

Name of Faculty Dr. N. V. Koteswara Rao  
 Designation Professor & Director-IQAC  
 Nature of Job/Appointment Regular  
 Date of Joining 24-12-1992  
 E-mail nvkoteswararao\_ece@cbit.ac.in



Education Qualifications	Name of the Degree	Class
Ph. D	Doctor of Philosophy (ECE) Osmania University	Awarded
PG	M. Tech.(Microwave Electronics) University of Delhi	Distinction
UG	B. Tech. (ECE) Nagarjuna University	Distinction

**Work Experience**

Teaching	31 Years
Research	
Industry	01 Year
Others	--

Area of Specialization Microwaves, EM Fields and Printed Antennas

Professional Memberships LMISTE, FIETE

- Responsibilities held at Institution Level
1. Director, IQAC (2021 - till date)
  2. Director, Academics (2018 - 2020)
  3. Member, Finance Committee (2017 - 2019)
  4. Dean, CDAAC (2014 - 2018)
  5. Chairman , BoS-ECE Dept. (2013-2018)
  6. Head, Dept. of ECE (2008 - 2018)
  7. TEQIP-II : Institute Coordinator (2013-2017)
  8. Member, Governing Body (2013 -2016)
  9. In-Charge, ic-CBIT (2003-2007)

- Responsibilities held at Department Level
1. Member, Board of Studies.
  2. Member, Course Expert Group.
  3. Member, Common Course Committee.
  4. Member, DRC

- Research Guidance
1. Recognized guide by OU and JNTU for guiding PhD scholars.
  2. Four (4) Scholars are awarded with PhD.
  3. Three (3) Scholars have submitted PhD thesis.
  4. Eight(8) Scholars are perusing with PhD.

- Awards Received
1. Honored as 'The Distinguished Teacher' of the ECE Department for excellence in the academic and administrative activities in the year 2002.
  2. Honored as 'Best Teacher' of the CBIT for excellence in the academic/research and administrative activities in the year 2018.

Courses Handled at Under Graduate / Post Graduate Level. EMTL, Antennas, Microwave Engineering, Radar, VHDL, ARS.

No. of Papers Published National Journals – -- International Journals – 32  
 National Conference – 14 International Conference –33

