngg. College, Pondicherry, Rs 4,500, Year: 2021.
- 84. Design of hybrid model by integrating microstrip patch antenna & slot antennawith RT duroid for 5G communications, Vikas college of engineering and Technology,nunna, Vijayawada, Rs 5,500, Year: 2021.
- 85. Flexible and compact PDMS based UWB antenna, Lakireddy Bali Reddy college ofEngineering, Rs 4,700, Year: 2021.
- 86. Fabrication of reconfigurable antenna for 5 G communications, VR SidharthaEngineering college, Vijayawada, Rs 8,400, Year: 2021.
- 87. Design and prototyping of flexible multiband metamaterial absorber, JawaharlalNehru Government Engineering Collage, Sundernagar, Rs 4,900, Year: 2021.
- 88. Functional verification of varactor based tuned monopole antenna for X-bandapplications, V R Siddhartha engineering collage, Vijayawada, Rs 4,200, Year: 2021.
- 89. Prototype modelling of textile based elliptical antenna with circular polarization forwearable applications, Pondicherry Engg. College, Pondicherry, Rs 2,800, Year: 2021.
- 90. Implementation of compact, low-profile planar dipole antenna with Meta surfacefor X-band communication, Pace Institute of Technology and Sciences, Ongole., Rs8,500, Year: 2021.
- 91. Modelling, prototyping and verification of planar slot antenna for dual bandapplications, Pace Institute of Technology and Sciences, Ongole.,

Rs 6,100, Year: 2021.

- 92. Design and analysis of 2-port MIMO antenna with high isolation for satellitecommunications, PVP. Siddhartha Institute of Technology, Vijayawada, Rs 5,400,Year: 2021.
- 93. Fabrication and testing of a dual band circular shaped antenna for Wi-Fi applications,Inhouse Consultancy Work, Rs 1,000, Year: 2021.
- 94. Prototype modelling of a flexible polyimide antenna with circular polarization, VRSidhartha Engineering college, Vijayawada, Rs 3,500, Year: 2021.
- 95. Biodegradable Antenna using PDMS for ISM band, NIT, Jamshedpur, Rs 1,500, Year:2021.
- 96. Single layer Unidirectional Antenna, SV University, Rs 5,500, Year: 2021.
- 97. High gain flexible antenna (Gain >7 dBi), Inhouse Consultancy Work, Rs 3,000,Year: 2021.
- 98. Double layer Unidirectional Antenna with AMC, Inhouse Consultancy Work, Rs 1,000,Year: 2021.
- 99. fabrication and testing of MIMO for millimeter wave applications, Inhouse ConsultancyWork, Rs 7,500, Year: 2021.
- 100. Low profile and low SAR Antenna, SV University, Rs 4,600, Year: 2021.
- 101. Reconfigurable Meta surface for 2.4 GHz antenna integration, Srivastava Engg.College, Tadepalligudem, Rs 4,700, Year: 2021.
- 102. Multifunctional Antenna, RVR & JC college of engineering, Guntur, Rs 4,900, Year:2021.
- 103. Compact textile antenna for wireless applications, Lakireddy Bali Reddy college ofEngineering, Rs 4,200, Year: 2021.
- 104. Flexible dual band antenna with circular polarization, Raghu Engineering College, Rs1,000, Year: 2021.
- 105. Low Cross Polarized antenna, Inhouse Consultancy Work, Rs 3,000, Year: 2021.
- 106. cross polarized antenna to enhance gain for X band applications, SV University, Rs3,500, Year: 2021.
- 107. rectangular patch antenna with CPW feed for ISM applications, NIT, Rourkela, Rs1,200, Year: 2021.
- 108. Star shaped circular patch antenna with high gain, Lakireddy Bali Reddy college ofEngineering, Rs 1,500, Year: 2021.
- 109. Flower shaped antenna on textile substrate for WBAN applications, SRM Institute of Technology, Ramapuram, Chennai, T.N, Rs 2,400, Year: 2021.
- 110. Fractal shape antenna with flexible polyimide substrate for WiMAX applications, JNTU Anantapur, Rs 4,000, Year: 2021.
- 111. characterization and testing of rectangular antenna with partially slotted ground forISM applications, Lakireddy Bali Reddy college of Engineering, Rs 1,500, Year: 2022.
- 112. Testing of jeans substrate based circular patch antenna with slotted ground, RVR &JC college of engineering, Guntur, Rs 1,500, Year: 2022.

