

Dr M Venkateswara Rao

B. Tech., M. Tech., Ph. D

Phone: 9441241642**E-mail:** mvenkatesh8692@gmail.com**Residence:**D NO 43-145-14,
Ajithsinghnagar, Vijayawada,
A.P, Pincode-520015***Career Objective***

Seeking for a challenging position as a professional in the organization for giving the practical knowledge which makes the student's career progressive as well as the growth of the organization.

Research Interests

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|-----------------------------------|--|
| Area of research | <ul style="list-style-type: none"> Blockchain, Generative AI, mCommunications Antennas, Microstrip patch antennas, Metamaterials, Conformal antennas, Bio- medical antennas, Reconfigurable antennas and Wearable antennas. |
| Specific topic of interest | <ul style="list-style-type: none"> Design and Analysis of Metamaterial Inspired Planar and Flexible Antennas for Wireless Communication Applications |
| Simulation tools | <ul style="list-style-type: none"> HFSS (High frequency structure simulator), CST (Computer simulation technology), ANSYS Savant, python |

Publications

- ◆ 19 (**SCI Journals**) (More details given in **Annexure P**)
- ◆ 4 (**E-SCI Journals**) (More details given in **Annexure P**)
- ◆ 1 (**PATENT Filed/Received**) (More details given in **Annexure P**)
- ◆ 28(**SCOPUS Journals**) (More details given in **Annexure P**)
- ◆ 10(**Scopus Indexed Conferences**)(More details given in **Annexure P**)

Professional and Research experience

- ◆ Total of **FIVE** and Half years experience (Excludes 3 and Half years of research experience)
- ◆ Presently Working as **Assistant Professor** at Pace Institute of Technology & Sciences From Aug 2022
- ◆ Past worked as **Assistant Professor** at Dhankeula Institute of Engineering & Technology From Feb 2020 To Aug 2022
- ◆ Worked as **Research Scholar (Dept. of ECE, K L University)** in the project titled "**Design and Analysis of Metamaterial Inspired Planar and Flexible Antennas for Wireless Communication Applications**" Dept of ECE sponsored by DST (Department of science and technology), Govt. of India.[From July 2016-october 2019]
- ◆ Selected for **Gate Exam** held in **March-2013**
- ◆ Hands on experience in **Network analyzers, Spectrum analyzers** (Rohde & Schwarz and Anritsu Combinational analyzer).
- ◆ Hands on experience in **Anechoic chamber** for antenna testing and measurement.

- ◆ Hands on experience in **Chemical etching process** for antenna prototypes.
- ◆ Hands on experience in **Nivis-72 PCB prototyping machine**.
- ◆ Expert in HFSS And CST EM simulation tool

Education

Ph.D	College/Institution	: Koneru Lakshmaiah Education Foundation
	Course	: Ph. D.
	Status/Mode	: Completed/Regular
	Location	: Guntur
M. Tech	College/Institution	: PVP Siddhartha institute of technology
	Course	: M. Tech in ECE (Microwave and Communication systems) JNTUK (2013-2015)
	Status/Mode	: Completed/Regular.
	CGPA	: 7.89
	Location	: Andhra Pradesh.
B.Tech	College/Institution	: Paladugu Parvathi devi college of engg and technology
	Course	: B.Tech in Electronics and Communication Engineering under JNTUK(2009-2013).
	Status/Mode	: Completed/Regular.
	Percentage	: 61.5%
	Location	: Andhra Pradesh.
Intermediate	College	: Vijayakrishna Junior college
	Course	: MPC (2007-2009), Board of Intermediate Education
	Status/Mode	: Completed/Regular.
	Percentage	: 69.3%
	Location	: Andhra Pradesh
SSC	School	: Bhasyam E.M School
	Course	: SSC (2006-2007).
	Status/Mode	: Completed/Regular.
	Percentage	: 81.3%
	Location	: Andhra Pradesh.

