

ANIL NEERUKONDA INSTITUTE OF TECHNOLOGY & SCIENCES

(Permanently Affiliated to AU, Approved by AICTE & Accredited by NBA) Sangivalasa-531162, BheemunipatnamMandal, Visakhapatnam Dt. Phone: 08933- 225084,226395

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING DEPARTMENT QUARTERLY NEWS LETTER

[MARCH 2019 - MAY2019]



CENTRE OF EXCELLENCE IN MARITIME & **SHIPBUILDING**

Faculty from department of ECE along with faculty from other departments had visited CEMS (Centre of Excellence in Maritime & Shipbuilding) on 20th April Hindustan Shipvard located at Visakhapatnam.It is a dedicated centre for facilitating Professional skill development in Maritime, Manufacturing automobile aerospace heavy engineering sectors

INDUSTRIAL TRAINING

Students of ECE undergone training during May 2019 in the following Companies.

HARDWARE

BHEL (VSP), BSNL (VSP + VZM), SAMEER (VSP), ECIL (HYD), AIRPORT (VSP), NSTL (VSP), DRDO (HYD), DRDL (HYD), SIEMENS (VSP), NTPC (VSP), HIDDEN VIEW SOLUTIONS (HYD), INSPRIDGE (VSP), CITD (HYD), AMBEST SOLUTIONS (HYD), BRISA TECHNOLOGIES (BANGALORE), and STEEL PLANT (VSP)

SOFTWARE

CULTUZZ (HYD), IGIAT (VSP) and CCC.



SPONSORED TWO WEEKFACULTY DEVELOPMENT PROGRAMME ON"ENGINEERING CHALLENGES FOR MAKING DIGITAL INDIA: INTERNET OF THINGS& APPLICATIONS"

Anil Neerukonda Institute Of Technology And Sciences (ANITS), Department of ECE, has organized AICTE sponsored two week faculty development programme from

11th - 24th June, 2019. A total of 43 participants are shortlisted for the Program, out of which, 35 are outstation participants and 8 are internal participants. A total of 10 resource persons handled all the sessions in this FDP, out of which 7 are from various premium academic institutions & Industries across India and 3 are from ANITS (Preapproved by



BOARD OF STUDIES MEETING

5th Board of Studies meeting was held on 30.03.2019 at 10.30 AM in the DSP lab with the agenda as, To finalize the course structure of R-2019 & To finalize the 1st year syllabus of R-2019 with Dr.V.Rajya Lakshmi (Chairman, BOS, ECE, ANITS), Prof. K. Chandra BhushanaRao (Prof., JNTUK, Vizianagaram) as Special Invitee, Prof.P.RamakrishnaRao(Advisor, ANITS) as Academic Council Nominee, Mr.G. Bhaskar (Avantel VSKP) Industry Person. Mr.M.Durga Prasad(JTO,BSNL) as Alumni, Professor, Assosiate Professors of ECE & Group Coordinators as members.

FACULTY ACHIEVEMENTS

1. Prof. V.Rajya Lakshmi, Prof & Head in ECE, ANITS has been the Joint Research Director for Mr.Rameshwho submittedPh.DinJuly 2019 with thesis entitled "SAR analysis of Textile Antenna using EBG structures"



to which Prof.P.MallikarjunaRao, Prof in ECE, Andhra University was Research Director. Prof. K. Murali Krishna, Prof in

ECE. ANITShas been the Joint Research Director for Sri AdiNarayanawho is awarded withPh.Don 29th April 2019 with thesis entitled "Channel Estimation for MIMO OFDM and Massive MIMO OFDM Systems" to



University was Research Director. 3. Mrs. M. Nirmala, Asst.Prof.,ECECompleted NPTEL online Certification course

whichProf.P. Rajesh Kumar, Prof in ECE, Andhra

SILVER Certificate for Antennas course with a consolidated score of 80% from IIT Mumbai in the duration Jan-April 2019(12 weeks).



4. Mr. J.BhaskaraRao, Asst., Prof., ECE

❖ Submitted his Ph.D titled "Non-Contact method for Surface RoughnessMeasurement for Quality Estimation using Image Processing Techniques" on 21st March GITAM(Deemed to be University).