- 113. Fabrication and testing of a miniaturized SIW antenna for WLAN applications,Lakireddy Bali Reddy college of Engineering, Rs 2,500, Year: 2022.
- 114. Compact wide band patch antenna for WLAN communication, VR SidharthaEngineering college, Vijayawada, Rs 2,500, Year: 2022.
- 115. Prototyping and testing of aa elliptical shaped antenna for LTE applications, UshaRama College, Rs 1,500, Year: 2022.
- 116. design and testing of triple band DGS antenna for X band applications, Usha RamaCollege, Rs 2,000, Year: 2022.
- 117. Design and testing of a jean's antenna with slotted ground for ISM applications,Lakireddy Bali Reddy college of Engineering, Rs 2,000, Year: 2022.
- 118. Fabrication and testing of UWB antenna with DGS structure for K band applications, Jawaharlal Nehru Government Engineering Collage, Sundernagar, Rs 1,700, Year:2022.
- 119. fabrication and testing of dual band monopole antenna, Ravindra college of engineering for women, Kurnool, Rs 1,700, Year: 2022.
- 120. Reconfigurable MIMO antenna for millimeter wave applications, Vishnu Institute ofTechnology, Vishnu Puram, Bhimavaram, West Godavari (Dist.), A.P, Rs 4,000, Year:2022.
- 121. Circularly polarized UWB antenna for wireless communication applications, JNTUAnantapur, Rs 2,200, Year: 2022.
- 122. design and testing of a multiband 2-port antenna array, Srivasavi Engg. College,Tadepalligudem, Rs 1,200, Year: 2022.
- 123. Frequency reconfigurable antenna with dual band for LTE applications, LakireddyBali Reddy college of Engineering, Rs 2,200, Year: 2022.
- 124. Fabrication of a metamaterial-based monopole antenna for C band applications, Usha Rama College, Rs 1,000, Year: 2022.
- 125. Multi slotted printed antenna with FSS for k and Ku band applications, St. Annscollege of engineering and technology, Chirala, Rs 3,500, Year: 2022.
- 126. Fabrication of a simple patch antenna for wi-fi applications, Inhouse ConsultancyWork, Rs 800, Year: 2022.
- 127. Characterization and testing of a dual notch band antenna for satellite applications,Potti Sree Ramulu College, Rs 1,000, Year: 2022.
- 128. High gain modified Vivaldi antenna for vehicular communication applications, Jawaharlal Nehru Government Engineering Collage, Sundernagar, Rs 1,900, Year:2022.
- 129. Metamaterial based T-shaped antenna for satellite applications, Andhra University,Rs 4,200, Year: 2022.
- 130. fabrication and testing of circular patch antenna for c band applications, Potti SreeRamulu College, Rs 1,500, Year: 2022.
- 131. Design and testing of pi shaped antenna with slotted CPW fed for ISM applications,Inhouse Consultancy Work, Rs 1,000, Year: 2022.

