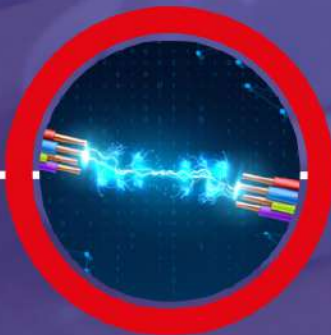




# ELECTRI.CT

"where ideas flow without resistance"

8<sup>th</sup> EDITION  
JANUARY-2023



# **Table of Contents**

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**03**

Department  
Vision & Mission

**04**

Principal's Talk

**05**

HOD's Desk

**06**

Faculty's Vision

**07**

Alumni  
Activities &  
Collaboration

**13**

Media  
Coverage

**16**

Students'  
Achievement

**22**

Events

**25**

Placement  
Details &  
Toppers

**26**

Creative Corner

**27**

Builders of  
ELECTRI.CT

# Vision

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- To foster learning environment for electrical engineering education having high technical skills, ethical values and overall global competence.



# Mission

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- Better employability, startups and entrepreneurship.
- A professional career with essential technical and managerial skills.
- Collaboration with industry through Research & Innovation.
- Other avenues for higher education.
- Adapting to change in technology and apply the same for the benefit of society at large.





**Dr. R. K. Gajjar**

**“Sometimes you will never know the value of a moment until it becomes a memory.”**

These words signify the celebration of the 75th anniversary of our institute. Our current students realized the value of the golden days of the college when they interacted with our alumni. We held the Global Alumni Convention 2023 on January 6, 7, 8, 2023 where alumni from across the globe, our former Principals, former faculty joined the current students and faculty to mark the occasion.

And what a celebration it was!

The Global Alumni Convention was inaugurated in the august presence of the Honorable CM of Gujarat, Shri Bhupendrabhai Patel, notable alumni, invited dignitaries, faculty, and students. We received congratulatory messages from the Hon. PM Shri Narendra Modi, Hon VP Shri M. Venkaiah Naidu and Hon HM Shri Amit Shah. The event was celebrated over a period of three days with various programs. You will get a glimpse of the programs in this issue. The event was a grand success as it brought together the illustrious and meritorious students of LDCE - both past and present. The alumni shared their success stories which inspired our present students, we had discussions on the centennial vision of LDCE which will also act as the roadmap for LDCE@100. TCS was instrumental in hosting a panel discussion where we had outstanding panelists which included two of our alumni. The government, alumni and our partners have indicated their contributions for the development of the institute. We also had a talent evening and musical night where we all danced to our hearts content.



Team LDCE, with its faculty, staff and students - are forever committed to realize the vision of LDCE. The departmental magazine - 'ELECTRI.CT - where ideas flow without resistance', gives the students an opportunity to exhibit their talent, teamwork, exchange knowledge and information and of course interact with the illustrious alumni of the department. This platform in its own way contributes to achieving our centennial plan.

I extend my warm wishes to the department and hope they keep marching forward tirelessly towards excellence.

**Dr. R. K. Gajjar**

Dear Readers,

I am glad to present to you the 8th edition of Electri.CT.

The department is full of new energy and commitment with the recent Global Alumni Convention (GAC) 2023.



**Dr. K. P. Badgujar**

As we are aware that this year, we are celebrating platinum jubilee of the college and we have year long celebration planned. The peak of the celebration, was GAC 2023. We have observed more than 100 alumni footfalls in the department ranging from 1960 to 2022 batch. It was a unique occasion where a span of 62 years alumni were brought on the same platform. Retired professors were also part of the Alumni meet and everyone was nostalgic as well. We observed commitment from each stakeholder for upgrading of the department. The faculty members played a key role in central management of the event at department as well as institute level.

The department appreciates alumni for the whole hearted participation, enthusiasm and commitment. The faculty of the department would not keep any stone unturned for the development and betterment of students and department. Let's all pledge, through this issue, that we will contribute to the progress of institute and department.

I appreciate the student editorial team and the faculty mentors Prof. Nupur Sinha and Prof. Vihang Dholakia for their efforts.

Best wishes

Dr Ketan Badgujar



## Faculty's Vision

“No resistance can drop your potential.”

Greetings on our Republic Day!

Here we come with the 8th edition of our department magazine “Electri.CT - where ideas flow without resistance”. The last issue was all about our activities and achievements as we kickstarted the celebrations of the 75th anniversary of the college along with the “Azadi ka Amrutmahotsav”.

This time we bring to you glimpses of our “Global Alumni Convention – 2023” held in the series of events to mark LDCE@75. It was a fun filled three-day event which saw many of our alumni who are stalwarts in their fields now. We had the privilege to greet and meet our senior faculty members who are now our mentors and guardians. They are always ready to guide and help us whenever we reach out to them.



