

# **TECHNO DIGEST**

# Newsletter from Department of ECE

# Geethanjali College of Engineering and Technology

(UGC Autonomous, Approved by AICTE and Permanently Affiliated to JNTUH)

Chairman: Sri G. R. Ravinder Reddy

Principal: Dr. S. Udaya Kumar

# **Head of the Department:**

Prof. B. Hari Kumar

#### **Editorial Committee:**

Dr.P.Vijai Bhaskar, Professor Ms V. Sirisha, Asst. Professor Mr M.Krishna, Asst. Professor

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Dr.C. V. Narasimhulu, Professor

Dr. S. Suryanarayana, Professor

Dr. B. L. Prakash, Professor

Prof. K. Somasekhara Rao

Prof. O.V.P.R Siva Kumar

Prof. S. Bhujanga Rao

Dr. P. Srihari, Professor

#### **Patents and Grants from AICTE**

- ◆ Dr.C.V.Narasimhulu, Professor has published an Indian patent titled "A Method of Image Denoising and A System Thereof" in the month of October 2019 with patent application no: 201941039885.
- ◆ Dr.P.Vijai Bhaskar, Professor and Dean Academics has been sanctioned a grant of Rs.5 lakhs by AICTE to conduct a one week short term training program (STTP) for the faculty of engineering.

# **Faculty Development Program (FDP)**

AICTE sponsored Two week FDP on Advances in Signal and Image



Processing with **Hands-on Training** using **MATLAB** was organized by Group II (Signal processing) from 18<sup>th</sup> to 30<sup>th</sup> Novem-2019. Prof. ber. B.Hari Kumar was convener and the Dr.C.V.Narsimhulu

was the Coordinator for this FDP. Dr. C.V.Narsimhulu has been funded with a grant of Rs.4.98 lakhs by AICTE. A total of 63 participants from various engineering colleges and research organizations from the states of Telangana, Karnataka, Tamilnadu and Andhra Pradesh have participated.



Nineteen eminent personalities from industry and academicians of repute from various engineering colleges have delivered the lectures in this FDP. Sri B.Gopala Krishna from NRSC, Dr.N.S.Murthy former Professor of NITW, Dr.J.V.R Ravindra from VCE, Dr.Subhendu Kumar Sahoo from BITS, Hyderabad Campus, Dr.G.Ganesh from SNIST, Prof.K.V.Sridhar from NITW, Dr.Sandhya from MVSREC, Dr.V.Anil Kumar from IIIT, Hyderabad, Dr.C.R.Rao from University of Hyderabad, Dr.P.K.Thiruvikraman from BITS, Hyderabad Campus, Prof.M.V.Raghunath from NITW, Mr.Nagendra Bandi from CoreEL Technologies, Dr.Tilottama Goswami from AGI, Dr.R.Krishnan former Director of ADRIN Hyderabad, Dr.S.Venkatraman Group Director of ADRIN, Hyderabad, Dr.Kumar Eswaran from SNIST, Dr.J.Ravi Kumar from NITW, Dr.S.P.V.Subba Rao from SNIST and Dr.K.M.M.Rao former Deputy Director of NRSC Hyderabad were the external resource persons. A hands on session on image enhancement and segmentation through MATLAB was conducted by Capricot Technologies and an Industrial visit to NRSA was arranged for the participants as a part of FDP program.

# **Faculty Peer Learning Sessions**

The following Professors have acted as internal resource persons during the Two week FDP on Advances in Signal and Image Processing with hands-on training using MATLAB.

- Prof. S. Bhujanga Rao was the internal resource person for the topic on "Mathematical tools for discrete time signals DTFT, DFT and Z-Transforms".
- ◆ Dr. P.Srihari was the internal resource person for the topic on "Stochastic Process and Spectral Estimation".
- ◆ Dr.C.V.Narasimhulu delivered a lecture on "Concept of Orthogonality, Mathematical tools for Continuous time signals: CTFT & LT".