Projects Carried out	<p>1. "Design and Development of Multi input and Multi frequency Antenna for Missile application", Project sectioned under CARS for research services, No.DRDL/23CR0004/APS/APS/DOMR/76097, dated 30-12-2022, for 13 months duration, Role in the Project: PI.</p> <p>2. Multifunction Frequency and Time Domain Signal analyzer for Testing and Performance Evaluation of Cellular and Navigation Components and Systems Sanctioned the project under MODROBS scheme by AICTE, New Delhi. Sanctioned AICTE Order No :9-89/RIFD/MODROB/Policy-1/2014-15 dated 03<sup>rd</sup> March 2015.Duration 1 year (2016-17). Role in the Project :PI</p> <p>3. IRNSS Navigation Receiver Field Trial and Data Collection, Under an MoU between Space Applications Centre (SAC), ISRO, Ahmedabad and CBIT, Hyderabad. (As Part of MoU signed with SAC-ISRO In 2014 and 2016). Role in the Project: One of the focal persons.</p> <p>4. A local short term model for forecasting ionospheric scintillations for GNSS applications over Indian region, sponsored by Indian Space Research Organisation (ISRO), Dept. of Space, Bangalore under Respond program.No: ISRO/RES/2/399/15-16. Project Starting Date:11<sup>th</sup> March 2016.Project Duartion of 3 years. Role in the Project : Co-PI</p> <p>5. Improvement of Performance of RLG using Wavelet and S-Transform.Sanction order No.: RCI/DCMM/LPD/CARS-368 Dt:29-04-2016. Sponsored by RCI, DRDO,Hyderabad (Under CARS Programme). Project Duartion of 21 months. Role in the Project :Co-PI</p> <p>6.'Design and Development of DSP Processor Based Signal Processing Unit for Ring Laser Gyro' Sponsored by RCI, DRDO,Hyderabad for duration of 1 year (2014-15). Role in the Project :Co-PI</p> <p>7. Design and Development of Palm Leaf Character Recognition System.AICTE Order No. 20/AICTE/RIFD/RPS (Policy-1)25/2013-14.Duration 3 years from 29/07/2013 to 29/07/2016. Role in the Project :Co-PI</p> <p>8. Reconfigurable Microstrip Antenna for Cognitive Radio and Mobile Communications funded by CBIT for duration of 1 year (2013-14) . Role in the Project :PI</p> <p>9. Design of Antenna System for Air-Borne Telemetry Sponsored by DRDO for duration of 2 years from 2011 to 2013. Role in the Project :PI</p> <p>10. Analysis of Printed slots and slot Coupled Radiators using MOM 8020/RID/NPROJ/R&amp;D Sponsored by AICTE for duration of 3 year from 2004 to 2007. Role in the Project :PI</p>
Patents	<p>An Indian Patent filed on 01/01/2016 with Application No. 201641000080A in Indian Patent Office Chennai. This patent published in the Journal of Indian Patents -- ISSUE NO. 03/2016 FRIDAY DATE: 15/01/2016, Page No.2268 with the title "System and Method for Palm Leaf Character Recognition using 2D Haar Wavelet Transformation and 3D Feature". Patent no: 400741, Date of Grant : 04/07/2022</p>
Technology Transfer	<p>Shared the design of a 'Wideband Circular Microstrip Patch Antenna' on a Low Dielectric thick substrate" with ISRO.</p>
Invited Speaker	<ol style="list-style-type: none"> <li>1. A talk on "Roles", delivered on 11-03-2022 in the in house training program conducted by IQAC-CBIT</li> <li>2. A talk on "NAAC Seven criterion and IQAC for HEI's", delivered on 30-04-2022 in the in house training program conducted by IQAC-CBIT</li> </ol>

3. A talk on "Demystifying Electromagnetics", delivered on 03-05-2021 in (VNR) Vignana Jyothi Institute of Engineering and Technology, Hyderabad.
4. A lecture on "Overview of EM Waves", delivered on 05-08-2020 in IEEE VNR Student Branch Chapter, Hyderabad.
5. A Lecture on "Introduction to Computational Electro Magnetics Part-I" on 01-04-2019 organized by OUCE, Dept. of ECE.
6. A Lecture on "Introduction to Computational Electro Magnetics Part-II" on 02-04-2019 organized by OUCE, Dept. of ECE.
7. A Lecture on "Variational Techniques and Weighted Residual Methods, Integral Equation and MoM" on 08-04-2019 organized by OUCE, Dept. of ECE.
8. A Lecture on "Method of Moments" on 15-04-2019 organized by OUCE, Dept. of ECE.
9. A Lecture on "Conducted an interactive session on "Autonomous for engineering college and responsibilities for the administrators" on 13-10-2018 organized by Pullayya Engineering College, Kurnool.
10. A Lecture on "Conducted an interactive session on "Autonomous for engineering college and responsibilities for the administrators" on 25-26 July, 2018 organized by St.Anns Engineering College, Chirala.

No. of Books/Chapter Published with details

"Compressed Sensing Based Mixed Noise Cancellation in Passive Bistatic Radar", In: Jain L., Peng SL., Alhadidi B., Pal S. (eds) Intelligent Computing Paradigm and Cutting-edge Technologies, ICICCT2019, Learning and Analytics in Intelligent Systems Book Series, vol 9, pp389-404, Springer, Cham, DOI: [https://doi.org/10.1007/978-3-030-38501-9\\_39](https://doi.org/10.1007/978-3-030-38501-9_39), First Online : 18<sup>th</sup> January 2020, Print ISBN978-3-030-38500-2, Online ISBN978-3-030-38501-9.

**FDPs Organized:**

Details of Short-Term Training Programs/Faculty Development Programs/Seminars/Workshops. Other Trainings (**Attended and/or Organized**).