2019 in

5. Mr. A. Lakshmi Narayana, Asst., Prof., ECE had submitted his Ph.D titled "Development of Bandwidth Based VHA along with Hybrid PAPR Reduction technique for Next Generation Wireless Heterogeneous Networks" on 21st



Heterogeneous Networks" on 21st March 2019 in GITAM(Deemed to be University).

6. Mr. K. V. GowreeSrinivas, Asst.,
Prof., ECE had submitted his Ph.D
titled "Investigations on
Multiplexers and Compressors
Based Floating Point



Multiplication for IEEE 754 Standard" on 15th May 2019 in Pondicherry Central University (PCU).

- 7. Mr.J.BhaskaraRao, Asst.Prof.,ECE as a reviewer in the peer review process for international journal of computer techniques in march 2019.
- 8. Dr.Murugapandiyan P, Assoc.Prof., ECE has presented an idea titled "Design of GaN-based high electron mobility transistor" in The Novel IP Insights INNOVATIVE CHALLENGE 2K18 organized by Novel IPR Academy AMTZ at Kalam Convention Center, Visakhapatnam on 26th April 2019.
- Dr.D.EswarchaitanyaAsst.Prof.,ECE has been reviewer for the article titled "Real-Time Modified Iterative Constrained Weighted Least Squares Algorithm for UWB-TDOA Localization" for IEEE Communications Letters in May 2019.
- 10. Dr.D.EswarchaitanyaAsst.Prof.,ECE has been reviewer for the article titled "Pedestrian Localisation in the typical Indoor Environments" for International Journal of Communication Systems in June 2019.
- 11. Mr.P.DeviPradeepAsst.Prof., ECE acta as a **mentor** for NPTEL course titled "**Problem solving programming in C**" for jan-apr2019.

NPTEL CERTIFICATION COURSES

- Ms.Ch.Anoosha, Asst.Prof., ECE Completed NPTEL online Certification course inMatlab programming for numerical computations with a consolidated score of 61% from IIT Madras in the duration January-March 2019 (8weeks).
- 2. Ms.P.Devi, Asst.Prof., ECE Completed NPTEL online Certification course in**Teaching and Learning in Engineering(TALE)** with a consolidated score of 50% fromIISc Banglorein the duration February-March 2019 (**4weeks**).
- 3. Dr.Murugapandiyan P, Assoc.Prof., ECE Completed NPTEL online Certification course in**Fundamentals of Semiconductor Devices**with a consolidated score of 45% from **IIT** Bangalore in the duration January-April 2019 (12weeks).
- 4. Ms.M.Nirmala, Asst.Prof., ECE Completed NPTEL online Certification course in**Antennas**with a consolidated score of 80% from **IIT** Bombay in the duration January- April 2019 (**12weeks**).
- Mr.B.ChandraMouli, Asst.Prof., ECE Completed NPTEL online Certification course in Electronic Systems for Cancer Diagnosis with a consolidated score of 62% from IIT Bangalore in the duration January- April 2019 (12weeks).
- 6. Mr.P.DeviPradeep, Asst.Prof., ECE Completed NPTEL online Certification course inCMOS Digital VLSI Designwith a consolidated score of 66% from IIT Roorkee in the duration February April 2019 (8weeks).
- 7. Ms.Ch.Padmasree, Asst.Prof., ECE Completed NPTEL online Certification course in Introduction to Research with a consolidated score of 72% from IIT Madras in the duration February April 2019 (8weeks).
- 8. Ms.PSM.Veena, Asst.Prof., ECE Completed NPTEL online Certification course in Introduction to Research with a consolidated score of 60% from IIT Madras in the duration February April 2019 (8weeks).
- 9. Ms.B.Deepa, Asst.Prof., ECE Completed NPTEL online Certification course in Electromagnetic Waves in Guided and Wireless Mediawith a consolidated score of 52% from IIT Kanpur in the duration February April 2019 (8weeks).
- Mr.N.Ramkumar, Assoc.Prof., ECE Completed NPTEL online Certification course in Fundamentals of Semiconductor Devices with a consolidated score of 45% from IIT Bangalore in the duration January-April 2019 (12 weeks).