# పఐసీటీఈ ఆధ్వర్యంలో ఫ్యాకర్టీ డెవలప్ మెంట్

కేసర : ఇంజినీరింగ్ మెకానికల్ లెర్నింగ్, ఆర్టిఫిషి యల్ ఇంటలిజెన్స్ అల్గారిజమ్కు రాబోయే రోజుల్లో చాలా ప్రాధాన్యత ఏర్పడుతుందని హైద రాబాద్ ఎన్ఆర్ఎస్సీ సైంటిస్ట్ డాక్టర్ బి. గోపాల క్రిష్ణ పేర్కొన్నారు. మండల పరిధిలోని చీర్యాల్ గీతాంజలి ఇంజినీరింగ్ కళాశాలలో సోమవారం నుంచి ఈనెల 30 వరకు రెండు వారాల పాటు ఏఐ సీటీఈ ఆధ్వర్యంలో ఫ్యాకర్టీ డెవలప్మమెంట్ కార్య క్రమాన్ని ఎలక్జ్రానిక్స్ అండ్ కమ్యూనికేషన్ శాఖ నిర్వహిస్తున్నది. ఈ కార్యక్రమానికి గోపాలక్రిష్ణ ముఖ్యఅతిథిగా హాజరై జ్యోతి ప్రజల్వన చేసి కార్య క్రమాన్ని ప్రారంభించారు. ఈ సందర్భంగా ఆయన మాట్లాడుతూ కమ్యూనికేషన్స్, మెడీకల్, సైబర్, సెక్యూరిటీ,మల్టీమీడియా, రిమోట్సెన్సింగ్, కంప్యూ టర్ విజన్ రంగాల్లో సిగ్నల్ ఇమేజ్ ప్రాసెసింగ్ టూల్స్ ఇంటలిజెన్స్ అల్గారిజమ్ను విరివిగా ఉప యోగిస్తున్నారని తెలిపారు. కళాశాల చైర్మన్ రవీంద ర్రెడ్డి మాటాడుతూ రెండు వారాల పాటు పలు రాష్ట్రాలకు చెందిన కళాశాల ఫ్యాకల్టీలకు టైనింగ్



సమావశంలా మాట్లాడుతున్న గీతాంజలి కళాశాల చైర్మన్ రవీందర్**రె**డ్డి

నిర్వహిస్తున్న ఈసీఈ డిపార్ట్మైవెంట్ కో -ఆర్డినేటర్ డాక్టర్ నర్నింహులును అభినందించారు.శిక్షణలో ఫ్యాకల్టీలు క్రమం తప్పకుండా నేర్చుకోవాలని, నేర్చుకున్న ప్రతి విషయాన్ని కళాశాల తరగతి గదుల్తో ఇంజసీరింగ్ విద్యార్థులకు వివరించాలని సూచించారు. ఈ కార్యక్రమంలో కళాశాల ట్రిన్సి పాల్ డిదయ్కుమార్, బి. హరికుమార్లతో పాటు పలువురు పాల్గొన్నారు.

Tue, 19 November 2019 https://epaper.ntnews.com/c/45902427



#### **Guest Lectures**

- ◆ A Guest lecture was organized by Group V

   A comprehensive lecture for better students. 120 students attended this lecture.

  (Analog Electronics) on 26<sup>th</sup> August 2019 on "Circuit Theory understanding", by Prof.S.Bhujanga Rao, Prof SNIST, for II year
- ◆ An invited talk was organized by Group III (Communications) on 17<sup>th</sup> October 2019 on "Opportunities and Essentials of writing Research Projects", by Dr.P.Sanjeeva Rao, Advisor, R&D, KL University, Vijayawada for the faculty. 60 faculty members from various branches attended this lecture.
- ◆ A two day discourse was arranged for III year students on 11<sup>th</sup> and 12<sup>th</sup> December 2019 on "Career Opportunities and venues for higher Education", by Mr.Hemant and Mr.D.Sai Kiran from Byjus under CACG (ECE). A total of 180 students attended.
- ◆ An invited talk was organized by CACG (GCET) for the faculty members on 17<sup>th</sup> December 2019 on "**Project Based Learning**", by Dr.S.S.Inamdar, Vice President of Vishwanikethan Mumbai and Dr.Janhavi Inamdar, Director of Vishwanikethan Mumbai. 16 faculty members from ECE Dept. have attended this lecture.

#### **MoUs with Industries**

The department has signed MoUs with following industries to facilitate opportunities for faculty members and students to get an exposure of industry on latest technologies in the form of providing internships, guest lectures, industrial visits and mini projects and other academic activities of interest.

- MoU with M/s Datalog Controls and Solutions Private Limited, Hyderabad with effect from 1<sup>st</sup> July 2019 for three years.
- ♦ MoU with M/s LED Chip Indus Private Limited, Hyderabad with effect from 15<sup>th</sup> July 2019 for three years.

#### **Students' Innovative Club**

A student club named **Srujanastra** was formed by the Department by Group IV (Digital Electronics) under the coordination of Prof.K.Somasekhara Rao on 16<sup>th</sup> October 2019. It is a platform intended for the students to implement their innovative thoughts in the field of Digital Electronics.

# **Projects carried out under Project Based Learning (PBL)**

**Electronic Circuit Analysis and Design Lab (ECAD):** Three projects were submitted by II year students under project based learning (PBL) in Electronic Circuit Analysis and Design Lab (ECAD) by Group V (Analog Electronics) under the guidance of Dr.S.Suryanaraya.

- ◆ Project titled "Transient response of RC low pass circuit using MATLAB", submitted by C.V.G.Prasad Varma mentored by Ms.J.Mrudula.
- ◆ Project titled "Design of low cost half wave rectifier with filter for a given ripple factor of 0.9", submitted by M.Spandana, M.Srilekha and S.Sahithi mentored by Mr.U.Appalaraju.
- A project titled "Selection of operating point from transistor data sheet and hence designing and verification of a self bias circuit for a given stability factor of 15", was submitted by Ruchishawa mentored by Mr.U.Appalaraju.