- 132. Design and characterization of flexible antenna with backed meta surface, ANITScollege, Rs 1,900, Year: 2022.
- 133. Testing of a felt substrate based dual band antenna for wearable applications, VRSidhartha Engineering college, Vijayawada, Rs 1,700, Year: 2022.
- 134. Metamaterial based reconfigurable tree shaped antenna with slotted ground forsatellite applications, Potti Sree Ramulu College, Rs 4,500, Year: 2022.
- 135. flexible high gain antenna with quad band for ISM applications, Ravindra college of engineering for women, Kurnool, Rs 2,200, Year: 2022.
- 136. Design and testing of a microstrip slotted antenna with SIW for multiband applications, Potti Sree Ramulu College, Rs 6,000, Year: 2022.
- 137. Fabrication and testing of FSS based antenna for wearable applications, SRM Instituteof Technology, Ramapuram, Chennai, T.N, Rs 1,500, Year: 2022.
- 138. Testing and analysis of dual notch band antenna for low frequency applications, Gudlavelleru Engineering College, Rs 3,000, Year: 2022.
- 139. Fabrication of a slotted ring antenna with CPW feed, Potti Sree Ramulu College, Rs1,000, Year: 2022.
- 140. circularly polarized metamaterial based triband antenna for X band applications,Pondicherry Engg. College, Pondicherry, Rs 1,700, Year: 2022.
- 141. Testing and analysis of a patch antenna with SIW slots for LTE applications, InhouseConsultancy Work, Rs 2,700, Year: 2022.
- 142. 2-port MIMO antenna with CPW feed for ISM applications, RVR & JC college of engineering, Guntur, Rs 10,800, Year: 2022.
- 143. Triband antenna with RT-Duroid substrate to improve the efficiency for satelliteapplications, Inhouse Consultancy Work, Rs 4,100, Year: 2022.
- 144. circularly polarized single band antenna with AMC backing for wireless applications, Adithya Engineering College, Rs 2,400, Year: 2022.
- 145. circularly polarized dual notch band antenna with DGS, Raghu Engineering College,Rs 9,700, Year: 2022.
- 146. Flexible textile-based antenna with backed meta surface for multiband operation for WBAN applications, Pune, Rs 4,200, Year: 2022.
- 147. Meta surface based single band monopole antenna for Ku band applications, InhouseConsultancy Work, Rs 1,500, Year: 2022.
- 148. Antenna array with quad band circularly polarized structure for ISM applications, Adithya Engineering College, Rs 1,000, Year: 2022.
- 149. metamaterial inspired slotted SRR based antenna with DGS ground, InhouseConsultancy Work, Rs 1,000, Year: 2022.
- 150. Elliptically polarized miniaturized antenna with quad band for satellite applications, Inhouse Consultancy Work, Rs 3,700, Year: 2022.

- 151. metamaterial based miniaturized rectangular patch antenna with CPW feed, Ravindracollege of engineering for women, Kurnool, Rs 3,500, Year: 2022.
- 152. power divider circuit for LTE applications, Inhouse Consultancy Work, Rs 1,700, Year:2022.
- 153. Antenna array with dual band CPW fed for WiMAX applications, Srivasavi Engg.College, Tadepalligudem, Rs 2,700, Year: 2022.
- 154. compact flexible UWB monopole antenna with notch band characteristics, AndhraUniversity, Rs 3,700, Year: 2022.
- 155. Dual band miniaturized antenna with metamaterial slotted DGS ground, RVR & JCcollege of engineering, Guntur, Rs 1,700, Year: 2022.
- 156. Wideband annular ring slotted monopole antenna for LTE and ISM applications, SRMInstitute of Technology, Ramapuram, Chennai, T.N Rs 2,000, Year: 2022.
- 157. Design and testing of a dual band antenna for satellite applications, Jawaharlal NehruGovernment Engineering Collage, Sundernagar, Rs 1,700, Year: 2022.
- 158. Fabrication and testing of a rectangular patch antenna with slotted ground, Ayodhya,Rs 1,700, Year: 2022.
- 159. Design, characterization and testing of rectangular patch antenna with HIS surface,Raghu Engineering College, Rs 8,200, Year: 2022.
- 160. fabrication and testing of flexible polyimide antenna for ISM applications, RVR & JCcollege of engineering, Guntur, Rs 2,200, Year: 2022.
- 161. Design, fabrication and testing of a 4-port MIMO to enhance gain and efficiency,JNTU Anantapur, Rs 7,200, Year: 2022.
- 162. Fabrication of a helical shaped antenna for the UWB applications, Usha Rama College,Rs 1,000, Year: 2022.
- 163. Design and testing of a flexible cone shaped antenna for WiMAX applications, Inhouse Consultancy Work, Rs 1,000, Year: 2022.
- 164. fabrication and testing of a multi band antenna for C, X and Ku band applications, SriVenkateswara college of engineering, Tirupati, Rs 1,700, Year: 2023.
- 165. Prototyping and testing of a polarization independent linearly polarized antennawith CPW feed, VR Sidhartha Engineering college, Vijayawada, Rs 2,600, Year: 2023.
- 166. Characterization and analysis of circularly polarized antenna for C band applications,RVR & JC college of engineering, Guntur, Rs 2,700, Year: 2023.
- 167. Design and testing of a 2 port MIMO antenna to enhance the gain, SVNIT, Rs 3,200,Year: 2023.
- 168. Design and characterization of 2 port antenna with Meta surface for k-bandapplications, Lakireddy Bali Reddy college of Engineering, Rs 3,000, Year: 2023.

