

# E.C Department, L.D.C.E



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E.C. Department

L.D. College of  
Engineering,  
Ahmedabad

Ahmedabad

10-Sep-19

**Patron:** Dr. M.V. Shah  
Head of Department

**Editors:**  
Prof. S.K. Rana  
Student 1:Prapti Jain  
Student 2:Nihar Gupte

## 1. PAPERS PRESENTED/PUBLISHED

- Prof. P.J Brahmbhatt's, Paper titled "Exploiting Phase of Speech Signal for Speaker Recognition" was published in the Journal of communication Engineering & Systems, ISSN: 2249-8613, Vol. 9, Issue-2, pp. 81-86, in August 2019.
- Prof. Sanjay Prajapati, Vikas Nehra, Piyush Tankwal, Zeljko Zilic, T. Nandha kumar, and Brajesh Kaushik's paper titled "Energy Efficient Differential Spin Hall MRAM based 4-2 Magnetic Compressor", got published IEEE Transactions on Magnetics in August 2019.
- Prof. Sanjay Prajapati, Vikas Nehra, Piyush Tankwal, and Brajesh Kaushik's paper titled "Performance Analysis of Differential Spin Hall Effect (DSHE)-MRAM based Logic Gates", got published in SCI and Circuit World.

## 2. DEPARTMENTAL ACTIVITIES

### Electronics and Communication Department

- Department had organized the orientation program for the first year students on 18<sup>th</sup> July 2019 at Aryabhata hall. Prof. U.V. Unagar, Prof. K.H. Gavit had coordinated the program. L.D.E.C. Alumni were present to encourage the students.



- Department had organized the IEEE MTTs/APs student chapters' inauguration ceremony on 20<sup>th</sup> July-2019. At the inauguration ceremony there were distinguished guests-Dr. Shiban Koul (Emeritus professor IIT delhi), Dr. Rajeev Jyoti (Deputy Director, SAC ISRO), Mr. Rajendra Agarwal (Director Jyoti Electronics, Ahmedabad), and Mr Ankit Dave (IEEE chair young professional affinity group).



- Department had organized expert talk on "Recent Trends in RF and Microwave Education" by Dr. Shiban Koul and CST software demonstration by Mr. Abhishek Dholakia (Application Engineer, Jyoti

Electronics) under IEEE MTTs/APs on 20<sup>th</sup> July 2019.



- Department had hosted a one day seminar on "Women's Safety and Laws" during Women's Empowerment Week, on 3<sup>rd</sup> August 2019 for the female faculties and Students. Team from P.B.S.C, Vastrapur, Ranjuben and Team from 181 Abhayam Help line, Pritiben Modi from OSC, Ritaben and Team, Ms. Khushbu (Advocate) were the invited speakers.
- Department had organized tree plantation activity for the first E.C. year students on 5<sup>th</sup> August 2019. Prof. S.K. Gonsai had coordinated the activity. Students had planted and adopted around 70 plants.



- Department had organized an expert lecture on "Power Integrity" for the final year UG students and PG students on 23<sup>rd</sup> August 2019. The lecture was delivered by Dr. Jay Trivedi (Technical Leader) from S.T. Microelectronics, Noida)



- Department had organized a seminar on career guidance by IMS on 23<sup>rd</sup> August 2019 for the students of E.C. Department.

- The department has been instrumental in the successful execution of national level unique space science fest called "TARANG-2019" inviting scientists from ISRO and PRL in various sessions on 30<sup>th</sup> -31<sup>st</sup> August 2019.