**Antennas and Wave Propagation:** Five projects were submitted by III year students under project based learning (PBL) in Antennas by Group I (Fields and waves) under the guidance of Prof. B.Hari Kumar, Dr.B.L.Prakash, Mr.P.Naresh Kumar, Ms.A.Sowjanya.

- Project titled "Design of Monopole Antenna for X-Band Operation", by 183 students.
- Project titled "Design of Dipole Antenna for X-Band Operation", by 183 students.
- Project titled "Design of Loop Antenna for X-Band Operation", by 183 students.
- Project titled "Design of Horn Antenna for X-Band Operation", by 183 students.
- Project titled "Design of Microstrip Antenna for X-Band Operation", by 183 students.

**Microwave Engineering:** Four projects were submitted by IV year students under project based learning (PBL) in Microwave Engineering by Group I (Fields and waves) under the guidance of Dr.R.S.Raju, Mr.R.V.N.R.Suneel Krishna and Mr.Ch.Suresh Kumar.

- Project titled "Design of a rectangular waveguide for X-Band Applications", by 48 students.
- Project titled "Design of E-Plane Tee for X-Band Applications", by 48 students.
- Project titled "Design of H-Plane Tee for X-Band Applications", by 48 students.
- Project titled "Design of Magic Tee for X-Band Applications", by 48 students.

**Digital Design:** A Two day project competition was held in Digital Design under project based learning on 10<sup>th</sup> and 11<sup>th</sup> October 2019 by Group IV (Digital Electronics) under the guidance of Prof.K.Somasekhara Rao, Mr.Ch.Sandeep and Mr.M.Anand. 14 teams of II year ECE students participated.

S.N	Prize	Roll no.	Name of the	Project Title
0			student	
1	1 <sup>st</sup>	18R11A0428	K Tejaswi Density based Automatic Traffic co	
2		18R11A0432	M Keerthana	system
3		18R11A0446	Y Saketh	
4	2 <sup>nd</sup>	18R11A0488	S Ramya	Smart Office
5		18R11A0490	S Ruchishun	
6		18R11A0478	M Srilekha	
7	3 <sup>rd</sup>	18R11A0473	K Vishwesh	2 bit Password checker
8		18R11A0475	L Nithin	



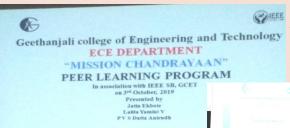
#### **Activities under Professional Bodies**

#### IEEE:



\* A Student peer learning program was conducted under IEEE-SB, GCET on 03<sup>rd</sup> October 2019 on "Mission Chandrayaan-A Journey to Moon". Ms.V.Sirisha, Assistant Professor of ECE Dept was the coordinator. The resource persons for this program were Ms.V.Lalitha Yamini, Mr.Jatin Ekbote and Mr.P.V.S.Datta Anirudh of IV year. This program is intended for the II year and III year students to create awareness and enthusiasm and develop passion towards advanced satellite systems. A total of 60 students participated.

\*A Student peer learning program was conducted under IEEE-SB, GCET on 05<sup>th</sup> October 2019 titled "MATLAB



for Signal Processing and Communications", coordinated by Ms.S.Jyothirmayee, Associate Professor of ECE Dept. The resource persons were 9 students of III and IV year ECE. The target

of MATLAB.

of III and IV year ECE. The target peers were II year students . This program benefited 29 students in their better understanding and practicing

\*About 7 Students of ECE department have participated in 24-hour global coding competition on 19<sup>th</sup> October 2019 "**IEEE Xtreme 13.0**" under IEEE SB, GCET and have secured the global and country ranks. This event was coordinated by Mr.D. Venkata Rami Reddy and Ms.S. Jyothirmayee.

Name of the Student	Year	Rank (Global)	Rank (Country)
V.V.P.Chary	IV	714	106
Aleshia Avinash	IV	706	102
Sharon Blessy, Sirisushma	III	750	118
Nitish	III	715	107
Eshwar Hemanth, Vineeth Raj	IV	2530	782

- ◆ A Guest lecture was organized by Group VI (VLSI) under IEEE-CAS for III and IV year students on 7<sup>th</sup> September 2019 on "Career Opportunities in VLSI Domain", Dr.Y.Avinash, Senior Director Mirafra Technologies Pvt.Ltd, Hyderabad. 58 students attended this lecture.
- ◆ A Guest lecture on "Latest Algorithms for Automatic Cars", in collaboration with IEEE-SB by Group VI (VLSI) was organized on 14<sup>th</sup> September 2019 for III year students by Mr.Ch.Revanth Reddy (Alumnus of GCET) from Cognizant Pvt. Ltd. 65 students attended this lecture.
- ◆ A Guest lecture was organized by Group III (Communications) under IEEE SB, GCET on 30<sup>th</sup> September 2019 on "Role of Communication, Navigation and Surveillance in Aviation", by Dr.Ch.Mahesh, SM (CNS), Airport Authority of India (AAI), HAL Hyderabad for IV Year students. 60 students have attended the lecture.
- ♦ A Guest lecture was organized by Group III (communications) under IEEE-SB, GCET on 1<sup>st</sup> October 2019 on "Career Guidance and Introduction to Analytics!", by Mr.E.Anirudh, Technology Analyst, Infosys Ltd. for III year students. 50 students attended the lecture.
- A Guest lecture was organized by Group III (Communications) under IEEE SB, GCET on 3<sup>rd</sup> October 2019 on "Advances of Mobile Communications", by Mr.D.Raju, SDE, BSNL, Hyderabad for final year students. 90 students have attended the lecture.