- 169. 4-port antenna using Polyimide for dual band, RVR & JC college of engineering,Guntur, Rs 8,200, Year: 2023.
- 170. Antenna with FSS for industrial applications, Gudlavelleru Engineering College, Rs4,000, Year: 2023.
- 171. High gain flexible antenna with the felt substrate, Inhouse Consultancy Work, Rs1,000, Year: 2023.
- 172. 2 port antennae with meta surface for ISM applications, Andhra University, Rs 1,700,Year: 2023.
- 173. 4 port MİMO with high gain and efficiency, ANITS college, Rs 2,200, Year: 2023.
- 174. Low profile MIMO antenna using polyimide substrate, VR Sidhartha Engineeringcollege, Vijayawada, Rs 1,700, Year: 2023.
- 175. Design and testing of dual band antenna with seven different dielectric flexible substrates, Eswar college of Engineering, Coimbatore, Rs 25,700, Year: 2023.
- 176. Multifunctional Antenna with high TARC and ECC, ANITS college, Rs 1,900, Year:2023.
- 177. 2x2 MIMO antenna to enhance isolation, Srivasavi Engg. College, Tadepalligudem, Rs4,700, Year: 2023.
- 178. Flexible 4 port MIMO antenna for millimeter wave applications, VIT, AP, Rs 8,000,Year: 2023.
- 179. MIMO antenna to improve gain for medical applications, VR Sidhartha Engineeringcollege, Vijayawada, Rs 2,500, Year: 2023.
- 180. Characterization and testing of UWB antenna with flexible substrate, Andhra LoyolaInstitute of Engineering and Technology, Rs 7,000, Year: 2023.
- 181. Fabrication and testing of a 4 port MIMO antenna, RVR & JC college of engineering, Guntur, Rs 1,700, Year: 2023.
- 182. Design and testing of an AMC backed antenna for ISM applications, Parimal Tiwari,Rs 4,700, Year: 2023.
- 183. Fabrication and testing of a polygon Shaped 4-port MIMO antenna, GITAM Vizag, Rs4,200, Year: 2023.
- 184. Compact flexible UWB Tree Shaped monopole antenna with notch bandcharacteristics, St. Anns college of engineering and technology, Chirala, Rs 2,000,Year: 2023.
- 185. Fabrication and testing of flexible polyimide antenna for ISM applications, InhouseConsultancy Work, Rs 3,500, Year: 2023.
- 186. Antenna array with dual-band CPW fed for WiMAX applications, Sri Venkateswaracollege of engineering, Tirupati, Rs 4,500, Year: 2023.
- 187. Fabrication of a Y-shaped slotted ring antenna with CPW feed, St. Anns college of engineering and technology, Chirala, Rs 4,500, Year: 2023.
- 188. Rectangular patch antenna with CPW feed for ISM applications, SV universityTirupathi, Rs 2,000, Year: 2023.

