## **PUBLICATIONS:**

 Madhusudhan, Amrit Raj, Mahesh A, Ashutosh Kedar, "Design and Analysis of Non-Conventional Dielectric Dome Antenna for Scan Enhancement", IEEE MAPCON, Hyderabad, Dec 2024 (Accepted for Presentation).

2. Ashutosh Kedar, Amogh G, Mahesh A, Shushrutha K S, Pramod Kumar, "Studies on Metasurface Geometries for Scan Enhancement in Phased Array Antennas", IEEE MAPCON, Hyderabad, Dec 2024 (Accepted for

Presentation).

 Yasha Mandavat, Ananya R Bhat, Mahesh A, "Theoretical Insights into mm-Wave Metasurface Behaviour", IEEE MAPCON, Hyderabad, Dec 2024

(Accepted for Presentation).

 Yasha Mandavat, Ananya R Bhat, Mahesh A, Debdeep Sarkar, "MIMO Antenna Performance Analysis With Realistic Bumper for Automotive Application", IEEE MAPCON, Hyderabad, Dec 2024 (Accepted for Presentation).

5. Anju G Chavan, Mahesh A, Manoj M Acharya, "Performance Evaluation of Lens types for Scan and Gain Enhancement", 8th International Conference on Computation System and Information Technology for Sustainable Solutions (CSITSS), 7-9 Nov 2024, RV College of Engineering, Bangalore, India.

6. Manoj M Acharya, Mahesh A, Anju G Chavan, "Software-Defined Radio with Integrated 4 x 4 Antenna Array for Wireless Communication", 8-International Conference on Computation System and Information Technology for Sustainable Solutions (CSITSS), 7-9 Nov 2024, RV College of Engineering, Bangalore, India.

7. Dheeraj G, Sateesh S. Badadal, Mahesh Appajappa, Raju Malleboina, Debdeep Sarkar, "Monopole-fed Modulated Metasurface based Antenna",

IEEE SPACE, Bangalore, July 2024.

8. Jahnavi K P Urs, Amogh G, Shushrutha K S "3D Printable GRIN Lens for C-band Circularly Polarized Antenna" IEEE MAPCON, Hyderabad, Dec

2024 (Accepted for Presentation).

9. Manjunath, K S Shushrutha "Design of Lens Based Circular Polarized Antenna Array for C Band Applications" 8th International Conference on Computation System and Information Technology for Sustainable Solutions (CSITSS), 7-9 Nov 2024, RV College of Engineering, Bangalore, India.

10. Kousthub Kaivar, Sunil Joshi, Aryan Namboodiri, Harshhitha P, K S Shushrutha "Design and Performance Analysis of Slotted Vivaldi Antennae in X-Band" 8th International Conference on Computation System and Information Technology for Sustainable Solutions (CSITSS), 7-9 Nov 2024, RV College of Engineering, Bangalore, India.

11. K S Shushrutha, Amogh G, Bhuvan Bharadwaj "Cost-Effective Solutions for Beamforming in Miniaturized S-Band Radar Applications' 2024 IEEE

SPACE, 23-24 July 2024

 K S Shushrutha, Mohith N Raate "Gain Enhanced Linear Rectangular Dielectric Resonator Antenna Array for RADAR Applications") 2024 IEEE SPACE, 23-24 July 2024

13. K S Shushrutha, Amogh G, Bhuvan Bharadwaj, "Temporal Analysis of the Wavefront for Direction of Arrival Estimation in Shaped Dielectric Lens Antennas" Asia-Pacific Microwave Conference (APMC2023), 5th to 8<sup>th</sup> October 2023, Taipei, Taiwan

14. K S Shushrutha, S Ravishankar, "Modal Analysis of scattering through Spheroidal Lens Antenna by Sectioning" 3<sup>rd</sup> International conference Wireless, Antenna & Microwave Symposium 2023, Gandhinagar, India

15. K S Shushrutha, Amogh G, Bhuvan Bharadwaj, Dheeraj G, "Optimized Direction of Arrival Estimation for Shaped Dielectric Lens Antennas using

Curve Fitting Approach." 3rd International conference Wireless, Antenna &

Microwave Symposium 2023, Gandhinagar, India

16. Shushrutha K S, Mahesh A and Ashish Adiga "Hybrid Method to Compute EM-Fields of Multi Gradient Flat Lens-Array Antenna" 2022 IEEE Wireless Antenna and Microwave Symposium, June 2022, National Institute of Technology Rourkela, India. DOI: 10.1109/WAMS54719.2022.9847870