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\* Eighth **IEEE Day** anniversary was celebrated on 05<sup>th</sup> October 2019 in the college. Ms.Ch.Mounica (Alumnus of GCET) ASIC Verification Engineer from Synopsys India Pvt.Ltd. was invited as the chief guest.



\* IEEE-WIE Star Event entitled "IGNITE'19", was conducted on 30<sup>th</sup> December, 2019 to enhance career options after tenth class for ninth and tenth class students of ZP high school, Cheeryal.

An awareness program was also conducted for girl students on Cyber Security.

- \* Vishwa Prakash Chary Vadla of IV year got selected to attend "IEEE WIE International Leadership SUMMIT 2019" at IEEE Bangalore Section and WIE Affinity Group Bangalore Section, Bangalore from 30<sup>th</sup> 31<sup>st</sup> August, 2019.
- \* Mr.Vishwa Prakash Chary, Ms Aleshia from IV year and Mr.Nithish kumar from III year attended **Section Student Congress'19** on 10<sup>th</sup> August 2019 at JN Auditorium, JNTU Hyderabad.
- \* IEEE Robotics and Automation Society SB Chapter has been approved and formed on 30<sup>th</sup> December 2019 with Geo-Code:SBC05841.

#### **IETE:**

\* A Two day workshop on "**Data Science using Python**" was organized by the department of ECE on 26<sup>th</sup> and 27<sup>th</sup> September, 2019 under the coordination of Mr.U.Appalaraju, Assoc.Prof. for second year students. 74 students participated this event. The resource persons were Mr.Pramod, Capability lead at Thought Works, Mr.Harisai, Software Development Engineer in Vitwit technologies, Ms.Maithreie, from Cap Gemini.





- \* A Guest lecture was organized by Group II (Signal Processing) by Dr.K.M.M .Rao former director NRSC (ISRO) and Adjunct faculty of Bits-Pilani, Hyderabad campus on 19<sup>th</sup> September 2019 on "Real time applications of image processing", for IV year students. 50 students have attended the lecture.
- \* Dr C.V.Narasimhulu, Dr P.Sudhakar, Mr.U.Appalaraju, and Mr.M.Krishna had attended Annual General Body meeting (AGM) of IETE Hyderabad Centre for the year 2018-19 at IETE Hyd Centre, O.U campus on 25<sup>th</sup> August 2019.

#### **ISTE:**

\* A Guest lecture was organized by Group III (Communications) on 23<sup>rd</sup> December 2019 on "**Employment opportunities in Optical Communications**", by Shaik Kareem, CEO and Mr.K.Ravi Kiran, Director of FTTH (Fiber Technology to Home) and Smart Technologies Pvt. Ltd. for III year students. 90 students attended this lecture.

\* A two day national level workshop on "Humanoid Robot Development" was organized for B.Tech students by ISTE student chapter and Incubation centre in association with EduxLabs, Gurugram on 9<sup>th</sup> and 10<sup>th</sup> August, 2019. This event was coordinated by Ms.M.Soujanya, Assoc Prof. on behalf of ECE department. 48 students participated in this workshop.



# **Enrichment of the Department**



**Prof S.Bhujanga Rao** has joined the department in the month of September 2019 as Professor. He has a total experience of 45 years which includes 25 years of industrial experience. His areas of expertise includes Design, Testing, Quality control, Training engineers in consumer electronic products. He headed the R&D section of TVD where digital TV, Skyvision TV and a couple of projection TVs were successfully developed and introduced into consumer electronics. He won the best teacher award for six times and has 4 International and 5 National level research papers.

**Dr.P.Srihari** has joined the department in the month of November 2019 as Professor. He has a total experience of 30 years. He has published technical papers in 14 National Conferences, 15 International Conferences, 7 National Journals and 24 International Journals. He has delivered 21 prominent talks as resource person in several Faculty Development Programs. He has given guest lectures in various engineering colleges for more than ten times. His areas of research interest



includes communication engineering and signal processing.



**Dr. Vallisree** S joined the department in the month of December 2019 as Associate Professor. She completed her ME from Anna University (University rank holder) in VLSI Design. She worked with Infosys Ltd as a Technical Test lead for 8 years and received several star awards and best project awards. She completed her Ph.D from IIT ISM Dhanbad in the area of optoelectronics. She has 2 SCI journal publications, 3 peer-reviewed journal publications and 4 conference publications. She has 31 citations from her publications and her h-index is 3.Her research interests include VLSI Interconnects and

devices, Modeling of High Performance Multi-junction Solar Cells.

