Name of Faculty	Dr. M. L. N. ACHARYULU	
Designation	Associate Professor	
Date of Joining	30-01- 2021	
E-mail	mlncharyulu_ece@cbit.ac.in	

Education Qualifications	Name of the Degree	Class
Ph. D	Doctor of Philosophy (ECE) JNTU,Hyderabad	Awarded
PG	M.E(Microwave &RADAR) OSMANIA UNIVERSITY	First Class
UG	AMIETE (ECE) IETE,NEW DELHI	First Class

Work Experience

Teaching	27 Years (Including Research)
Research	8 Years
Industry	--
Others	--

Area of Specialization	Microwave & Radar, VLSI Design ,Antennas
Professional Memberships	MIEEE, LMIETE, LMISTE, LMIAENG IEEE Solid-State CircuitsSociety (M)
Responsibilities held at Institution Level	Member of NITTR
Responsibilities held at Department Level	1. Co-ordinator for AAA Audit Department 2. Member, Course Expert Group. 3. Member,NBA Criterions (6&10) for department 4. Member, CIE 5. Class In charge 6. Professional Society coordinator 7. Department Budget coordinator 8. OMC Coordinator 9. Mentoring 10. Internal BOS Member
Research Guidance	--
Awards Received	--
Courses Handled at Under Graduate / Post Graduate Level.	UG: Electromagnetic Waves & Transmission Lines, Electronic Devices Circuits, Antenna Propagation & Wave Propagation, Digital Communications, Signals and Systems, Analog Communications, Linear Integrated Circuit Applications, Microwave Engineering, Satellite Communications, Radar Systems, Cellular and Mobile Communications, Television Engineering, VLSI Design, Telecommunication Systems and Services, Electro Magnetic Interference & Compatibility, RF Integrated Circuits, GPS,Electronic Measurements and instrumentation, Drones &Applications,VLSI testing and verification. PG : Low power VLSI , Mixed Signal & RFIC ,EMI/EMC, ANALOG DESIGN, VLSI Design for testability.

No. of Papers Published (50)	National Journals – Nil	International Journals – 35
	National Conference – 04	International Conference – 11

Patents :5 (Granted:4,Published:1)	1. AI BASED DRONE FOR MEDICAL LOGISTICS DELIVERY Dr. Vivek Singh Kushwah, Dr. M.Lakshmi Narasimha Charyulu, Dr. C. Venkata Narasimhulu, Dr. P. Narahari Sastry, Dr. M.Ramana Reddy CHAITANYA BHARATHI INSTITUTE OF TECHNOLOGY Patent No. 6345044 Engineering and Technology Granted Filed 2024-02-06 Published 2024-02-21 2.IOT ENABLED RESPIRATORY SENSING DEVICE M L N Acharyulu,viveksingh kushaw,CV Narsimhulu,M ramana reddy,P.N.Sastry

CHAITANYA BHARATHI INSTITUTE OF TECHNOLOGY
Patent No. 406763-001 Medical and Health Sciences Granted
Filed 2024-02-06 Published 2024-04-18

3.A novel method and system to improve security and QOS parameters in MANETS
Dr.M L N Acharyulu,J.Pandu Ranga rao
CHAITANYA BHARATHI INSTITUTE OF TECHNOLOGY
Patent No. 6345044 Engineering and Technology Granted
Filed 2020-12-20 Published 2020-09-25

4. AI and Solar Powered Antenna for 5G International Design
Chaitanya Bharathi Institute of Technology, Dr. Vivek Singh Kushwah, Dr. Maddala Lakshmi Narasimha Charyulu, Dr. Male Ramana Reddy, Dr. Panyam Narahari Sastry, Dr. Vasanth Kishore Babu
Dr.M L N ACHARYULU,VIVEK SINGH KUSHWAH,etc...
Patent No. 6444415 Engineering and Technology Filed
Filed 2025-05-14 Published 2025-05-21