- 189. Design and Testing of Pattern reconfigurable antenna for WBAN, Andhra University,Rs 3,400, Year: 2023.
- 190. Reconfigurable Beam Steering Meta surface for 2.4 GHz antenna integration, InhouseConsultancy Work, Rs 3,500, Year: 2023.
- 191. Fabrication and measurements of two S shaped slot wideband antenna, DNR collegeof Engg and technology Bhimavaram, Rs 2,200, Year: 2023.
- 192. Characteristics analyzed of single port textile/fabric(jeans) based antenna,Puducherry University Puducherry, Rs 2,200, Year: 2023.
- 193. Design and testing of inverse T shaped antenna for broadband with CPW, VNITNagpur, Rs 3,000, Year: 2023.
- 194. Fabrication and measurements of Three Slot E shaped antenna, RCW Kurnool, Rs1,700, Year: 2023.
- 195. Design and testing of Shuffle arrows shaped antenna for Wi-Fi applications, VNITNagpur, Rs 2,700, Year: 2023.
- 196. Design and testing of different inductor topologies-based antenna with centeredSwastik shaped, Raghu Engineering College Vizag, Rs 6,200, Year: 2023.
- 197. Design and testing of multi-U shaped wideband reconfigurable antenna, Dr. KKoteswara Hyderabad, Rs 5,000, Year: 2023.
- 198. Fabrication and testing of 4 port Multi S shaped MIMO, Inhouse Consultancy Work,Rs 3,000, Year: 2023.
- 199. SBI emblem shaped two port antennae for broadband applications, GITAM Vizag, Rs2,500, Year: 2023.
- 200. Inverted F shaped single port antenna on cotton materials, Siddhartha Egg College,Rs 2,500, Year: 2023.
- 201. Fabricate and testing two port Lotus shaped antenna for UWB applications, St. Annscollege of engineering and technology, Chirala, Rs 1,700, Year: 2023.
- 202. Design and testing of Double Question mark shaped antenna on flexible materials,NIT Rourkela, Rs 12,700, Year: 2023.
- 203. Characterization and testing of rectangular inverted L shaped antenna arrays for ISMapplications, RISE Gandhi Engg College ONGOLE, Rs 2,500, Year: 2023.
- 204. Design and Testing of jeans substrate based circular patch antenna with slottedground, V.B.S. Paranuchal University, Jaunpur (UP), Rs 5,000, Year: 2023.
- 205. Fabrication and testing of a miniaturized SIW antenna for WLAN applications, St.Anns college of engineering and technology, Chirala, Rs 15,00, Year: 2023.
- 206. Compact wide band patch antenna for WLAN communication, VR SiddharthaCollege of Engg Vijayawada, Rs 2,000, Year: 2023.
- 207. Prototyping and testing of an elliptical shaped antenna for LTE applications, St. Annscollege of engineering and technology, Chirala, Rs 2,200, Year: 2023.

- 208. Design and testing of triple band DGS antenna for X band applications, St. Annscollege of engineering and technology, Chirala, Rs 3,000, Year: 2023.
- 209. Design and testing of a jean's antenna with slotted ground for ISM applications, Kluniversity Vijayawada, Rs 3,600, Year: 2023.
- 210. Fabrication and testing of UWB antenna with DGS structure for Kband applications, Dr. Rammanohar Lohia Avadh University, Ayodhya, Uttar Pradesh, Rs 7,400, Year:2023.
- 211. Fabrication and testing of dual band monopole antenna, Ravindra College ofEngineering for women, Kurnool, Rs 5,200, Year: 2023.
- 212. Reconfigurable MIMO antenna for millimeter wave applications, Ayodhya, UttarPradesh, Rs 5,100, Year: 2023.
- 213. Circularly polarized UWB antenna for wireless communication applications, Puducherry University Puducherry, Rs 10,200, Year: 2023.
- 214. Design and testing of a multiband 2-port antenna array, V R Siddhartha engineeringcollege, Vijayawada, Rs 6,600, Year: 2023.
- 215. Frequency reconfigurable antenna with dual band for LTE applications, St. Annscollege of engineering and technology, Chirala, Rs 4,000, Year: 2023.
- 216. Fabrication of a metamaterial-based monopole antenna for C band applications,RVR & JC college of engineering, Guntur, Rs 2,500, Year: 2023.
- 217. Design of Multi slotted printed antenna with FSS for k and Ku band applications, Veltech university, Chennai, Rs 3,200, Year: 2023.
- 218. Fabrication of a Compact and low-profile patch antenna for wi-fi applications, Kluniversity Vijayawada, Rs 4,300, Year: 2023.
- 219. Characterization and testing of a dual notch band antenna for satellite applications,ANITS college, Vizag, Rs 5,000, Year: 2023.
- 220. Design and analysis of High gain modified Vivaldi antenna for vehicular communication applications, Dr. Rammanohar Lohia Avadh University, Ayodhya, Uttar Pradesh, Rs3,800, Year: 2023.
- 221. Fabrication and testing of High gain flexible Substrate materialbased antenna, St.Anns college of engineering and technology, Chirala, Rs 4,500, Year: 2023.
- 222. Design and analysis of Double layer Unidirectional Antenna with AMC, AdityaEngineering College(A), Surampalem, Rs 4,000, Year: 2023.
- 223. Fabrication and testing of MIMO for millimeter wave applications, Charutar VidhyaMandal university, Gujarat, Rs 6,200, Year: 2023.
- 224. Design and development of Low profile and low SAR Antenna, IMPS College ofEngineering and Technology, West Bengal, Rs 4,500, Year: 2023.
- 225. Fabrication and analysis of Reconfigurable Meta surface for 2.4 GHz antenna integration, S.V university, Tirupati, Rs 4,000, Year: 2023.