#### **R&D** Activities of the Department

- ◆ Prof.O.V.P.R.Siva Kumar has been nominated as Co-Principle Investigator on 24<sup>th</sup> October 2019 for the project titled "Development of Novel Carbon Nanotube/Polymer Nanocomposite Materials for EMI Applications", sponsored by DRDO.
- Prof.O.V.P.R.Siva Kumar went through a review of the above project in Directorate of Extramural Research & Intellectual Property Rights (ER & IPR), DRDO, New Delhi on 2<sup>nd</sup> December 2019 to update the status of the above project.
- ◆ Dr.V.Satya Srinivas attended 2<sup>nd</sup> Group Monitoring Meeting held on 23<sup>rd</sup> and 24<sup>th</sup> August, 2019 at Centre for Earth, Ocean and Atmospheric Sciences, University of Hyderabad for presenting the work on the completed project funded by SERB, titled "Investigation of Linear Combinations of GNSS Measurements to mitigate the effect of Ionosphere and Multipath (SR/FTP/ES-156/2014)", which had a duration from 23<sup>rd</sup> September 2015 to 31<sup>st</sup> April 2019. The project was successfully completed with 7 IEEE Conference papers. These papers were presented at URSI Asia Pacific Radio Science Conference held at New-Delhi from 9<sup>th</sup> 15<sup>th</sup> March 2019.

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# FDPs/Workshops Attended by Faculty

S. No	Name of the	Name of the FDP /Workshop	Venue	Date(s)
1	Prof.O.V.P.R.Siva Kumar G.Sreelakshmi B.Mamatha	Workshop on Electronics and Photonics Packaging by IEEE CAS Society	AMS Semiconductors Pvt Ltd., Hyderabad	20 <sup>th</sup> July 2019
2	Prof.O.V.P.R.Siva Kumar	UKIERI Technical Leadership development Program by AICTE	AICTE, New Delhi	30 <sup>th</sup> July 2019 to 2 <sup>nd</sup> August 2019
3	Dr.V.Satya Srinivas	A symposium on 5G Technology	Mind Space Hotel, Gachibowli	30 <sup>th</sup> July 2019
4	Dr.C.V.Narasimhulu Dr.P.Sudhakar U.Appalaraju	All India Seminar on "Cyber Security and Image Processing"	IEI, Hyderabad	10 <sup>th</sup> - 11 <sup>th</sup> August, 2019
5	Prof.B.Hari Kumar Dr.C.V.Narasimhulu Dr.P.Vijai Bhaskar Dr.S.Suryanarayana Prof.O.V.P.R.Siva kumar	Special Seminar for Principals and faculty of engineering Colleges	Rama Krishna Mutt, Hyderabad	9 <sup>th</sup> September 2019
6	Dr.P.Vijai Bhaskar Dr.C.V.Narasimhulu	A two day national workshop on "Quality Enhancement Measures in Higher Technical, Professional and Management Educational Institutions with special focus on NIRF INDIA Rankings – 2020"	UGC Mini Auditorium, JNTU University, Ku- katpally, Hyderabad	18 <sup>th</sup> - 19 <sup>th</sup> October, 2019
7	S.Jyothirmayee V.Sirisha	Three day workshop on "Research Methodology".	CVR College of Engineereing	30 <sup>th</sup> October 2019 to 1 <sup>st</sup> November 2019
8	Prof.O.V.P.R.Siva Kumar	A two –Week AICTE & TEQIP-FDP on "Synthesis and characterization of Nanomaterials-2019"	Center for Nano Science and Technology, IST, JNTUH	4 <sup>th</sup> -16 <sup>th</sup> November, 2019
9	Dr V.Satya Srinivas	Short Course on "Space Weather" under the auspices of centre for space science and Technology Education in Asia and Pacific (CSSTEAP), affiliated to United Nations	Physical Research Laboratory (ISRO), Ahmedabad	14 <sup>th</sup> - 27 <sup>th</sup> November , 2019
10	Prof.O.V.P.R.Siva Kumar Dr.S.Spandana M.Laxmi Ch.Sandeep	Regional Research Symposium on PBL	KLE Technological University, Hubli	21 <sup>st</sup> - 23 <sup>rd</sup> November, 2019
11	M.Laxmi B.Sreelatha	One week short term training programme sponsored by AICTE on "Embedded Systems in IoT"	G.Narayanamma Institute of Technology and Science, Hyderabad	25 <sup>th</sup> - 30 <sup>th</sup> November, 2019
12	S.Yagnasree	One week FDP on Trends in SoC Design & Its Applications	Vasavi College of Engineering and Technology, Hyderabad	9 <sup>th</sup> - 14 <sup>th</sup> December, 2019
13	P.Naresh Kumar Ch.Suresh Kumar R.V.N.R.Suneel Krishna A.Sowjanya	A one week short term course on "Role of Antennas in Advanced Communication Systems"	CMR Technical Campus	16 <sup>th</sup> - 21 <sup>st</sup> December, 2019

### Centers of Excellence in VLSI and IoT & Embedded Systems

The department has established two centers of excellence in VLSI and IoT & Embedded Systems to train the students in these core areas and facilitate them to work on innovative projects.