1. Organized a two weeks FDP on "Recent Trends in VLSI for Embedded Applications" from 15<sup>th</sup> to 27<sup>th</sup>, June 2015 sponsored by AICTE.
2. Organized a two weeks FDP on "Real Time Signal Processing "from 2<sup>nd</sup> to 14<sup>th</sup>, December 2013 sponsored by AICTE.

Programs Attended (Year : 2019-20) : 12  
Online Courses completed : 02 (Coursera)

**Details of Journal Publications/ Conferences**  
**Years (s): 2017-2022**

1. Jangampally Rajeshwar Goud, Nalam Venkata Koteswara Rao, and Avala Mallikarjuna Prasad, " Design of Uplink and Downlink Triple Band  $\pi$  - Slot Antennas for Simultaneous Communication," Wireless Personal Communications. Journal, Feb. 2022. (SCIE Science Citation Index Expanded) indexed and Free Journal). <https://doi.org/10.1007/s11277-022-09508-1>
2. Mahidhara Reddy Kankara, Maanvik Thodupunuri, Lakshmi Srikanth Yechuri and N. V. Koteswara Rao, "Encrypted e-Voting System using IoT", International Journal for Research in Applied Science & Engineering Technology (IJRASET) ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.429 Volume 9 Issue IX Sep 2021. DOI: <https://doi.org/10.22214/ijraset.2021.37973>
3. J. Rajeshwar Goud, N. V. Koteswara Rao, and A. M. Prasad, "A Novel Triple Band MIMO Antenna Array for Simultaneous Communications", Progress In Electromagnetics Research M, Vol. 102, 159-169, 2021, doi:10.2528/PIERM21042205.
4. Lenin Naragani, N. V. Koteswara Rao and Kumara Swamy K, "A Compact Low Profile Inverted-F Multi Band Antenna (IFMBA) System for Wifi – Wlan - Wimax Applications", International Journal of Advanced Research in Engineering and Technology (IJARET) Volume 12, Issue 5, May 2021, pp. 51-58, ISSN Print: 0976-6480 and ISSN Online: 0976-6499, DOI: 10.34218/IJARET.12.5.2021.005.
5. Kumara Swamy K, N. V. Koteswara Rao and Lenin Naragani, "A Shared Aperture Multifunction Dual Polarized Dual Band Antenna for Base Station Applications", International Journal of Advanced Research in Engineering and Technology (IJARET) Volume 12, Issue 5, May 2021, pp. 59-68, ISSN Print: 0976-6480 and ISSN Online: 0976-6499, DOI: 10.34218/IJARET.12.5.2021.006.
6. Manikya Krishna Chaitanya Durbhakula and N.V. Koteswara Rao, "Wideband rotated square slot microstrip antenna with tuning stub", Elsevier-Materials Today: Proceedings, October 2020, <https://doi.org/10.1016/j.matpr.2020.09.633>