17. Arun Patil, Mayuri Sathyanarayana Rao, Mahesh A, Keerthi Priya Sathish, "A wideband single polarization antenna for precision cosmology in S-band", Wireless, Antenna & Microwave Symposium, 29 Feb - 03 March 2024, RIT,

Visakhapatnam, India

- 18. Dheeraj G, Sateesh S. Badadal, Mahesh Appajappa, Debdeep Sarkar, "Generation of High-Gain Steered Beam using Dipole Antenna Loaded on Anomalous Reflector with Near-field Correction", Wireless, Antenna & Microwave Symposium, 29 Feb 03 March 2024, RIT, Visakhapatnam, India
- 19. Raghunandan, Mahesh A, Mahesh Babu, "Wireless Communication System Design Using Labview and Software Defined Radio", 7<sup>th</sup> International Conference on Computation System and Information Technology for Sustainable Solutions (CSITSS), 2-4 Nov 2023, RV College of Engineering, Bangalore, India
- 20. Ashish K Adiga, Mahesh A, Ashutosh Kedar, Pratap Vangol, "A High Gain Wide Beam U-Slot Elliptical Microstrip Patch Antenna for Phased Array Applications", 2023 IEEE International Symposium on Antennas and Propagation and USNC-URSI Radio Science Meeting, 23-28 July 2023 in Portland, USA
- 21. Ashish K Adiga, Mahesh A, Ashutosh Kedar, "An X-band U-Slot Modified Square Microstrip Patch Antenna with wide beam and high gain for Radar applications", Wireless, Antenna & Microwave Symposium, June 07-10, 2023, Gandhinagar, India
- 22. Pratap P Vangol, Mahesh A, Jogesh Das, Debdeep Sarkar, "Design of an S-Band Transmit-Mode Active Integrated Antenna for Low Power IoT Application", IEEE Microwave, Antennas, and Propagation Conference

(MAPCON), Dec 12-16, 2022.

- 23. Ashish K Adiga, Mahesh A, Jogesh Das, Debdeep Sarkar, "CSRR and Stub Loaded Miniaturised Tri-Band Patch Antenna for 5G Base Station Application", IEEE Microwave, Antennas, and Propagation Conference (MAPCON), Dec 12-16, 2022.
- 24. Aravind, Rahul Chickodi, Mahesh A, Ashutosh Kedar, "High Gain, Wide Band and Wide Scanning Substrate Integrated Waveguide based U-Slot Phased Array Antenna in X-band", IEEE Microwave, Antennas, and Propagation Conference (MAPCON), Dec 12-16, 2022.
- **25.** Shruthi, Aravind, Mahesh A, Ashutosh Kedar, "A Comparative Study of Dielectric Lenses for Wide Scanning Performance", IEEE Microwave, Antennas, and Propagation Conference (MAPCON), Dec 12-16, 2022
- 26. K S Shushrutha, Amogh G, Bhuvan Bharadwaj, "Temporal Analysis of the Wavefront for Direction of Arrival Estimation in Shaped Dielectric Lens Antennas" Asia-Pacific Microwave Conference (APMC2023), 5th to 8<sup>th</sup> October 2023, Taipei, Taiwan
- 27. K S Shushrutha, S Ravishankar, "Modal Analysis of scattering through Spheroidal Lens Antenna by Sectioning" 3<sup>rd</sup> International conference Wireless, Antenna & Microwave Symposium 2023, Gandhinagar, India
- 28. K S Shushrutha, Amogh G, Bhuvan Bharadwaj, Dheeraj G, "Optimized Direction of Arrival Estimation for Shaped Dielectric Lens Antennas using Curve Fitting Approach." 3<sup>rd</sup> International conference Wireless, Antenna & Microwave Symposium 2023, Gandhinagar, India
- 29. K S Shushrutha, Mahesh A, Ashish Adiga, "Hybrid Method to Compute EM-Fields of Multi Gradient Flat Lens-Array Antenna", International