Center of Excellence in VLSI was established on 8th May 2019 with Prof.O.V.P.R.Siva Kumar as Coordinator and Ms.G.Sreelakshmi, Mr.B.Jugal Kishore and Ms.B.Mamatha as Members.



The following were the line up of events that took place under CoE-VLSI:

- Visit to CoE-VLSI BVRIT (Narsapur) as a precursor, on 03<sup>th</sup> April 2019.
- Visit to HySoC Technologies Pvt.Ltd (Hi-Tech City) on 10<sup>th</sup> July 2019.
- ◆ A Guest lecture was organized under IEEE-CAS on 30<sup>th</sup> August 2019 on "Challenges and opportunities in Analog & Digital IC Design", by Dr.A.G.Krishna Kanth, Senior Manager, AMS Semiconductors, Hyderabad for III year students.
- Screening test was conducted to III and IV B.Tech(ECE) in which 155 students participated and 79 students were short listed for CoE-VLSI.
- ◆ Classes and hands-on lab sessions are conducted for the shortlisted students every Saturday from 7<sup>th</sup> September, 2019.
- ◆ A Guest lecture was organized under IEEE-CAS on 7<sup>th</sup> September 2019 on "**Design for Testability**", by Mr.Durga Prasad, Mr.Sridar, from HySoC Technologies Pvt.Ltd.
- ◆ A Guest lecture was organized under IEEE-CAS for III and IV year students on 07<sup>th</sup> September 2019 on "Physical Design Flow", by Ms.Ramya from Mirafra Technologies Pvt. Ltd.
- ◆ An interaction session was held on 05<sup>th</sup> October 2019 with Ms.Ch.Mounica (Alumna of GCET) ASIC Verification Engineer from Synopsys India Pvt.Ltd.
- Mr.Raja Bandi, Founder Lucid VLSI delivered an invited talk on 16th October 2019, followed ny a Two Week workshop for students on "Advanced Digital Design using VERILOG HDL
- ◆ 25 students of IV B.Tech attended test for Internship in HySoC Technologies Pvt.Ltd., in which 8 are shortlisted for interview. Three students K. Vinay kumar, P. Anil Kumar and A. Sri Nithya are selected for the internship.



DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING
TWO WEEK WORKSHOP
ON





FOUNDER, LUCID VLSI
in collaboration with

IEEE CAS Student Chapter-GCET

25 th November to 7 th December 2019

Venue: VLSI LAB, Department of ECE, Block-I, GCET





Center of Excellence in IoT and Embedded Systems was established on 17<sup>th</sup> August 2019 with steering members Prof.K.Somasekhara Rao (Coordinator), Mr.Ch.Sandeep, Ms.G.Sreelakshmi, Ms.M.Laxmi, Ms.M.Uma Rani Ms.B.Sreelatha, Ms.A.R.L.Padmaja and Mr.M.Anand.

The activities happened under CoE-IoT and Embedded Systems:

- ◆ Visit to Bits-Pilani Hyderabad Campus on 22<sup>nd</sup> August 2019.
- Visit to Hanbit Instruments at Cherlapalli on 11<sup>th</sup>October 2019.
- Visit to Srinidhi Institute of Science and Technology on 16<sup>th</sup> October 2019.
- ◆ A five day In house FDP on "Raspberry Pi Applications in IoT", under the coordination of Ms.B.Sreelatha, was conducted from 15<sup>th</sup> to 19<sup>th</sup> October, 2019. The resource persons were Mr.Ch.Sandeep, Asst. Prof. from GCET ECE Dept, Mr.V.Shivanarayana Reddy , Assoc.Prof. from GCET

CSE Dept, Mr.Y.V.N.Phani Kishore Asst. Prof. from CSE Dept GCET, Dr.Ameet Chavan Professor Dean from SNIST and Ms.Priyanka Asst.Prof from SNIST ECE Dept.





The recently sanctioned financial grant to the department by AICTE under MODROBS of Rs. 8.23 lakhs, was utilized for purchasing a **PCB Manufacturing Unit**. With an initial fund of Rs. 6,58,400 released on 2<sup>nd</sup> May 2019, the machine is purchased from M/s.APPLY VOLT on 25<sup>th</sup> November



2019 for an amount of Rs.6,00,810. In this regard a training program was conducted for the faculty on 9<sup>th</sup> and 10<sup>th</sup> December 2019. This machine would open doors for the students to design and develop PCBs and Patch antennas indigenously for various projects and facilitate to carry out research activities.