### 3. FACULTY ACTIVITIES

#### Electronics and Communication Department

- Prof Usha Neelakantan was convener in the state level space science fest called "TARANG 2K19" organized for the space science aspirants, science enthusiasts under the L.D science club Prakalpa on 30<sup>th</sup> -31<sup>st</sup> August 2019.
- Prof. P.P. Prajapati has been awarded PhD degree.
- Dr. P.P. Prajapati has served as a reviewer for international/national journals/ conferences.
- Prof. K.R. Sheth coordinated one day seminar on "Women's Safety and Laws" during Women's Empowerment Week, on 3<sup>rd</sup> August 2019.
- Prof. K.R Sheth was faculty coordinator in the state level space science fest "TARANG-2K19" organized for the space science aspirants, science enthusiasts under the L.D science club Prakalp on 30<sup>th</sup> -31<sup>st</sup> August 2019.
- Prof. S.K. Rana, Prof. K.R. Sheth, and Prof. S.L. Bharvad had attended one day workshop at Gujarat Technological University, Chandkheda on 19<sup>th</sup> July 2019.
- All the faculty members from the department were involved in the different events and committees as coordinators in Tarang-2019 on 30<sup>th</sup> and 31<sup>st</sup> August 2019.

### 4. STUDENT ACTIVITIES

#### Electronics and Communication Department

- Chirag Senjaliya (M.Tech 2019 batch) got selected for the doctoral programme at Bhabha Atomic Research Centre (BARC) and stood first in Electronics category. Every year only 2 students are selected in this category.



- Khanjan Joshi of 7<sup>th</sup> Semester stood 2<sup>nd</sup> in Western Instrumental Solo Competition at

XITIJ 2K19 held at G.P Ahmedabad 16<sup>th</sup> -19<sup>th</sup> September 2019.

- Jay Sharma of 5<sup>th</sup> semester was the student fest coordinator in TARANG 2K19 organized under LDCE Science Club called Prakalp on 30<sup>th</sup> and 31<sup>st</sup> August 2019.
- Harsh Rajput of 5<sup>th</sup> Semester stood 1<sup>st</sup> in General Quiz Competition at XITIJ 2K19 held at G.P Ahmedabad 16<sup>th</sup> -19<sup>th</sup> September 2019.
- Nishith Vasava of 5<sup>th</sup> Semester stood 1<sup>st</sup> in Quiz Competition at XITIJ 2K19 held at G.P Ahmedabad 16<sup>th</sup> -19<sup>th</sup> September 2019.
- Rashi Desai, Shivam Khandelwal and Kaluskar Mandar's invention titled "The Trigger Assisted Preservation (TRAP) System" got published on 16<sup>th</sup> August 2019.
- Surya Sathish, Narayan Raval, and Kishan Nai of 7<sup>th</sup> Semester had participated in "Innovative FPGA" from July to September 2019. They are the regional finalist in Asia region. Final round is to be held in Taiwan.
- Rutva Sanghvi and Dhruvi Shah of 7<sup>th</sup> Semester presented paper titled "Black Box and Advanced Controls for Cars" under the guidance of Dr. M.V. Shah at Students' Special Symposium, 4<sup>th</sup> ISSE National Conference (INAC-4) on 27<sup>th</sup> September 2019.



- Prapti Jain of 3<sup>rd</sup> Semester got 3<sup>rd</sup> rank in Elocution Competition at XITIJ 2K19 held at G.P Ahmedabad 16<sup>th</sup> -19<sup>th</sup> September 2019.
- Aishwarya Acharya of 7<sup>th</sup> Semester stood 1<sup>st</sup> in Poetry Recitation Competition at XITIJ 2K19 held at G.P Ahmedabad 16<sup>th</sup> -19<sup>th</sup> September 2019.
- Ruchit Sheth of 7<sup>th</sup> Semester got 2<sup>nd</sup> rank in Folk Orchestra at XITIJ 2K19 held at G.P Ahmedabad 16<sup>th</sup> -19<sup>th</sup> September 2019.
- Aishwarya Acharya of 7<sup>th</sup> Semester stood 2<sup>nd</sup> in PAD PURTI (Verse Completion) Competition at XITIJ 2K19 held at G.P Ahmedabad 16<sup>th</sup> -19<sup>th</sup> September 2019.
- Aishwarya Acharya of 7<sup>th</sup> Semester stood 3<sup>rd</sup> in Western Vocal Solo Competition at XITIJ 2K19 held at G.P Ahmedabad 16<sup>th</sup> -19<sup>th</sup> September 2019.
- Aishwarya Acharya of 7<sup>th</sup> Semester stood 2<sup>nd</sup> in Indian Group Song Competition at XITIJ 2K19 held at G.P Ahmedabad 16<sup>th</sup> -19<sup>th</sup> September 2019.