- 226. Design and testing of Multifunctional Antenna, Siddhartha Egg College, Rs 3,600, Year: 2023.
- 227. Antenna array with dual band CPW fed for WiMAX applications, St. Anns college of engineering and technology, Chirala, Rs 4,800, Year: 2023.
- 228. Compact flexible UWB monopole antenna with notch band characteristics, InhouseConsultancy Work, Rs 3,000, Year: 2023.
- 229. Fabrication and testing of W shaped Antenna array with dual-band CPW fed forWiMAX applications, BIRIT Hyderabad, Rs 4,000, Year: 2023.
- 230. Compact reconfigurable flexible UWB monopole antenna with notch bandcharacteristics, Sree Vaidhyanathan Tirupati, Rs 2,000, Year: 2023.
- 231. Dual-band hetero miniaturized antenna with metamaterial slotted DGS ground,Inhouse Consultancy Work, Rs 3,000, Year: 2023.
- 232. Wideband annular double-ring with twisted slotted monopole antenna for LTE and ISM applications, IMPS College of Engineering and Technology, West Bengal, Rs2,500, Year: 2023.
- 233. Design and testing of a connected circle's shaped dual band antenna for satelliteapplications, Siddhartha Egg College, Rs 3,200, Year: 2023.
- 234. Fabrication and testing of a wideband R shaped rectangular patch antenna withslotted ground, Inhouse Consultancy Work, Rs 1,500, Year: 2023.
- 235. Design, characterization and testing of Olympic symbol shaped patch antenna withHIS surface, GMRIT, TP GUDEM, Rs 2,500, Year: 2023.
- Fabrication and testing of triple inverted N shaped flexible polyimide antenna forISM applications, Siddhartha Egg College, Rs 3,000, Year: 2023.
- 237. Design, fabrication and testing of a Swastik shape with SIW 4-port MIMO to enhancegain, and efficiency, RVR & JC college of engineering, Guntur, Rs 4,200, Year: 2023.
- 238. Fabrication of a two inner helical shaped antenna for the UWB applications, GITAMVizag, Rs 4,400, Year: 2023.
- 239. Design and testing of a Multiple bud shaped flexible antenna for WiMAX applications,VVIT GUNTUR, Rs 2,600, Year: 2023.
- 240. Design and testing of an Indian cricket emblem with AMC backed antenna for ISMapplications, Siddartha Egg College, Rs 3,800, Year: 2023.
- 241. Fabrication and testing of a crown Shaped 4-port MIMO antenna, RVR & JC collegeof engineering, Guntur, Rs 3,500, Year: 2023.
- 242. Compact flexible multi crown shaped UWB Tree Shaped monopole antenna withnotch band characteristics, Inhouse Consultancy Work, Rs 3,600, Year: 2023.

- 243. Fabrication and testing of trisul shaped flexible polyimide antenna for wirelessapplications, Sujit Shantana, Rs 2,200, Year: 2023.
- 244. Multi trisul Antenna array with dual-band CPW fed for WiMAX applications, InhouseConsultancy Work, Rs 2,000, Year: 2023.
- 245. Fabrication, Characterization and Testing of a wearable antenna with a Meta surfaceto improve gain and efficiency for ISM applications, LH Bhaskar Enterprises, Rs35,100, Year: 2023.
- 246. Design and prototyping of antennas, pattern reconfigure antennas and MIMOstructures for ISM and Wi-MAX applications, CHADRAKALA SCAN SYSTEMS, Rs36,200, Year: 2023.
- 247. Design and prototyping of UWB Notch antennas, reconfigurable antennas, andCPW structures for ISM and WBAN applications, CHADRAKALA SCAN SYSTEMS,Rs 39,600, Year: 2023.
- 248. Design and prototyping of Wearable textile antennas, AMC reflectors, and Microstripfeed and Coaxial based structures for Satellite and Vehicle communicationapplications, CHADRAKALA SCAN SYSTEMS, Rs 38,000, Year: 2024.
- 249. Prototyping and Testing of Various Transparent Material-based Multiband Antennasfor 6G, Vehicular Communications and Medical Applications, PRATYUSHAENTERPRISES, Rs 30,000, Year: 2024.
- 250. Development of Fabric/Textile Substrate Based MIMO antennas and FrequencySelective Surfaces for Wireless Body Aera Network (WBAN) Applications, PRATYUSHA ENTERPRISES, Rs 45,000, Year: 2024.
- 251. Design, Development, Prototyping, and Testing of Various Multiband and MIMOAntennas for Wireless Vehicular Communication and Biomedical Applications, LHBhaskar Enterprises, Rs 45,000, Year: 2024.