#### **Industrial Visits Organized**

S. No	Year	Date of visit	Name of the Industry Visited	No. of Students	No. of Faculty
1	IV	28 <sup>th</sup> August 2019	SAFVI Pre-Cast Walls, Cheeryal, Hyderabad	50	1
2	II	26 <sup>th</sup> June 2019	Datalog Controls and Solutions Pvt.Ltd, Cherlapally, Hyderabad	259	8
3	-	29 <sup>th</sup> November 2019	NRSC, Jeedimetla, Hyderabad.		15
4	III	20 <sup>th</sup> and 21 <sup>st</sup> December 2019	Indian Meteorological Department, Begumpet, Hyderabad	160	7

#### **Faculty Achievements**

- ◆ Prof.K.Somasekhara Rao has been appointed as independent director in the company **Kernex Micro**Systems India Ltd on 1<sup>st</sup> October 2019.
- Mr.U.Appalaraju received a certificate of participation as Faculty mentor in "DST and Texas Instruments India Innovation Challenge Design contest 2019" powered by AICTE and sponsored by NSRCEL@IIMB.
- Dr.V.Satya Srinivas, Assoc. Prof. has received **URSI lifetime senior membership** (M184009095523).

# **Faculty Interaction with Outside World**

- ◆ Dr.S.Suryanarayana gave an invited talk on "Information Security Using Processing in Transform Domain- A Study" in All India Seminar on "Cyber Security and image Processing" on the occasion of centenary celebrations of IEI (The Institute of Engineers-India (TS State Centre)) held on 10<sup>th</sup> and 11<sup>th</sup> August, 2019 at Visvesvaraya Bhavan, Khairtabad, Hyderabad.
- Dr.V.Satya Srinivas gave an invited talk on "Research trends in GNSS" in a two day symposium at Research and Training Unit for Navigation Electronics (NERTU), Osmania University, Hyderabad, held on 8<sup>th</sup> and 9<sup>th</sup> September, 2019.
- ◆ Dr. V.Satya Srinivas presented a poster on "Multipath Environment Analysis using GNSS interferometric Reflectometry (GNSS-IR) Technique" at 2<sup>nd</sup> Triennial conference of Federation of Indian Geosciences Association (FIGA) at NGRI Habsiguda held from 13<sup>th</sup> to 16<sup>th</sup> October, 2019.
- ◆ Dr.R.Suryanaryana Raju Dean R&D acted as Conference Chair for "International Conference on Multifunctional Materials (ICMM-2019)" from 19<sup>th</sup> to 21<sup>st</sup> December, 2019 organized at Geethanjali College of Engineering and Technology in association with MRSI Hyderabad Chapter and sponsored by DRDO India.
- ◆ Dr.V.Satya Srinivas was invited as Judge for the poster presentation in "International Conference on Multifunctional Materials (ICMM-2019)" from 19<sup>th</sup> to 21<sup>st</sup> December, 2019 organized at Geethanjali College of Engineering and Technology in association with MRSI Hyderabad Chapter and sponsored by DRDO India.

#### **Journal and Conference Papers**

- ◆ S.Krishna Priya, Jugal Kishore Bhandari and M.Krishna Chaitanya have published a paper on "Design and Research of Rectangular, Circular and Triangular Microstrip Patch Antenna", in International Journal of Innovative Technology and Exploring Engineering (IJITEE) ISSN: 2278-3075, Volume-8 Issue-12S, October 2019.
- Ms.G.Sree Lakshmi, Assoc.Prof. has presented an IEEE paper titled "Design and Implementation of Vinculum Binary Coded Decimal multipliers using Vinculum binary coded decimal Compressors", at 4<sup>th</sup> International Conference on Communication and Electronics Systems (ICCES 2019) organized by PPG Institute of Technology, Coimbatore, Tamilnadu held from 17<sup>th</sup> to 19<sup>th</sup> July, 2019.

# Faculty Qualified in MOOC Courses during 2019-20- I Semester

S.No	Name of Faculty	Designation	Name of the Course	
1	B.Sreelatha	Assoc. Prof.	Digital Circuits	
2	G.Sreelakshmi	Assoc. Prof.	of. Microelectronics circuits to devices	
3	S.Yagnasree	Asst. Prof.	The Joy of Computing Using Python	
4	S.Yagnasree	Asst. Prof.	Problem Solving through Programming in C	