WORKSHOPS/ SEMINARS/ FDPS ATTENDED BY FACULTY

- Mr.P.DeviPradeep, Asst.Prof., ECE has attended a three day workshop on "Smart Systems" organized by the department of Instrumentation Technology, AUCOE in association with ISSS AP Chapter, held at AUCOE, Visakhapatnam during21st-23rd March 2019.
- Dr.Murugapandiyan P, Assoc.Prof., ECE has attended workshop on "Intellectual Property in Innovation & New Product Development" organized by Novel IPR

- Academy AMTZ at Kalam Convention Center, Visakhapatnam on 26th April 2019.
- 3. Ms.M.Nirmala, Asst.Prof., and Ms.B.Deepa, Asst.Prof., Dept. of ECE has attended 5 day workshop two credit equivalent course and qualified a written examination titled "Advanced School of Antennas ASA-2019" organized by IEEE AP/MTTs Kolkata Chapter at School of Electronics Engineering, KIIT Bhubaneswar during 20th 24th June 2019.
- 4. Dr.G.ManmadhaRao,Prof., Dr.B.Somasekhar, Assoc.Prof.,Mr.B.ChandraMouli, Asst.Prof., Ms.P.Chaya Devi. Asst.Prof. andMr.P.DeviPradeep, Asst.Prof have attended AICTE sponsored Two week FDP titled "Engineering challenges for making digital india: Internet of things & applications" organized by the department of ECE, ANITS, Visakhapatnam during 11th -24th June 2019.
- 5. Ms.B.Deepa, Asst.Prof., ECE has attended credit course program on "Research Methodologies" as a part of Ph.D program organized by JNTU Kakinada during 1st May- 17th May 2019.

FACULTY PAPER PUBLICATIONS IN JOURNAL

- Mrs.B.Deepa, Asst.Prof., ECE has published a paper titled "Design of Microstrip Patch Array Antenna for Wideband and improved gain" in an international Journal of Applied Science and Computations, Volume VI, Issue IV, April 2019, PP:2757-2764.
- 2. Dr.S.Srinivas, Assoc.Prof., ECE has published a paper titled "Fast 3D Integrated Circuit Placement ethodology using Merging Technique" in Defence Science Journal Vol 69, No 3, PP: 217-222, DOI:10.14429/dsj.69.14410, May 2019.
- 3. Ms.G.GayatriAsst.Prof. and Ms.PSM.VeenaAsst.Prof., have published a paper titled "Performance Evaluation of ECG signal using Frequency, Time-Frequency and Feature vector ECG signal analysis (FVESA)" in an international Journal of Applied Science and Computations, Volume VI, Issue IV, April 2019, PP:3678-3682.
- Dr.V.Rajyalakshmi HOD, ECE has published a paper titled "Specific Absorption Rate Reduction using EBG Structure as Superstrate for Textile Antenna" in international journal ARPN Journal of Engineering and Applied Sciences, Vol 13, No 10, ISSN:1819-6608, PP:3495-3501, may 2019.
- 5. Dr.V.Rajyalakshmi HOD, ECE has published a paper titled "Corner Truncated Triple Band Notch Monopole with DGS for Satellite Communication Applications" in international journal of Intelligent Engineering Systems, Volume 12, Issue 2, PP:95-103, APR 2019.
- 6. Dr.V.Rajyalakshmi HOD, ECE has published a paper titled "Modeling & Simulation Analysis of Frequency Selective Fabrics (FSF) for evaluation of its Shielding Effectiveness in GSM band" in 15th International Conference on Electro Magnetic Interference & Compatibility (INCEMIC) organized by Society Of EMC

- Engineers (India) at NIMHANS Convention Centre, Bengaluru and published in IEEE Digital Library in May 2019.
- 7. Dr.P.Murugapandiya, Assoc.Prof. andDr.V.Rajyalakshmi, HOD ECE has published a paper titled "Investigation of ultra-scaled AlN/GaN/InGaN double heterojunction HEMT for high-frequency applications" in international Journal of INTERNATIONAL JOURNAL OF ELECTRONICS LETTERS, June 2019.
- 8. Mr.B.Jena, Asst.Prof.,ECE, has published a paper titled "Wireless Sensor Networks: Architecture, Issues and Research Challenges" in international Journal of Environmental Science, Computer Science and Engineering & Technology, An International Peer Review E-3 Journal of Sciences and Technology: Sec. B; Vol.8. No.3, PP: 201-207, E-ISSN: 2278–179X, June 2019.