SUSTAINABLE DEVELOPMENT GOALS

Goal 3: Good health and well-being	3 documents	Goal 9: Industry, innovation and infrastructure	3 documents
Goal 6: Clean water and sanitation	1 document	Goal 11: Sustainable cities and communities	4 documents
Goal 7: Affordable and clean energy	3 documents	Goal 17: Partnership for the goals	28 documents
Goal 8: Decent work and economic growth	1 document)

LIST OF SPONSORED PROJECTS

- 1. Systematic Studies of phase stability in dimeric liquid crystals, SERB-SR/S2/CMP-71/2008. Rs. 27 Lakhs
- 2. Design of Low-Cost Amateur Radio Satellite Compatible Transceiver Setup's for Operation and Quick Establishment of Communication Platform for During Disaster Situations, AICTE- 8023/RID/RPS-32/2011-12, Rs. 9.8 Lakhs
- 3. DST-FIST Level-1 (SR/FST/ETI-316/2012). Rs. 55 Lakhs-----(2013-2018)
- 4. DST-FIST Level-2 (SR/FST/ET-II/2019/450) Rs. 75 Lakhs-----(2020-2024)
- 5. Development of Conformal Liquid Crystal Polymer based Reconfigurable Antenna for Vehicular Band Applications, SERB-ECR, Rs. 43 Lakhs. ECR/2016/000569------(2016-2019)
- 6. Design and Development of RF-MEMS based Reconfigurable Antenna for Body Area Network Applications. Rs. 42 Lakhs, EEQ/2016/000604-----(2017-2020)
- Design and Analysis of EBG Structured Slot Antenna for Reduction of Size and Surface Wave Losses, KLEF-In-house Funded Project. Rs. 5 Lakhs------ (2013-2014)
- 8. Analysis and design of concentric circular ring microstrip patch antenna, DST-SERB, SB/FTP/ETA-0179/2014, Rs. 35 Lakhs, (2014-2017).
- 9. Investigation on implantable conformal antennas for the biomedical applications, DST-SERB, EEQ/2016/000754, Rs. 38 Lakhs, (2016-19).
- 10. Design and analysis of RF-MEMS switch on Reconfigurable Conformal Patch Antenna for Biomedical Applications, CSIR, 09/1068(0004)/2020, Rs. 10,14,400
- 11. Image Analysis-A Tool to detect the phase transitions and Properties of synthesized nono doped novel liquid crystalline mesogens, Rs.1.8 Lakhs------(2020-2021)
- 12. DST-PURSE-Novel Low Dimensional Materials and Flexible Dielectrics for Optoelectronic and Microwave Devices, Rs. 7 Crores, (2023-2027).

WORKSHOPS ATTENDED

- 1. Attended workshop on Embedded systems at Krishnadevaraya University, anathapur,2005.
- 2. 🛛 Attended one day workshop on Singula-EM-Simulator at K L University in January2013.
- 3. 🛛 Attended three days workshop on Outcome based course preparation at K L University in Sep-2014
- 4. 🛛 Attended two days workshop on Reconfigurable Communication System Designusing NI Platforms, WRCCSD-15, Aug-2015
- 5. Attended workshop on NI-Days at Bangalore in Nov 2015
- 6. 🛛 Attended 5G communication Systems based advanced technological challengesworkshop by Keysight Technologies International Limited at DV Manor, Vijayawadain May-2018.