#### **Students' Achievements**

- Rashmi Handra of III year participated in 24Hrs Hackathon on "Internet of Things with IBM Cloud", at JNTUH College of Engineering, Hyderabad held on 10<sup>th</sup> to 12<sup>th</sup> August 2019.
- ◆ B.Sushma of III year participated in "LIMITLESS, 5th EDITION, TEDx HYDERABAD 2019", at Limitless, 5th Edition, TEDx Hyderabad 2019, held on 22<sup>nd</sup> September 2019.
- ♦ A total of 115 students of III year ECE have appeared and qualified in the National Employability Test conducted by AICTE under **Whee-Box** Training for students. Mr.Rithish Reddy has secured 14<sup>th</sup> rank and V.Indira has secured 19<sup>th</sup> rank at National Level.
- V.Umakanth, A.Suryanarayana Goud, E.Naveen, G.Vinay Kumar from III year have won the Second Prize in the 36-hour Hackathon organized by Incubation Center of Geethanjali College of Engineering and Technology held from 23<sup>rd</sup> to 24<sup>th</sup> December 2019 for the project titled "Scrap picking Robot".
- ♦ B.Suhas (IV year), Nikhil (III year), G.Bhargav (II year) won the Runner up prize in basket ball competition held on 23<sup>rd</sup> and 24<sup>th</sup> September 2019 in Srivision 2k19 at Srinidhi Engineering College, Hyderabad.

# **Students' Placements** (Till date of Academic Year 2019-20)

S.No	Name of the company	Date of Visit	Package Offered	No. of Students Placed
1	MPHASIS	23-07-2019	3.50 LPA	13
2	EIDIKO	06-09-2019	2.40 LPA	7
3	TCS	11-09-2019	4.00 LPA	28
4	MODAK ANALYSTICS	23-09-2019	3.80 LPA	2
5	ALIENS Developers	24-09-2019	3.80 LPA	2
6	NTT DATA	13-10-2019	2.40 LPA	4
7	HASHED IN TECHNOLOGIES	20-10-2019	6.15LPA	1
8	BYJUS	05-11-2019	10.0 LPA	3
9	GENPACT INDIA PVT LTD	26-11-2019	1.80 LPA	16
10	JARO EDUCATION	03-12-2019	12.0 LPA	2

#### **NSS** Activities

S.No	Date	Name of the Activity	No. of Student Volunteers
1.	10 <sup>th</sup> to 22 <sup>nd</sup> June 2019	"Better Spoken English and MS-Office"	100
	(Two weeks)	Program	
2.	12 <sup>th</sup> July 2019	"Dental Camp" in association with Army College	200
	•	of Dental Sciences –Secunderabad.	
3.	19 <sup>th</sup> July 2019	Donation of Stationery to Govt. Primary Schools-	40
	•	Cheeryal.	
4.	26 <sup>th</sup> July 2019	"Dental Treatment" Program was conducted in	34
		Army College of Dental Sciences	
5.	16 <sup>th</sup> August 2019	"Haritha Haaram" Program	158
6.	15 <sup>th</sup> July to	Cutting and Tailoring Classes for women	40 villagers
	30 <sup>th</sup> November 2019	(Cheeryal and Yadgarpally villagers)	
7.	3 <sup>rd</sup> December 2019 to	Teaching and Helping Hands to Govt. Primary	60
	30 <sup>th</sup> April 2020	Schools of near by villages (Cheeryal, Yadgar	
		pally, Thimmaipally, Kundanpally, Godhumakunta	
		and Karimguda) by GCET-Students.	

#### **Academic Toppers of 2019-20 - I semester**

# IV year toppers:

- K.Greeshma from A section secured first rank with SGPA 9.38.
- S.Sai.Harshitha from B section secured second rank with SGPA 9.21.
- N.Sai Swetha from D section secured third rank with SGPA 9.17.

#### III year toppers:

- S.Ambika from C section secured first rank with SGPA 9.63.
- M.Jaya Manasa from D section secured second rank with SGPA 9.38.
- ♦ M.Sai Teja Sree from C section secured third rank with SGPA 9.33.

#### II year toppers:

- K.Rukumini from A section secured first rank with SGPA 9.65.
- G.Suma from D section secured second rank with SGPA 9.50.
- Divya Shree from D section secured third rank with SGPA 9.45.

# **Events Organized at Institution Level**

#### **Bathukamma Festival**

Bathukamma festival was celebrated in the college under the Cultural Club of the college on 5<sup>th</sup> October, 2019. The department has won the best bathukamma award for the year 2019 for the elegant arrangement of pedicels of various flowers.





# **Graduation Day**

Eleventh Graduation Day was conducted on 3<sup>rd</sup> August 2019 for the passed out student batch of 2015 -19. Batch toppers were honoured in this context. Sri.Vijaya Saradhi, Head of the International Public Health Practice Tata Consultancy Services was the Chief Guest for this program.

# **Orientation Day**

Fifteenth Orientation Programme was conducted on 2<sup>nd</sup>August 2019 for the first year students. It was organized by Freshman Engineering Department. The chief guest was Dr.Chandrashekar Commuri, Professor and Head of the Dept. in Public Policy and Administration at California State University, Bakersfield He is also Faculty Director of Teaching and learning wing at California State University.



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### **Alumni Meet**

Eleventh Alumni meet was organized in the college premises on 25<sup>th</sup> December 2019. A good number of alumni have attended the meet.

# **Obituary**

The Department of ECE expresses its deep condolences on the unexpected demise of **Dr.S.Ramana Murthy**, Professor of ECE Dept on 5<sup>th</sup> September 2019.