Contribution towards Departmental/College Level Activities/Others

- ◆ Head **Institution innovation council PACE ITS Ongole**
- ◆ Managing Operations of **Vinuthna Incubation Centre**
- ◆ **NBA Department Level Coordinator**
- ◆ **Communication subject Circulam Expert**
- ◆ **Awarded Ecosystem Enabler-Individual from Atal Incubation Center Srikrishna Devaraya university**
- ◆ **Received Best Faculty Award from PACE ITS-2024**
- ◆ Actively Participated in **Consulatancy Works at ALRC Lab,KLEF.**
- ◆ Received Best paper award at **ATMS 2019**
- ◆ Published Student project Works in reputed Journals and Conferences in Scopus indexed

Research AND Fundings

Coordinator – AICTE IDEA Lab[2025*]

PACE ITS,Ongole – FUND-90 Lakhs

Status-Ongoing

- ❖ Successfully led the proposal, establishment, and operationalization of the AICTE IDEA Lab, securing ₹1 crore in funding support from AICTE and institutional/industry partners.
- ❖ Spearheaded lab planning, procurement, and setup of advanced prototyping equipment including 3D printers, CNC machines, and IoT toolkits.
- ❖ Coordinated interdisciplinary student innovation projects and faculty development programs in design thinking, innovation, and entrepreneurship.
- ❖ Fostered collaborations with industry and startups for mentoring, funding, and project-based learning.
- ❖ Oversaw documentation, reporting, and compliance as per AICTE guidelines, ensuring smooth fund disbursement and utilization.

Co-Coordinator – ATAL Advance FDP[02 Decemeber 2024 -14 December 2024]

Title-VLSI Trends On Network On Chip And Its Application

Department of ECE,PACE ITS,Ongole – Funding received -6.5 Lakhs

Status-Completed

Co-Coordinator – ATAL Basic FDP[02 Decemeber 2023 -07 December 2023]

Title-Emerging Research Area in Advance VLSI System Design and Challenges:Semiconductor-to-End Application- Approach

Department of ECE,PACE ITS,Ongole – Funding received -3.5 Lakhs

Status-Completed

Personal Details

- ♦ Marital Status : Married.
- ♦ Nationality : Indian
- ♦ Date of Birth : 08-06-1992
- ♦ Sex : Male
- ♦ Native :Vijayawada
- ♦ Religion :Hindu