- Symposium on Wireless Antennas and Microwave Symposium, (WAMS), 5-8 June 2022, NIT Raurkela, India
- 30. Mahesh A, Ashish Adiga, Abhishek, Yashwanth, Rohini G, "Gain Enhancement of 4x4 mm-Wave Patch Array with Dielectric Shells and Metamaterial Lens: A Comparative Study", International Symposium on Wireless Antennas and Microwave Symposium, (WAMS), 5-8 June 2022, NIT Raurkela, India
- 31. Shushrutha K S and Sachin B M "Design of a Dual-Polarized Patch Antenna with RDRA" 6th International Conference for Convergence in Technology, (I2CT) 2nd 4th April 2021
- 32. Ashutosh Kedar, Pratap Vangol, Rahul Chikkodi, Mahesh A, "Preliminary Investigations on Hybridization of Bayesian Compressive Sensing and Array Dilation Technique", IEEE Indian Conference on Antennas and Propagation (InCAP-21), Jaipur, India, 13-16<sup>th</sup> Dec 2021.
- 33. Rahul Chikkodi, Pratap Vangol, Mahesh A, Ashutosh Kedar, "Wide-Scan and Wideband Antenna Array Design for Phased Array applications in X-band", IEEE Mysore Sub Section Flagship International Conference, 24th & 25th October 2021.
- 34. Mahesh A, Soujanya N, "Design of Non-Uniform Circularly Polarized Dipole Antenna Array for P-Band Applications", 8th IEEE Uttar Pradesh Section International Conference on Electrical, Electronics, and Computer Engineering (UPCON-21), Uttarakhand, India, 11-13<sup>th</sup> Nov, 2021.
- 35. Mahesh A, Neha V Jetgonda, "Analysis of Dielectric Lens-Shell Antennas using Hybrid Method", International Conference on Smart Generation Computing, Communication and Networking (SMARTGEN), Pune, Oct 29-30, 2021.
- 36. Mahesh A, Rohini Batkoorse, "Design and Simulation of Metamaterial based Patch Array Antenna with Lens", 10th International Conference on Internet of Everything, Microwave Engineering, Communication and Networks (IEMECON 2021), Jaipur, India, 1-2 December, 2021.
- 37. Shushrutha K S, Pooja T R and Sushma V "Design of Modified U-Slot Multiband Circular Patch Antenna with Cylindrical Dielectric Resonator Antenna" 4th IEEE International Conference on Recent Trends in Electronics, Information & Communication Technology (RTEICT 2019) 2019
- 38. Mahesh A, Sandhya, Keerthana, "Design of Conformal Multiband Antenna and its Gain Enhancement using Metamaterial Lens", 5th IEEE international Women in Engineering (WIE) Conference on Electrical and Computer Engineering, Bangalore, India, Nov 2019.
- 39. Ravishankar S, Shushrutha K S, Mahesh S, Arjun Ravishankar "Computations of Scattering by Shaped Dielectric Lenses and a comparison with Measurements" 2017 IEEE AP-S Symposium on Antennas and Propagation and USNC-URSI Radio Science Meeting, July 9–14, 2017, San Diego, California, USA
- 40. Ravishankar S, Shushrutha K S, Mahesh A, "A Hybrid Method of Analysis for Shaped Dielectric Lenses Compared with Measurement Results" 2017 IEEE MTT-S International Microwave and RF Conference (IMaRC), Ahmedabad, India, Dec. 2017.
- 41. Mahesh A, Shushrutha K S, Ramesh Kumar Shukla "Design of Multi-Band Antennas for Wireless Communication Applications" 6th biennial IEEE Applied Electromagnetics Conference AEMC, Aurangabad, India, December 2017.
- 42. Ravishankar S, Mahesh A, "A Hybrid Method of Analysis of Shaped Dielectric Lens Antennas", 2015 IEEE AP-S Symposium on Antennas and Propagation and URSI CNC/USNC Joint Meeting, Vancouver, British Columbia, Canada, July 19-25, 2015...
- 43. Ravishankar S, Shushrutha K S, "Analysis of Spheroidal Dielectric Lens-Array Antenna" IEEE- Asia-Pacific Conference on Antennas and Propagation June 30 July 3, 2015, Bali Island, Indonesia.

- 44. Ravishankar S, Shushrutha K S, Abdul Haq N "Estimation of Actual Direction of Arrival for Ellipsoidal Dielectric Lens Array Antenna", in IEEE MTT International Microwave and RF Conference (IMaRC), Dec 2014.
- 45. Ravishankar Sankaranarayanan, Mahesh Appajappa, Rukmini T S, Arjun Ravishankar, "Spherical Modal Analysis of a Patch Array Dielectric Lens Antenna", 4th European IEEE conference on Antennas and Propagation (EUCAP2010), Barcelona, Spain, April 2010.
- 46. Ravishankar Sankaranarayanan, Mahesh Appajappa, Rukmini T S, S K Thakur, Modal Analysis of Dielectric Lens based Patch Array Antenna for Vehicular Applications, 9th International Symposium on Antennas Propagation and EM Theory (ISAPE), China, DEC-2010.