7. J. Rajeshwar Goud, N. V. Koteswara Rao, and A. M. Prasad, "Design of Triple Band U-Slot MIMO Antenna for Simultaneous Uplink and Downlink Communications," Progress In Electromagnetics Research C, Vol. 106, 271-283, November 2020. doi:[10.2528/PIERC20082403](https://doi.org/10.2528/PIERC20082403)
8. B. Neeraja, N.V. Koteswara Rao, B.Rajendra Naik " Detection and Analysis of Closely Spaced Multiple Targets Using Modified Music Method", Jour of Adv Research in Dynamical & Control Systems, Vol. 12, 07-Special Issue, 2020, pp: 2857-2865. DOI : [1 0.5373/JARDCS/ V12SP7 /20202427](https://doi.org/10.5373/JARDCS/V12SP7/20202427).
9. VenuDunde, Koteswara Rao N V, " Weight Matrix-Based Representation of Sub-Optimum Disturbance Cancellation Filters For Passive Radars ", Journal of Adv Research in Dynamical & Control Systems, Vol. - 11, Special Issue - 05, 2019
10. J. Rajeshwar Goud, N. V. Koteswara Rao, A. Mallikarjuna Prasad, "Inset fed Triple Band U-Slot Antenna for GSM900/GSM1900/WLAN Applications", International Journal of Engineering and Advanced Technology (IJEAT) ISSN: 2249 – 8958, Volume-8, Issue-6S3, September 2019, pp 1513-1517. Scopus indexed Journal
11. Bharath Regimanu,, Kishore Chandra Das, Kakarla Subba Rao and N V Koteswara Rao," Dither Filtering of Real RLG Signal Using Wavelet Transforms", Paper accepted for publication in 'Gyroscopy and Navigation Journal (Peer Reviewed Journal) , 2019
12. Venu Dunde, Koteswara Rao NV, " Weight Matrix-based Least Mean Square Algorithm for Target Detection in passive Radars", Accepted for publishing in International Journal of Engineering and Advanced Technology (IJEAT). Scopus Link: <https://www.scopus.com/sourceid/21100899502> International Journal of Engineering and Advanced Technology (IJEAT) ISSN: 2249 – 8958, Volume-8 Issue-6, August 2019.
13. VenuDunde, Koteswara Rao NV, "Weight Matrix-Based Representation of Sub-Optimum Disturbance Cancellation Filters", International Journal of Intelligent Systems and Applications(IJISA), Vol.11, No.10, pp.15-24, 2019. DOI: [10.5815/ijisa.2019.10.02](https://doi.org/10.5815/ijisa.2019.10.02)
14. Q.J.Mohd1, D.S. Achanta, V. K. R. Nalam, and T. K. Pant, "Comparison of TEC Estimation Techniques using S1 and L5 Signals of IRNSS", Radioelectronics and Communications Systems, 2018, Vol. 61, No. 7, pp. 306–316. © Allerton Press, Inc., 2018, ISSN 0735-2727.
15. Bharath Regimanu1 , Kishore Chandra Das , Kakarla Subba Rao , N.V.Koteswara Rao, "Dither Signal Filtering in Ring Laser Gyroscope Using Modified Stockwell Transform", This article has been accepted for publication in IEEE Sensors Letters, DOI [10.1109/LSENS.2018.2865426](https://doi.org/10.1109/LSENS.2018.2865426).
16. Y.Srinivas, N. V. Koteswara Rao "Single port Sensing and Communicating Antenna for Cognitive Radio Applications", ICTACT Journal on Communication Technology, Vol-08, Issue 01, ISSN 0976-0091, March 2017, PP1472-1477

#### International Conference Publications

1. B.Neeraja, N.V. Koteswara Rao, B.Rajendra Naik "Detection and Analysis of closely spaced Multiple Targets using Modified MUSIC method", Accepted for presentation in Second International Conference on Computing, Communication and Energy Systems 2020 (ICCCES 2020) will be held in MEA College of Engineering, Perinthalmanna, Kerala, India, 26 - 27, February 2020.
2. J Rajeshwar Goud, N V Koteswara Rao and A Mallikarjuna Prasad, "Triple Band U- Slot Antenna for GSM900/GSM1900/WiMAX Applications", Accepted for presentation in International Conference on Communications, Signal Processing and VLSI (IC2SV2019), Organized by National Institute of Technology, Warangal, 3rd -4th, Oct. 2019.
3. Mohd Qurram Javeed, A.D.Sarma, A.Supraja Reddy, N.V.Koteswara Rao, T.Sridher, "Multipath and thermal noise free Relative TEC Estimation using IRNSS L5 and S1 Signals", Accepted for oral Presentation in IEEE International Conference on Innovative Technologies in Engineering 2018, Osmania University, Hyderabad, 11<sup>th</sup>-13<sup>th</sup> April 2018.
4. T.Sridher, A.D.Sarma, N.V.Koteswara Rao, P.Naveen Kumar, "Indoor Propagation of IRNSS Signals: Preliminary Results", Accepted for oral Presentation in International CET conference on Control, Communication and Computing(IC4), Trivendrum, 05<sup>th</sup>-07<sup>th</sup> July, 2018.