FACULTY PAPER PRESENTATIONS IN CONFERENCES

1. Ms.P.Devi, Asst.Prof. and Dr.V.Rajyalakshmi, HOD, ECE have presented a paper titled "Structural Alteration and Switch **Technique Based** Novel Compound Reconfigurable Antenna for PCS and WLAN **Applications**" in an International Conference on Advanced Knowledge from Multidisciplinary Perspectives in Engineering and Technology (ICAKMPET-19) organized by IFERP, Visakhapatnam during 5th – 6th April 2019.

FACULTY STUDENT JOINT PAPER PUBLICATIONS IN JOURNAL

- Ms.P.Devi, Asst.Prof., Dr.V.Rajyalakshmi HOD, ECE, Mr.Ch.Harish and Ms.TDV.Gayatri IV/IV ECE have presented a paper titled "A Comparison Analysis of 2X1 Series Feed Array Antenna for Satellite Applications" in an International Conference on Advanced Knowledge from Multidisciplinary Perspectives in Engineering and Technology (ICAKMPET-19) organized by IFERP, Visakhapatnam during 5th – 6th April 2019.
- Mrs.Ch.Padmasree, Asst.Prof., ECE, Ms.K.DurgaSuguna, Mr.K.Lalith Kumar, Mr.K.Akhil and Mr.K.ShivaAjith IV/IV ECE-A has published a paper titled "Performance Evaluation of OFDM and Coded OFDM under AWGN and Rayleigh Fading Scenario" in an international Journal of Applied Science and Computations, Volume VI, Issue III, March 2019, PP:2196-2202.
- Mrs.PSM.Veena, Asst.Prof., ECE, Ms.D.SwarnaBharathi, Mr.K.Jayastyanarayana, Ms.EDeepthisai and Mr.B.Rajendra IV/IV ECE-A has published a paper titled "Noise Cancellation in Audio Signal Using VAD-Weiner Filter algorithm" in an international Journal of Applied Science and Computations, Volume VI, Issue III, March 2019, PP:2291-2294.
- 4. Mr.R. Chandra Sekhar, Asst.Prof, Ms.A. Lavanya, Ms.A.Tejaswini, Mr.Ch. Kamal Chand and Mr.B. SaiVamsi IV/IV ECE have published a paper titled