PUBLICATION LIST***Papers in International Journals SCI LIST***

1. Saritha, V., Prasanna, P. D. N. S., Chandrasekhar, C., Jhansi Rani, A., & **Venkateswararao, M.** (2022). A triple band pattern reconfigurable planar antenna for 5G applications. *Frequenz*, 76(7-8), 367-380.
2. **Rao, M. V.**, Madhav, B. T. P., Anilkumar, T., & Nadh, B. P. (2018). Metamaterial inspired quad band circularly polarized antenna for WLAN/ISM/Bluetooth/WiMAX and satellite communication applications. *AEU-International Journal of Electronics and Communications*, 97, 229-241.
3. Prudhvi Nadh, B., Madhav, B. T. P., Siva Kumar, M., Anilkumar, T., **Venkateswara Rao, M.**, & Kishore, P. V. V. (2020). Windmill-shaped antenna with artificial magnetic conductor-backed structure for wearable medical applications. *International Journal of Numerical Modelling: Electronic Networks, Devices and Fields*, 33(6), e2757.
4. Deepak, B. S., Madhav, B. T., Prabhakar, V. S. V., Lakshman, P., Anilkumar, T., & **Rao, M. V.** (2018). Design and analysis of hetero triangle linked hybrid web fractal antenna for wide band applications. *Progress in Electromagnetics Research C*, 83, 147-159.
5. **Rao, V. V.**, & Kumar, A. A. (2018, May). Artificial neural network and adaptive neuro fuzzy control of direct torque control of induction motor for speed and torque ripple control. In *2018 2nd International Conference on Trends in Electronics and Informatics (ICOEI)* (pp. 1416-1422). IEEE.
6. Nadh, B. P., Madhav, B. T., Kumar, M. S., **Rao, M. V.**, & Anilkumar, T. (2018). Asymmetric ground structured circularly polarized antenna for ISM and WLAN band applications. *Progress in electromagnetics Research M*, 76, 167-175.
7. Tilak, G. B., Kotamraju, S. K., Madhav, B. T., Kavya, K. C., & **Rao, M. V.** (2020). AMC backed circularly polarized dual band antenna for Wi-Fi and WLAN applications. *Journal of Electrical Engineering*, 71(5), 298-307.
8. Madhav, B. T. P., Reddy, M. V. K. C., **Rao, M. V.**, Krishna, C. M., Raj, P. C., & Jaya, G. (2017). Quad band filtenna using split ring resonators to notch unwanted frequencies in medical application bands. *Journal of Theoretical and Applied Information Technology*, 95(9), 1-9.
9. Tilak, G. B. G., Kotamraju, S. K., Madhav, B. T., Kavya, K. C. S., & **Rao, M. V.** (2020). Dual sensed high gain heart shaped monopole antenna with planar artificial magnetic conductor. *Journal of Engineering Science and Technology*, 15(3), 1952-1971.
10. **Venkateswara Rao, M.**, Madhav, B. T., Krishna, J., Usha Devi, Y., Anilkumar, T., & Prudhvi Nadh, B. (2019). CSRR-loaded T-shaped MIMO antenna for 5G cellular networks and vehicular communications. *International Journal of RF and Microwave Computer-Aided Engineering*, 29(8), e21799.
11. Anilkumar, T., Madhav, B. T., **Rao, M. V.**, Nadh, B. P., & Kumar, P. R. (2023). Automotive communication applications based circular ring antenna with reconfigurability and conformal nature. *International Journal of Communication Systems*, 36(1), e5364.
12. Anilkumar, T., Madhav, B. T. P., **Rao, M. V.**, & Nadh, B. P. (2020). Bandwidth reconfigurable antenna on a liquid crystal polymer substrate for automotive communication applications. *AEU-International Journal of Electronics and Communications*, 117, 153096.
13. Prasad, G. R., Madhav, B. T. P., Pardhasaradhi, P., Devi, Y. U., Nadh, B. P., Anilkumar, T., & **Rao, M. V.** (2021). Concentric ring structured reconfigurable antenna using MEMS switches for wireless communication applications. *Wireless Personal Communications*, 120, 587-608.
14. **Venkateswara Rao, M.**, Madhav, B. T. P., Anilkumar, T., & Prudhvinadh, B. (2020). Circularly polarized flexible antenna on liquid crystal polymer substrate material with metamaterial loading. *Microwave and Optical Technology Letters*, 62(2), 866-874.
15. Madhav, B. T. P., Ramya, U., Lakshman, P., Prabhakar, V. S. V., & **Rao, M. V.** (2021). Triple notch slotted monopole antenna with complementary split ring resonators. *International Journal of Computer Aided Engineering and Technology*, 15(4), 458-474.
16. Sagar, P. P., Rajesh, V., Altahan, B. R., **Venkateswararao, M.**, Ahammad, S. H., Smirani, L. K., ... & Rashed, A. N. Z. (2023). Design and Analysis of Rectangular Circularly Polarized Array Antenna for Flexible IoT Applications. *Wireless Personal Communications*, 130(2), 1257-1275.
17. Madhav, B. T. P., **Venkateswara Rao, M.**, & Anilkumar, T. (2018). Conformal band notched circular monopole antenna loaded with split ring resonator. *Wireless Personal Communications*, 103, 1965-1976.
18. Prudhvi Nadh, B., Madhav, B. T. P., Siva Kumar, M., Anil Kumar, T., **Venkateswara Rao, M.**, &

Mohan Reddy, S. S. (2022). MEMS-based reconfigurable and flexible antenna for body-centric wearable applications. *Journal of Electromagnetic Waves and Applications*, 36(10), 1389-1403.

19.Prudhvi Nadh, B., Madhav, B. T. P., Siva Kumar, *M., Venkateswara Rao*, M., & Anilkumar, T. (2019). Circular ring structured ultra-wideband antenna for wearable applications. *International Journal of RF and Microwave Computer-Aided Engineering*, 29(4), e21580.

Patents Filed

[1] Enhancement of Quality of service in wireless Sensor Network by Redundant Sensors Controlling
Application Number- 202041051968 , Application Ref Number- 202041051968 ,
Filing Date- 28/11/2020 .

Papers in Scopus/E Sci List and International Conferences

20.Nagendram, S., Madhav, B. T. P., Sony, K., Janaki, P., Lakshmi, P. P., & Swetha, S. (2018). Study and analysis of single notched rectangular dielectric resonator antenna for cognitive radio applications. *International Journal of Engineering and Technology (UAE)*, 7(1.1), 530-533.