Technology Transfer	Design of Impulse Radiating Antenna--
Invited Speaker	1. Lectures (5) on "Antenna &Wave propagation on 2007 August organized by MLRIT, Dept. of ECE 2. A Lecture on "Evolution of technology in Micro Electronics" .on 19- 10-2012 organized by BVCE, ODALAREVU, Dept. of ECE. 3. A Lecture on "Microwave antennas " on 28-03-2013 organized by BVCE,ODALAREVU, Dept. of ECE 4. A Lecture on "Impulse radiating antenna design and applications "on 18-12-2-18 in faculty development program organized by SNIST, Hyderabad Dept. of ECE
No. of Books/Chapter Published with details	1. Investigation on routing methods in low power VLSI Scenario Scholars press,S.R.L.Publisher ing group ,EUROPE 978-613-8-95526-9 , June,2021, Dr.M.L.N.Acharyulu, Dr.N.S.M.Sarma,T.Rama Swamy 2. Design of conical TEM feed for an Impulse radiating antenna , Lambert Academic Publication, june /2012, m.l.n.acharyulu,dr.n.s.murthi sarma,Prasanna Rajan ISBN :978-3-8484-1094-1 3. Microstrip L Band Filter For Clock Source At Submeter Wavelength, Lambert Academic Publication, Aug/2012, Mohan,M.L.N.Acharyulu,Dr.N.S.M.Sarma ISBN:978-3-8484-1308-9 4. Analyzing the Hybrid Electric Vehicle's Performance for Automatic Acceleration Control Charyulu M.L.N.;Sailaxmi M.;Kushwah V.S. Conference Paper Communications in Computer and Information Science, Volume 2399 CCIS, Year 2025, Pages 23-48 DOI:10.1007/978-3-031-87886-2_3

1. Attended webinar on "Antenna protocols" organized by department of electronics and communication engineering ,RVS College of engineering & Technology , Coimbatore on 1.6.2020
2. Participated webinar on "Next generation AI Technologies for Cyber Physical Systems "organized by St.Peters Engineering college ,Hyderabad on 13.05.2020
3. Enhancement of latest VLSI technology seminar conducted by AARK IC TECHNOLOGIES in 2022
4. Leader ship and Governance in higher education level-2 exam certificate from MHRD,NTA in 2021jan to 2021 April.
5. "Augmented Reality and Virtual Reality" work shop conducted by Department of E&TC Engineering, AISSMS College of Engineering, Pune (Maharashtra). 21.06.2021 to 25.06.2021 sp onsered by AISSMS College of Engineering association with IEEE,IE(I),ISTE.
6. National Level Five-Days Online Workshop on "MATLAB and its Applications in Image Processing and Communication" conducted by the Department of Electronics and Communication Engineering, SRM TRP Engineering College, Tiruchirappalli on 21.02.2022 – 25.02.2022. Department of Electronics and Communication Engineering in Association with IETE and IIC
7. weak FDP on Communication systems using machine Learning Algorithms 14.03.2022 TO 19.03.2022 conducted by AIETS, HYDERABAD

FDDF

1. Attended workshop on "VLSI CIRCUITS ANALOG AND DIGITAL DESIGN PERSPECTIVES "Organized by department of ECE, JNTUA College of engineering associated with ASM Semiconductors and HCL Technologies 16.5.2020 to 17.05.2020.
2. actively participated in the Two-day workshop on "Wired and Wireless Network Simulation using Network Simulator (NS-2)" organized by dept of ECE ,St.peters Engineering college, from 19.05.2020 to 20.05.2020.
3. actively participated in "one week National Level Faculty Development program on Innovation to Academicians " organized by National Science And Technology Entrepreuor Ship Development Board ,DEPARTMENT OF SCIENCE AND TECHNOLOGY ,GOVT.OF INDIA and Ramachandra College of Engineering ,ELURU,AP(st) From 11.5.2020 to 16.5.2020
4. Attended webinar on "CHALLENGES IN CYBER SECURITY " organized by department of electronics and communication engineering ,saveetha engineering college,Chennai on 14.5.2020
5. Attended 3day webinar Faculty Development Program on "IOT with Artificial Intellegent in collaberation with 360Dogi TMG "organized by department of electronics and communication engineering, sir CR Reddy College of engineering,Eluru from 27.5.2020 to 29.05.2020.
6. Participated in the faculty development program on "Research Paper & Project Proposal Writing" under IEEE Student Branch held on 15-May to 16-May, 2020 organized by the Department of Electrical and Electronics Engineering,SREE VIDYANIKETHAN ENGINEERING COLLEGE(A), Sree Sainath Nagar, A. Rangampet, Tirupati
7. Participated in online Faculty development program on Renewable Energy sources: A Way Ahead organized bymechanical dept in association with ASM international Pune Chapter and ISARAE Nagpur chapter "Organized by CUMMINS COLLEGE OF ENGINEERING FOR WOMENS, NAGPUR MH(st)15 th may to 21 may 2020.
8. participaed 2-week AICTE Funded Faculty Development Programme on Pedagogical Training on Outcome Based Education slot 1 conducted in the online mode from 2nd Nov to 16th Nov 2020 organized and Hosted by St.Peters engineering College(A),Hyderabad

