Name of Faculty Dr. N. V.Koteswara Rao Designation Professor & Director-IQAC Nature of Job/Appointment Regular 24-12-1992 Date of Joining E-mail nvkoteswararao ece@cbit.ac.in **Education Qualifications** Name of the Degree Class Doctor of Philosophy (ECE) Ph. D Awarded Osmania University M. Tech.(Microwave Electronics) PG Distinction University of Delhi B. Tech. (ECE) UG Distinction Nagarjuna University Work Experience Teaching 28 Years Research 01 Year Industry Others Area of Specialization Microwaves, EM Fields and Printed Antennas **Professional Memberships** LMISTE, FIETE Director, Academics (16-10-2018 to 30-01-2020) 1 2. Member, Finance Committee (07-09-2017 to 06-09-2019) Dean, CDAAC (21-04-2014 to 24-01-2018) Chairman, BoS-ECE Dept. (16-09-2013-to 19-10-2018) 4 Responsibilities held at Institution Level Head, Dept. of ECE (30-08-2008 to 19-10-2018) 5. TEQIP-II: Institute Coordinator (2013-2017) Member, Governing Body (05-12-2013 to 14-11-2016) 7. 8. In-Charge, ic-CBIT (2003-2007) 1. Member, Board of Studies. Member, Course Expert Group. 2. Responsibilities held at Department Level Member, Common Course Committee. 3. 4. Member, DRC Recognized guide by OU and JNTU for guiding PhD scholars. 1. Two (2) Scholars are awarded with PhD. Research Guidance 2. Eight(8) Scholars are perusing with PhD. Honored as 'The Distinguished Teacher' of the ECE Department for excellence in the academic and administrative activities in the year Awards Received 2002. 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 EMTL, Antennas, Microwave Engineering, Radar, VHDL, ARS. Graduate Level. National Journals - --International Journals - 24 No. of Papers Published National Conference – 14 International Conference -33

**Projects Carried out** 

- 1. 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).
- 2. 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).
- 3. 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.
- 4. 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.

- 5. 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).
- 6. Design and Development of Palm Leaf Character Recognitition System.AICTE Order No. 20/AICTE/RIFD/RPS (Policy-1)25/2013-14. Duration 3 years from 29/07/2013 to 29/07/2016.
- 7. Reconfigurable Microstrip Antenna for Cognitive Radio and Mobile Communications funded by CBIT for duration of 1 year (2013-14) .
- 8. Design of Antenna System for Air-Borne Telemetry Sponsored byy DRDC for duration of 2 years from 2011 to 2013.
- 9. Analysis of Printed slots and slot Coupled Radiators using MOM 8020/RID/NPROJ/R&D Sponsored by AICTE for duration of 3 year from 2004 to 2007.

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".

Shared the design of a 'Wideband Circular Microstrip Patch Antenna' on a Low Dielectric thick substrate".

- 1. A Lecture on "Introduction to Computational Electro Magnetics Part-I" on 01-04-2019 organized by OUCE, Dept. of ECE.
- 2. A Lecture on "Introduction to Computational Electro Magnetics Part-II" on 02-04-2019 organized by OUCE, Dept. of ECE.
- 3. A Lecture on "Variational Techniques and Weighted Residual Methods, Integral Equation and MoM" on 08-04-2019 organized by OUCE, Dept. of ECE.
- 4. A Lecture on "Method of Moments" on 15-04-2019 organized by OUCE, Dept. of ECE.
- 5. 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.
- 6. 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.

"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, First Online: 18th January 2020, Print ISBN 978-3-030-38500-2, Online ISBN978-3-030-38501-9.

FDPs Organized:

- 1. Organized 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 two weeks FDP on "Real Time Signal Processing "from 2<sup>nd</sup> to 14<sup>th</sup> ,December 2013 sponsored by AICTE.

Development Trainings (Attended and/or Organized).

## Details Journal Publications/ of Conferences

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,

1. Special Issue - 05, 2019. (Article History: Received: July 26, 2019, Revised: Aug 18, 2019, Accepted: Sep 22,

- J. Rajeshwar Goud, N. V. Koteswara Rao, A. Mallikarjuna Prasad, "Inset fed Triple Band U-Slot Antenna for 2. 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 Bharath Regimanu,, Kishore Chandra Das, Kakarla Subba Rao and N V Koteswara Rao," Dither Filtering of
- 3. Real RLG Signal Using Wavelet Transforms", Paper accepted for publication in 'Gyroscopy and Navigation Journal (Peer Reviewed Journal), 2019
- 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 4. (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. 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.15-5. 24, 2019. DOI: 10.5815/ijisa.2019.10.02

**Patents** 

**Technology Transfer** 

Invited Speaker

No. of Books/Chapter Published with details

Details of Short-Term Training Programs/Faculty Programs/Seminars/Workshops.Other

- Q.J.Mohd1, D.S. Achanta, V. K. R. Nalam, and T. K. Pant, "Comparison of TEC Estimation Techniques using S1
- 6. and L5 Signals of IRNSS", Radioelectronics and Communications Systems, 2018, Vol. 61, No. 7, pp. 306–316. 
  © Allerton Press, Inc., 2018, ISSN 0735-2727.
- Bharath Regimanu1 , Kishore Chandra Das , Kakarla Subba Rao , N.V.Koteswara Rao, "Dither Signal Filtering
- 7. 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.
- 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**

- 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.
- 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.
- 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.
- 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.
- 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).
- 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>-10th March 2018.

  Uttama Ghosh, A.D. Sarma, NV Koteswara Rao and Mohd Qurram Javeed,
- 7. "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.
- N.Alivelu Manga,K.Lakshmanna, 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.
- 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.
- 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.
- 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, Hyderabd, .05 Jan 07 Jan 2017, Hyderabad. DOI 10.1109/IACC.2017.88, (Available in IEEE explorer, Pp434-439

## **National Conference Publications**

- 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.
- Manikya Krishna Chaitanya Durbhakula and .N.V. Koteswara Rao, "Sierpinski Monopole Antenna 2. 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.
- Rajeshwar Goud Jangampally, Venkata Koteswara Rao Nalam and Mallikarjuna Prasad Avala, "Corner cut 3. 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.