21.Tirunagari, A., Makireddi, N., Madhav, B. T. P., & Manikonda, V. R. (2024, February). Design and Comparative Study on Planar ELC Resonators for ϵ_r Analysis. In *2024 IEEE Wireless Antenna and Microwave Symposium (WAMS)* (pp. 1-5). IEEE.

22.Samudra, J., Avula, S., Kola, S. S., Koppolu, R., Kumar, D. A., Kumar, S., & Venkateswararao, M. (2023, June). A Material Insensitive Photonic Band Gap Structured for Tunable THz Applications. In *2023 IEEE Wireless Antenna and Microwave Symposium (WAMS)* (pp. 1-5). IEEE.

23.Venkateswara Rao, M., Madhav, B. T. P., Naveen, T., Sai Prashanth, N., & Niharika, B. (2019). Met material loaded rectangular monopole antenna with ultra-wideband applications. *Int J Recent Technol*, 8(1), 1573-1576.

24.Priyadharshini, B., Madhav, B. T. P., Sasank, M. H., Rao, M. V., & Krishna, P. V. A Compact Semi Square Split Ring Resonator Slotted Flag Shaped MIMO Antenna for Band Notched UWB Applications.

25.Madhav, B. T. P., Khan, H., Harsha, B. S., Kumar, P. S., Lavanya, M., Veena, K., & Rao, M. V. (2018). X-Slotted circularly polarized antenna with parasitic patches. *International Journal of Engineering & Technology*, 7(1.1), 534-538.

26.Madhav, B. T. P., Thirumalarao, K., Rao, M. V., Saiteja, V. N. V., Kumar, J. K., & Reavanth, P. N. V. S. (2017). Metamaterial inspire multiband monopole antenna with defected ground structure. *International Journal of Engineering & Technology*, 7(5), 90-96.

27.Madhav, B. T. P., Sai Santosh, T., Venkateswara Rao, M., Sai Manikanta, S., Srinivas, K. B. V., & Hanumath Sastry, J. (2017). 'A novel ultra wideband mimo antenna with wimax band notch characteristics. *Journal of Advanced Research in Dynamical and Control Systems*, 9(Special Issue 14), 2094-2103.

28.Venkateswararao, M., Vamsikrishna, M., Manjusha, P., Suryaprakashrao, B., Sruthi, G., & Raghavkrishna, B. (2023). A Compact Circularly Polarized MIMO Diversified Antenna for 5G Mobile Applications. In *Advances in Signal Processing, Embedded Systems and IoT: Proceedings of Seventh ICMEET-2022* (pp. 237-246). Singapore: Springer Nature Singapore.

29.Tirunagari, A., Korupalli, P. K., Kadimisetty, Y., Kandregula, J., & Rao, M. V. (2023, June). Design and Analysis of Pascal Triangle Shaped Chip-less RFID Tag Antenna. In *2023 IEEE Wireless Antenna and Microwave Symposium (WAMS)* (pp. 1-4). IEEE.

30.Madhav, B. T. P., Babu, M. A., Kumar, P. P., Rao, M. V., & Srikar, D. P. (2018). Cylindrical Structured Multiple-Input Multiple-Output Dielectric Resonator Antenna. In *Microelectronics, Electromagnetics and Telecommunications: Proceedings of ICMEET 2017* (pp. 589-597). Springer Singapore.

31.Lakshmi, M. L. S. N. S., Madhav, B. T. P., Khan, H., Rao, M. V., & Madhumati, G. L. (2020). Triple Notch Reconfigurable Parasitic Monopole Patch Antenna with Defected Ground Structures. *International Journal of Microwave & Optical Technology*, 15(4).

32.Babu, M. A., & Rao, M. V. (2018). Design and Analysis of Stepped Reconfigurable Rectangular Patch Antenna for LTE, Vehicular and Ultra-Wideband Applications. *International Journal of Engineering and Technology*, 7(1.1), 548-553.

33.Sivakumar, B. S., Saradhi, P. P., Madhav, B. T. P., Rao, M. V., & Sai, G. K. (2019). Meta-material inspired monopole antenna for LTE/bluetooth/Wi-max subsystems. *International Journal of Recent Technology and Engineering*, 8(1), 3019-3022.