REFRESHER COURSES & FDP'S ATTENDED

- 1. Attended webinar on "Star Robotics X-pert" on 01-06-2020.
- 2. ©Completed the Refresher course on Hydrological applications, conducted by theJNTU Hyderabad University
- 3. ©Completed the short-term course on REMOTE SENSING, GIS & GPS Conducted by the UGC and obtained 'A' GRADE in may-2005.
- 4. ©Completed Refresher Course on VLSI and EMBEDDED Systems, Conducted by UGCin JNTU University.
- 5. ©Completed Orientation course on Teaching Methodology Conducted by UGC in JNTUUniversity.
- 6. In Completed Orientation course on Teaching methodology Conducted by UGC in JNTUUniversity
- 7. ©Completed AICTE Teacher training program on Advancements in Mobilecommunications conducted by V.R.Siddhartha Engineering college
- 8. ©Completed UGC Sponsored teacher training program on Digital signal processing atK L University
- 9. Completed training program on VLSI designing by XILINX at K L University
- 10. Attended the International conference RSPS-2008 at K L University
- 11. Attended and acted as coordinator in the international conference RSPS-2010 at K LUniversity.
- 12. Attended short term course on "Current Trends in Microwave Design and Applications" at IIT Kharagpur during June 2012
- 13. Completed Orientation program on Training to Trainers at K L University in July 2012.
- 14. Attended Faculty Development Program at PVPSIT on Advances in MicrowaveEngineering and Technology. (28th Oct to 9th Nov-2013)
- 15. 🛛 Attended one week program on Jeevan Vidya in June-2014 at K L University
- 16. Attended training program on Course Handout design for course coordinators atKLU in April 2015.
- 17. Attended Ansys Conference at Bangalore in Oct-2015
- 18. Attended one week training program on "Faculty Skills Enhancement" at K L Universityin Feb-2017.
- 19. 🛛 Attended 5 days refresher course on Metamaterial and Antenna Design for FutureGeneration Wireless Communication Systems during Feb 22-26, 2021.

WORKSHOPS CONDUCTED

- 1. Workshop conducted on "Vector Network Analyzer & Spectrum Analyzer basedMeasurement Techniques" on 22-10-2013
- 2. Workshop conducted on "RF Microwave measurement using VNA and SA" on 01-10-2013
- 3. Workshop conducted on "Antenna Measurement Setup" on 21-10-2013
- 4. Workshop conducted on "Advancements in Turnitin Plagiarism Checking" on 18th June 2020
- 5. Conducted one-day workshop as Coordinator on RF System Design & Testing at KLU in 2011.
- 6. Organized national level conference on RF-Tools in the ECE department of K L University in Nov-14
- 7. Conducted FEKO Tool workshop from CSRG Group in January-2016
- 8. Conducted CST Microwave studio workshop from CSRG Group in February-2016
- 9. As Resource Person workshop on Ansys HFSS tool was conducted at Amrita Sai Institute of Technology, Paritala, Andhra Pradesh in February-2016.
- 10. Conducted Workshop on Software Defined Radio in association with Scientech from CSRG group on 13-4-2016.
- 11. Conducted Workshop on Savant Tool in association with Entuple technologies, Bangalore from CSRG group on 17-01-2017.
- 12. Conducted Workshop on Combinational Analyzer in association with Aniritsu India Pvt Ltd from CSRG group on 23-1-2017.
- 13. Conducted Workshop on NVIS PCB Prototype Machine in association with Scientech technologies, Hyderabad from CSRG group on 14-2-2017.
- 14. Conducted workshop on Applications with Microwave Signal Source with Keysight Technologies on 6-07-2017 from CSRG group.
- 15. Conducted workshop on Medical diagnosis using CMC-DAQ with TMI Systems Pvt Ltd on 28-07-2017 from CSRG group.
- 16. Conducted workshop on 5G related future communication with R&S India Pvt Ltd on10-8-2017 from CSRG group.

FDP'S CONDUCTED

Conducted FDP in Association with ICT Academy of NIT Warangal on "Advances in Microwave Antenna Design" in 2017.

RESEARCH AWARDS & RECOGNITIONS







Antennas and Liquid Crystals Research Center (ALRC)

45 YEARS OF EDUCATIONAL LEADERSHIP