9. Details of Journal Publications/ Conferences (National and International: **(50)**

<mark>**International Journal from the year 2020**</mark>

1. SNG Metasurface–Enhanced Two-Terminal Silicon–Graphene THz Antenna with Beam Tilting, Circular Polarization, and Isolation Improvement,
Sastry P.N.; .;Kumar A.K.;Deepika D., Charyulu M.L.N.;Reddy M.R,; Kushwah V.S Year 2025

2.Frequency reconfigurable array-based hybrid antenna in the THz regime with high gain and quasi-isotropic radiation pattern features

Reddy M.R.;Charyulu M.L.N.;Kushwah V.S.;Sastry P.N.;Kumar A.K.;Koshti R.

Article Applied Optics, **Volume** 64, **Year** 2025, **Pages** 4114-4120,<mark>SCOPUS,SCI,WOS</mark>
DOI:10.1364/AO.557311

3.Design and investigation of a polarization convertor loaded MIMO graphene–silicon DRA in the THz domain with enhanced isolation

Kushwah V.S.;Charyulu M.L.N.;Reddy M.R.;Sastry P.N.;Kumar A.K.;Deepika D.

Article Applied Optics, **Volume** 64, **Year** 2025, **Pages** 6727-6732, <mark><u>SCOPUS,UGC CARE,SCI,WoS Indexed, (IF:1.7)</u></mark>
DOI:10.1364/AO.570452

4.**Design and investigation on two port circularly polarized graphene-silicon based MIMO antenna with high isolation for THz wireless applications**

Reddy M.R.;Charyulu M.L.N.;Kushwah V.S.;Sastry P.N.;Kumar R.

Article Journal of Optics India, **Volume** 54, **Year** 2025, **Pages** 1313-1321, SCOPUS,UGC CARE,SCI,WoS Indexed, (IF:1.6)
DOI:10.1007/s12596-024-01821-1

5. Design and analysis of frequency agile LP to CP convertor loaded silicon–graphene based MIMO array antenna in THz regime

Kushwah V.S.;Reddy M.R.;Charyulu M.L.N.;Sastry P.N.;Goyal S.

Article Journal of Optics India, **Volume** 54, **Year** 2025, **Pages** 1210-1217, SCOPUS,UGC CARE,SCI,WoS Indexed, (IF:1.8)
DOI:10.1007/s12596-024-01783-4

6. Four-port Silicon-Graphene Built Frequency Agile Circularly Polarized Nano-plasmonic Antenna in THz Regime with Bidirectional Pattern Diversity

Charyulu M.L.N.;Reddy M.R.;Kushwah V.S.;Sastry P.N.;Kumar A.K.;Jain K.

Article Plasmonics, **Volume** 20, **Year** 2025, **Pages** 6037-6047, SCOPUS,UGC CARE,SCI,WoS Indexed, (IF:4.3)
DOI:10.1007/s11468-025-03065-6

7.Evaluating the use of an artificial neural network to figure out leaf area
MLN ACHARYULU,K.LAL KISHORE

article INTERNATIONAL JOURNAL OF INNOVATIVE RESEARCH IN TECHNOLOGY, **Volume** 11, **Year** 2024, **Pages** 2199-2204

8.A Novel Channel Routing Using For Minimization of Cross Talk in VLS

Dr.MADDALA LAKSHMI NARASIMHA CHARYULU

journal-article Journal of VLSI Design and Signal Processing, **Year** 2023

9.INVESTIGATION OF LOW POWER TRANSISTOR STACKING SYSTEM IN VLSI CIRCUITS

Dr.MADDALA LAKSHMI NARASIMHA CHARYULU

journal-article INTERNATIONAL JOURNAL OF NOVAL RESEARCH AND DEVELOPEMENT, **Volume** 8, ISSUE7, **Year** 2023, **Pages** c621-c632

10.A Novel Channel Routing Using For Minimization of Cross Talk in VLSI

MLN ACHARYULU

article Journal of VLSI Design and Signal Processing (e-ISSN: 2581-8449), **Volume** 9,issue2, **Year** 2023, **Pages** 25-38

11.A Novelty of Emergent Technology Challenges of Dielectric Films at14nm Era

MLN ACHARYULU, NS MURTHI SARMA, K.LAL KISHORE

article International Journal of VLSI & Signal Processing, **Volume** 9,issue2, **Year** 2022, **Pages** 5-8
DOI:10.14445/23942584/IJVSP-V9I2P102

12.A Novel Approach of ONOFIC Method to the Minimization of Leakage Power in CMOS Circuits KSLR M. L. N. Acharyulu

journal-article Journal of Electronic Design Engineering, **Year** 2021

13.Investigation on Routing Methods in Low Power VLSI Scenario

MLN ACHARYULU, NS MURTHI SARMA, RAMA SWAMY

book SCHOLARS PRESS, UK SRI publishing group, **Year** 2021

14.A Novel Approach of ONOFIC Method to the Minimization of Leakage Power in CMOS Circuits.