- 34.Sanam, N., Venkateswara Rao, M., Nekkanti, V. S. K., Pulicherla, V. K., Chintapalli, T., & Yadlavalli, A. P. (2019). A flag-like MIMO antenna design for wireless and IoT applications. *Int J Recent Technol Eng*, 8(1), 3023-3029.
- 35.Saravanan, R. A., Venkateswararao, M., Sahiti, V. S., Swetha, V., Priyanka, V. K., & Anand, P. S. (2019). Frequency and pattern reconfigured multi band CPW antenna for Wimax and X-band applications. *Int J Innov Tech Expl Eng*, 8(6), 1202-1208.
- 36.Subbareddy, V., Madhav, B. T. P., Prathyusha, S., Janardhan, G. G., Kalpanath, N., & Rao, M. V. (2017). A printed staircase serrated CPW antenna for UWB applications. *ARPN J. Engineering Appl. Sci*, 12(15), 4483-4488.
- 37.Rao, V. V., & Kumar, A. A. (2018, May). Artificial neural network and adaptive neuro fuzzy control of direct torque control of induction motor for speed and torque ripple control. In *2018 2nd International Conference on Trends in Electronics and Informatics (ICOEI)* (pp. 1416-1422). IEEE.
- 38.Rao, V. V., & Kumar, A. A. (2018, May). Artificial neural network and adaptive neuro fuzzy control of direct torque control of induction motor for speed and torque ripple control. In *2018 2nd International Conference on Trends in Electronics and Informatics (ICOEI)* (pp. 1416-1422). IEEE.
- 39.Anilkumar, T., Madhav, B. T. P., Hawanika, Y. S., Rao, M. V., & Nadh, B. P. (2019). Flexible Liquid Crystal Polymer Based Conformal Fractal Antenna for Internet of Vehicles (IoV) Applications. *International Journal of Microwave & Optical Technology*, 14(6).
- 40.Nagaraju, K., Kelleti, L., Dega, V., Venkateswararao, M., Manda, S., Bhagyalakshmi, B., & Anem, R. K. (2023, June). Time Variant Circularly Polarized CPW Antenna for WIFI/ISM/Wi-Max/Wi-LAN Communication Applications. In *2023 IEEE Wireless Antenna and Microwave Symposium (WAMS)* (pp. 1-5). IEEE.
- 41.Vasujadevi, M., Madhav, B. T. P., Skandan, A. S., Rajeswari, P., Rao, K. A., Reddy, K. K., & Rao, M. V. (2018). Maple leaf shaped array antenna for multiband applications. *International Journal of Engineering and Technology (UAE)*, 7(1.1), 494-499.
- 42.Kishore, M. P., & Rao, M. V. (2019). A CPW-fed elliptically curved antenna design for multiband operation with metamaterial loading. *Int J Innov Tech Expl Eng*, 8(7), 120-125.
- 43.Vineetha, K. V., SivaKumar, M., Rao, M. V., & Kishore, P. V. V. (2020). SRR based Tri-Mode Resonant Microstrip Bandpass Filter for WLAN Applications. *Journal of Engineering Science and Technology*, 15(5), 3218-3241.
- 44.Rao, P. R., Madhav, B. T. P., Deepthi, C. H., VenkateswaraRao, M., Kasa, V. S. A. H., & Paidi, Y. R. (2019). Design and analysis of multi-band met material antenna for wireless and IOT applications. *International Journal of Recent Technology and Engineering (IJRTE)*, 8(1).
- 45.Rajakumar, M., Babu, B. L., Supraja, P., Gayatri, G., Manikanta, M., Muheeth, S. K., & Venkateswararao, M. (2023, June). Split Ring Resonator Based Isolation Reduced 5g MIMO Antenna for UWB Communication Applications. In *2023 IEEE Wireless Antenna and Microwave Symposium (WAMS)* (pp. 1-5). IEEE.
- 46.Sujatha, M., Madhav, B. T. P., Prakhya, V., Akhila, B., Gowtham, N., Mozammil, S., & Rao, M. V. (2018). Tristrip Monopole Antenna with Split Ring Resonators for ISM Band Biomedical Applications. *Indian Journal of Public Health Research & Development*, 9(6), 301-305.
- 47.Prakash, B. L., Madhav, B. T. P., Lokesh, T., Sri, Y. R., Aditya, N. V. D. S., & Rao, M. V. (2019). Metamaterial Inspired Tri-Band Antenna with SRR and Shorting Stub. *ARPN Journal of Engineering and Applied Sciences*, ISSN, 6608, 6197-6205.
- 48.Ramakrishna, T. V., Madhav, B. T. P., Rao, M. V., Rao, A. B., Sunaina, A., Avinash, A., & Shivani, B. (2018). SRR loaded half-mode substrate integrated waveguide monopole slot antenna for multiband applications. *International Journal of Engineering and Technology (UAE)*, 7, 1-1.
- 49.Pokkunuri, P., Madhav, B. T. P., Sai, G. K., Venkateswararao, M., Ganesh, B., Tarakaram, N., & Teja, D. P. (2019). Metamaterial inspired reconfigurable fractal monopole antenna for multiband applications. *International Journal of Intelligent Engineering and Systems*, 12(2), 53-61.
- 50.Mujawar, M., Saradhi, D. V., Desai, S. L., & Venkateswararao, M. (2021, May). Performance Analysis of Dipole and Bow-Tie Antenna for Underwater Communication Using FEKO. In *2021 Emerging Trends in Industry 4.0 (ETI 4.0)* (pp. 1-6). IEEE.
- 51.Mujawar, M., Saradhi, D. V., Desai, S. L., & Venkateswararao, M. (2021, May). Performance Analysis of Dipole and Bow-Tie Antenna for Underwater Communication Using FEKO. In *2021 Emerging Trends in Industry 4.0 (ETI 4.0)* (pp. 1-6). IEEE.
- 52.Madhav, B., Reddy, V., Rajasekar Reddy, D., Sankar, K., Ramanujan, E., Prakash, V., & Rao, M. (2018). Tree shaped fractal antenna with multiband characteristics. *International Journal of Engineering*