- "Performance Analysis of Channel Estimation using ZF and MMSE for MIMO-FBMC System" in an international Journal of Applied Science and Computations Volume VI, Issue III, March/2019, ISSN NO: 1076-5131, Page No:2051- Page No:2059.
- Ms.P.Devi, Asst.Prof.,ECE, Mr.Ch.Harish, Ms.D.V.Gayatri, Mr.Ch.Vikas and Mr.V.Ramesh IV/IV ECE-C has published a paper titled "Design of 4 Element Plus Shaped Slotted Microstrip Array Antennas for Satellite Application" International Journal of Emerging Technologies and Innovative Research (JETIR) ISSN: 2349-5162, Volume 6, Issue 4, PP 116-120, April 2019.
- Ms.K.Yashoda. Asst.Prof.,ECE, Mr.G.Kirthikar, Ms.K.Rohit, Ms.J.Chandhini and Mr.Ch.Preetham IV/IV has published a paper titled ECE-A "Power **Optimization** of Linear Feedback Shift Register(LFSR) for Low Power BIST" International Journal of Emerging Technologies and Innovative Research (JETIR) ISSN: 2349-5162, Volume 6, Issue 4, PP 709-713, April 2019.
- Dr.S.Somasekhar, Assoc. Prof., Ms.T.L.Priyanka, Ms.K.Triveni, Mr.B.Manikanta and Ms.G.Deepthi IV/IV ECE has published a paper titled "Clipping Noise Based Tone Injection-An Approach to Reduce PAPR in OFDM System" in an International Journal of Management, Technology and Engineering IJMTE, Volume 9, Issue 4, PP:2835-2838, April 2019.
- 8. Dr.V.Rajyalakshmi, HOD, Mr.G.V.Raviteja, Asst.Prof., Ms.K.Sujatha, Mr.K.Balasagar, Ms.K.V.Tejaswi, Mr.ALS.Yashwanth and Mr.K.Saiteja IV/IV ECE-A has published a paper titled "Gain and bandwidth enhancement of microstrip antenna array using double square split ring resonator FSS as a superstrate for WiMax/WiFi/WLAN applications" in international journal of Communication on Applied Electronics, volume 7, Number 28, Pages: 11-16, ISSN: 2394-4714, May 2019.
- Mr.A.Siva Kumar, Asst.Prof., ECE, Mr. N.R.V.Satish, Ms. M.VenkataLavanya, Mr. K.HemanthVarma and Ms. P.Divya Sri IV/IV ECE-A have published a paper titled "Implementation and Comparison of K mean and Fuzzy c mean techniques for medical image segmentation" in an international Journal of Applied Science and Computations Volume VI, Issue IV, April/2019, ISSN NO: 1076-5131.
- 10. Mr.A.Siva Kumar, Asst.Prof., ECE, Mr. S.V.manikantagupta, Ms. S.Aparanjini, Mr. M.Gangadhar and Ms. Y.Sravyavanitha IV/IV ECE have published a paper titled "Offline signature verification using grid based feature extraction" in an international Journal of Applied Science and Computations Volume VI, Issue IV, April/2019, ISSN NO: 1076-5131.
- Mr.VVK.Raju, Asst.Prof., ECE, Mr.U.Rajesh Naidu, Ms. M.Jayalakshmi, Mr. V.SaiSumanth and Ms. A.NagamaniIV/IV ECE-C have published a paper titled "Voice Controlled Personal assistant" in an international Journal JETIR, Volume 6, Issue 3, ISSN -2349-5162,March2019.

- 12. Mr. VVK.Raju, Asst.Prof., ECE, Mr. M.N.Manikanta, Ms. M.Sajida, Mr. P.Revanth, Mr. N.Sandeep and Ms. I.Rajini IV/IV ECE-B have published a paper titled "Vehicle Number Plate detection for traffic Control" in an international Journal of Applied Science and Computations Volume VI, Issue V, May/2019, ISSN NO: 1076-5131.
- 13. Mr.D.Anil Prasad, Asst.Prof., ECE, Mr.M.SaiPavan, Ms. P.Manideepa, Mr. P.Prasanth and Mr.N.Kiran Sri IV/IV ECE have published a paper titled "FPGA Implementation of CRC Error detection code" in an international Journal of Applied Science and Computations Volume VI, Issue III, March/2019, ISSN NO: 1076-5131.
- 14. Mr.B.ChandraMouliAsst.Prof., and Mr.V.Rajesh IV/IV ECE has published a paper titled "Automatic Attendance Management System using BLE Technology" in an international Journal JETIR, Volume 6, Issue 5, ISSN -2349-5162, May2019.
- 15. Dr.D.EswaraChaitanya, Asst.Prof., ECE Mr.Vara Prasad Reddy, Mr.HariVamsi, Mr.SaibabuMummareddy and Mr.LokeshMrudul IV/IV ECE have published a paper titled "Performance analysis of Bat and Firefly algorithm using benchmark equations", in an international Journal of Applied Science and Computations(JASC), Volume-VI, Issue-V, May 2019. (ISSN No:1076-5131)
- 16. Dr.D.EswaraChaitanya, Asst.Prof., ECE, Mr.KrishnaTeja Y, Mr.Harshavardhan S, Ms.Priyanka V and Mr.O.Nagendrakumar IV/IV ECE have published a paper titled "Performance evaluation of simulated annealing algorithm in constrained environment", in an international Journal of Management Technology and Engineering(IJMTE), Volume-IX, Issue-V, May-2019 (ISSN No:2249-7455)

STUDENT SPECIAL ACHIEVEMENTS

Mr.P.Kausthubh and Mr.B.Nikhil Reddy III/IV ECE got **First Prize** in paper presentation event PREZENTA titled **"eye ball moment by wheel chair"** e-Sayoga in a two day national level Symposium EKTHRA organized by the department of ECE, Gayatri Engineering College, Visakhapatnam during 6th march -7th march 2019.