5. J. Rajeshwar Goud, N. V. Koteswara Rao and A. Mallikarjuna Prasad, "Edge cut Dual-Band Slot Antenna for Bluetooth/WLAN and WiMAX Applications", Accepted for oral presentation in ICSCSP-2018, 22-23 June 2018 (will be published in AISC Series, Springer Publication ISSN:2194-5357).
6. Rajeshwar Goud Jangampally, Venkata Koteswara Rao Nalam and Mallikarjuna Prasad Avala, "Impact of mutual coupling between the antenna elements on BER Performance of Dual Diversity Adaptive Array", Presented in International conference "IEEPS-18, VNRVJIET Hyderabad, 9<sup>th</sup>-10<sup>th</sup> March 2018.
7. Uttama Ghosh, A.D. Sarma, NV Koteswara Rao and Mohd Qurram Javeed, "Selective Suppression of IRNSS S-band Signals for Specific Applications.",\_Presented in IEEE international conference,\_WEICON -2017 on Electrical and computer engineering 2017 organized from 18<sup>th</sup>-19<sup>th</sup> December 2017 at Women Institute of Technology, Dehradun, Uttarakhand, India.
8. N.Alivelu Manga,K.Lakshmana, AD Sarma,NV Koteswara Rao and T K Pant, "Effect of Amplitude Scintillations on the Tracking Error of IRNSS Receiver for Indoor Navigation Applications.", Presented in IEEE International Conference, WEICON -2017 on Electrical and computer engineering 2017 organized from 18<sup>th</sup>-19<sup>th</sup> December 2017 at Women Institute of Technology, Dehradun, Uttarakhand, India.
9. D.Venu and N. V. Koteswara Rao , "Ambiguity Function Analysis of Broadcast Signals for Passive Radar", IEEE International Conference On Recent Trends In Electronics Information Communication Technology, Bengaluru, May 19-20, 2017, India, pp1996-1998.
10. K. Karthik Sri Sai Nath, N.V.Koteswara Rao and G. V. Pradeep Kumar, " A Secure Routing Algorithm for Detecting and Preventing Sinkhole Attack in MANETS" Presented in IEEE International Conference on Science, Technology, Engineering and Management (ICSTEM'17), 03 - 04 Mar 2017.
11. D.M.K.Chaitanya, N.V.Koteswara Rao, "Wide band patch antenna structures for cognitive radio applications" Presented in IEEE international conference, EEE 7th International Advance Computing Conference , Hyderabad,.05 Jan - 07 Jan 2017,Hyderabad. DOI 10.1109/IACC.2017.88,(Available in IEEE explorer,Pp434-439.

#### **National Conference Publications**

1. Narayanadas Mallaiah, N.V.Koteswara Rao and D Ramakrishna, "RLS Adaptive Beamforming Algorithm in terms of Energy Efficiency for Smart Antenna System", Accepted for oral presentation in 2<sup>nd</sup> Indian Conference On Antennas And Propagation (InCAP 2019), Organized by IEEE AP/MTT , SAC and ISRO. 19-22 December , 2019.
2. Manikya Krishna Chaitanya Durbhakula and .N.V. Koteswara Rao, "Sierpinski Monopole Antenna Reconfigurable System using Hairpin Bandpass Filter Sections", Accepted for presentation in IEEE Indian Conference on Antennas and Propagation (InCAP2018), 16<sup>th</sup>-19<sup>th</sup> Dec 2018.
3. Rajeshwar Goud Jangampally, Venkata Koteswara Rao Nalam and Mallikarjuna Prasad Avala, "Corner cut Inset-fed Dual-Band Slot Antenna for PCS and Bluetooth/WLAN Applications", Accepted for presentation in IEEE Indian Conference on Antennas and Propagation (InCAP2018), 16<sup>th</sup>-19<sup>th</sup> Dec 2018.