and Technology, 7(1.1), 333-338.

53.Akram, P. S., Madhav, B. T. P., Sravya, G. J., Sudhakar, V., Sirisha, G. L., Mounika, C., & Rao, M. V. (2018). Design and analysis of square shaped serrated patch antenna for ultra-wideband applications with single rejection band. *International Journal of Engineering and Technology (UAE)*, 7(1.1), 525-529.

54.Madhav, B. T. P., Rao, M. V., Manisahithi, K., Sarvani, D. S. S., Dharani, M., & Reddy, S. R. (2018). Compact metamaterial inspired periwinkle shaped fractal antenna for multiband applications. *International Journal of Engineering and Technology*, 7(1.1), 507-512.

55.Mujawar, M., Gunasekaran, T., Saradhi, D. V., & Venkateswararao, M. (2024, January). THz microstrip antenna array design for cancer detection through THz spectroscopy. In *AIP Conference Proceedings* (Vol. 2512, No. 1). AIP Publishing.

56.Rao, R. K., Gnaphthika, T., Abhinash, D., Keerthi, S., Varma, T. S., Venkateswarlu, G., & Rao, M. V. (2023, June). Design of Compact Fed Serrated CPW Radial Patch Antenna for WiMAX Applications. In *2023 IEEE Wireless Antenna and Microwave Symposium (WAMS)* (pp. 1-4). IEEE.

57.Galeeb, M., Swetha, K., Durga, K. P., Manisri, K., Naidu, L. N., & Venkateswararao, M. (2023, April). Triple stub enclosed CPW fed patch antenna for Wi-Fi/ISM/Bluetooth and V2X Auto-motive Communication. In *2023 International Conference on Recent Advances in Electrical, Electronics, Ubiquitous Communication, and Computational Intelligence (RAEEUCCI)* (pp. 1-4). IEEE.

58.Srilekha, G., Pardhasaradhi, P., Madhav, B. T. P., VenkateswaraRao, M., & Rao, M. C. (2021). A compact low frequency dual band liquid crystal polymer antenna for VHF and UHF band applications. *Materials Today: Proceedings*, 42, 1356-1360.

Declaration

I hereby declare that the above-mentioned information is correct, up to my knowledge and i bear the responsibility for the correctness of the above-mentioned particulars.

DATE:

Place: Vijayawada.

(M Venkateswara Rao)