M. L. N. Acharyulu,K. Suhitha Lakhi Reddy

article Journal of Electronic Design Engineering, **Volume** 7,issue1, **Year** 2021, **Pages** 1-8

15. INVESTIGATION OF CONGESTION PREDICTOR WITH SUPERVISED LEARNING FOR ROUTABILITY-DRIVEN GLOBAL ROUTING

journal-article journal of Electronics and communications 6 (3), 24-30, **Volume** 6,issue3, **Year** 2021, **Pages** 24-30

16.Implementation of SPI Protocol in FPGA and Validation with Various Inputs

supervised-student-publication "Journal of Embedded Systems & Its Applications", **Volume** 5, 2, **Year** 2020, **Pages** 1-16

17. Novelty of Multi Route Coding for Reduction of IR Drop

journal-article International Journal of Grid and Distributed Computing web of science 13 …, **Volume** 13, 2, **Year** 2020, **Pages** 785-791

International /National Conferences from the year 2020:

1. FPGA Design and Implementation of Approximate Radix 16 Booth Multiplier using Error Detection and Correction, Aditi battu,mln acharyulu,sravani,varsha T ,. IEEE Madhya Pradesh Section Conference (MPCON) 2025 **979-8-3315-1285-9/25/$31.00©2025 IEEE ,pp378-382 (MPCON) 2025(SCOPUS)**
DOI: 10.1109/MPCON.2025.63

2. ASIC Flow of AXI Interface for ADPLL Module using SCL180nm, M.L.N Charyulu1,R. Mounika2,, Mohd Ziauddin Jahangir3, Vivek Singh Kushwah*4, IEEE Madhya Pradesh Section Conference (MPCON) 2025,; **979-8-3315-1285-9/25/$31.00©2025 IEEE,pp-347-355** (MPCON) 2025(SCOPUS)
DOI: 10.1109/MPCON.2025.58

3. Reduction of BTBT effect in Junctionless NanowireTransistor with T-Gate and Si3N4 Gate Dielectric, Dibyadrasta Sahoo M. Ramana Reddy,Vivek Singh Kushwah, M.L.N.Charyulu,; IEEE Madhya Pradesh Section Conference (MPCON) 2025, 979-8-3315-1285-9/25/$31.00©2025 IEEE,pp-**441-445,** (MPCON) 2025(SCOPUS)
DOI: 10.1109/MPCON.2025.74

4.Analyzing the Hybrid Electric Vehicle's Performance for Automatic Acceleration Control

Charyulu M.L.N.;Sailaxmi M.;Kushwah V.S.

Conference Paper Communications in Computer and Information Science, **Volume** 2399 CCIS, **Year** 2025, **Pages** 23-48 **(SCOPUS)**

5.UVM Based Verification of an Ethernet MAC using Wishbone Bus

Charyulu M.L.N.;Kanth N.M.;Kushwah V.S.

Conference Paper Proceedings 2024 13th IEEE International Conference on Communication Systems and Network Technologies Csnt 2024, **Year** 2024, **Pages** 183-188, **(SCOPUS)**

6. Implementation of an Optimized AXI using Verilog

Gollapudi A.;Kumar A.K.;Charyulu M.L.N.

Conference Paper Proceedings of International Conference on Circuit Power and Computing Technologies Iccpct 2024, **Year** 2024, **Pages** 684-690, **(SCOPUS)**

7. ANN Model for Designing Stub Microstrip LowPass Filters

Kushwah V.S.;Charyulu M.L.N.;Tomar G.S.

Conference Paper Proceedings 2024 13th IEEE International Conference on Communication Systems and Network Technologies Csnt 2024, **Year** 2024, **Pages** 22-28, **(SCOPUS)**

8.Novelty of Multi Route Coding for Reduction of IR Drop "

conference-paper Proceedings of ICCEEE 2020,st.peters engg college, **Year** 2020