- Aishwarya Acharya of 7<sup>th</sup> Semester stood 1<sup>st</sup> in Installation Competition at XITIJ 2K19 held at G.P Ahmedabad 16<sup>th</sup> -19th September 2019.

- Prof.(Dr.) M.V shah successfully completed 2 weeks STTP on “Machine Learning in the area of Pattern Recognition and Computer Vision” at MKSSS’s Cummins College of Engineering for Women, pune from 16<sup>th</sup> to 28<sup>th</sup> September 2019.
- Prof. N.A. Kotak had participated in 2 weeks STTP on “Induction Training Phase -2” at NITTTTR Extension Center, RCTI College, Ahmedabad from 16<sup>th</sup> to 28<sup>th</sup> September 2019

## **7. WORKSHOPS / STTP PARTICIPATED BY FACULTIES**

### **Electronics and Communication Department**

- Prof. H.B Tank had participated in 1 week STTP on “SciLab Software” from 15<sup>th</sup> to 19<sup>th</sup> July 2019 at NITTTTR Bhopal.

## **8. M.E. DISSERTATION**

### **Electronics and Communication Department**

<b>Sr. No.</b>	<b>Title of thesis</b>	<b>Name of student</b>	<b>Guide</b>
1.	Video-Based Sign Language Recognition Using CNN and RNN	Aishwarya Jayadas	Dr. Arun Nandurbarkar
2.	Design And Implementation Of MMIC And MIC Based Small Signal Amplifiers For Microwave Remote Sensing Application	Bhavsar Vishva Kalpeshkumar	Dr Anil J. Kshyatriya
3.	MIMO Antenna For 5G Application	Bhoi Nachiketkumar Dineshbhai	Dr Nirali Kotak
4.	Speech Emotion Recognition	Chandarana Jigna Shaileshkumar	Dr. Arun Nandurbarkar
5.	ASIC Optimization Of SOC On 28nm Technology With Timing Closure.	Chaudhari Mahesh Ramsibhai	Dr. Mihir Shah
6.	Enhancement Of DFT- ATPG For Processor IP In SOC	Chaudhary Priyaben Muljibhai	Dr. Sanjay Prajapati
7.	A Study On Meta Materials/Dielectric Waveguide /Antenna	Kanjani Priyanka Mohanlal	Dr. Arun Nandurbarkar
8.	Impact Of Floor-plan on QOR In Physical Design	Karmur Sejalben Devanandbhai	Dr. Sanjay Prajapati
9.	Sizing Of CMOS Based Analog Circuit Using Teaching Learning Based Optimization (TLBO) Algorithm	Maru Rahul Madhavjibhai	Prof. Kinnar Vaghela
10.	Design And Simulation Of High Temperature Blackbody Calibration Source	Neha Parmar	Dr Anil J. Kshyatriya
11.	Characterization Of GaN On SIC HEMT Hetero-structure	Nimavat Riddhi Dineshchandra	Prof. Pinky J. Brahmabhath
12.	Development of AHB-LITE UVM VIP With System VERI-LOG Assertion And Functional Coverage	Parikh Kavisha Devang	Prof. Kirit Patel
13.	Facial Expression Detection	Patil Divya Deepakbhai	Prof. Kinnar Vaghela
14.	Design And Simulation Of Current Strap Antenna In Mega Hertz Range	Pirzada Sana Parvin Zaynul Abedin	Prof. Shilpa Rana
15.	Design And Development Of CMOS BASED Active Filter For IRNSS Receiver	Prasad Poojakumari Jangbahadur	Dr. Mihir Shah
16.	Optimization Of Pin Count And Test Time For Fault Isolation	Rathod Parita Bakulbhai	Dr. Pankaj Prajapati
17.	A Novel Concept of Dual Band Dual Pole Conjugate Matched Feed	Sagar Dixit	Dr B.S. Sedani
18.	Investigation on DR Based Wideband Antenna For Sub 6 GHz 5G Application	Tailor Krunal Chaitanyakumar	Prof. K.R. Sheth