L to R: Prof. C. A. Patel, Prof. V. B. Babaria, Prof. G. P. Upadhyay, Prof. H. R. Dave, Prof. H. T. Kashipara, Prof. H. N. Prajapati, Prof. R. I. Patel

We relived so many memories and made new ones. We resolved to ourselves to uplift the department and college to newer heights of success. And yes, we partied all night with the talent evening and musical night. All in all, we enjoyed ourselves thoroughly.

We always strive to make our newsletters more than just newsletters by being informative and using them as a platform to showcase the multifaceted talent of our students and faculty. Having said that, we are open to any ideas that will help us improve our newsletter. We would like to thank all the students and faculty who have contributed to the newsletter. We appreciate the student editorial team who have done a commendable job. We hope that you will enjoy reading this issue. Once again, Team Electri.CT values your contribution and looks forward to your continuous support in the coming issues.

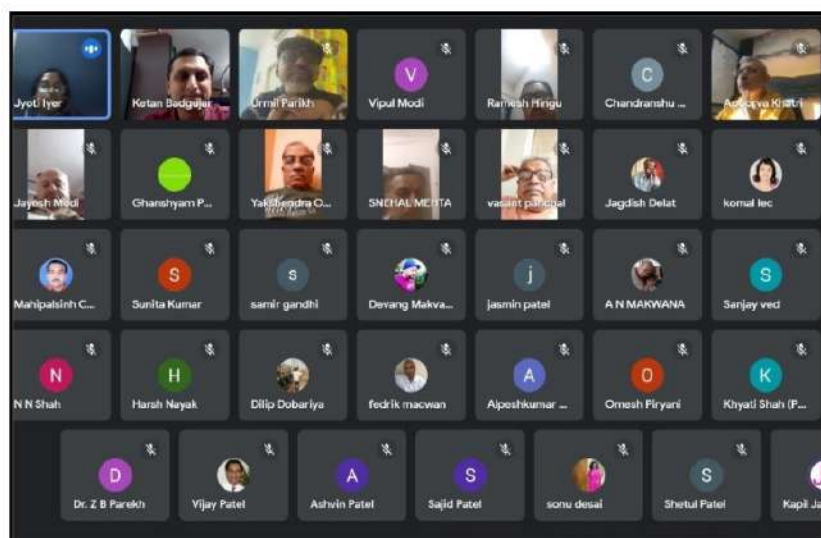
Happy Reading!

## Alumni Online Meeting @75



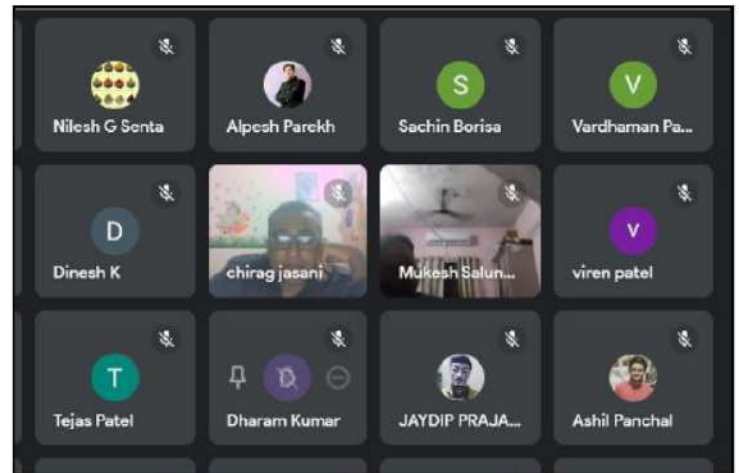
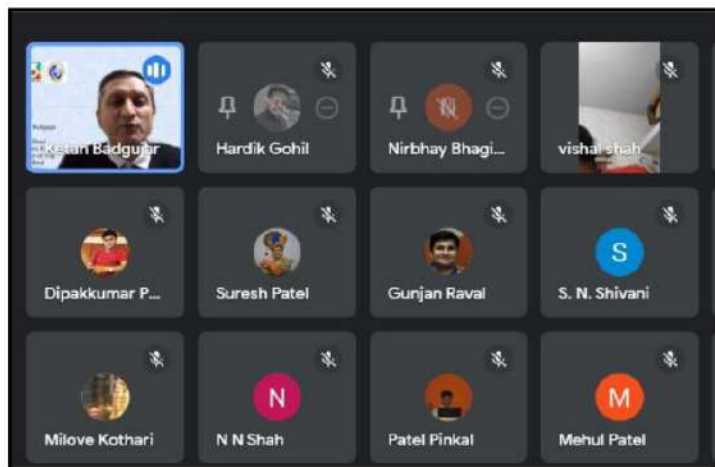
The meeting took place on 23/7/2022 and 20/12/2022 with an aim to provide an interactive platform to our alumni.

Alumni who passed out between 1960 and 2000 were an essential part of the meeting. HOD and core faculty members of Electrical department were present. They gave a brief idea to our alumni about the events which were to be held in GAC meet. Alumni also shared their anecdotes and memories about the college.



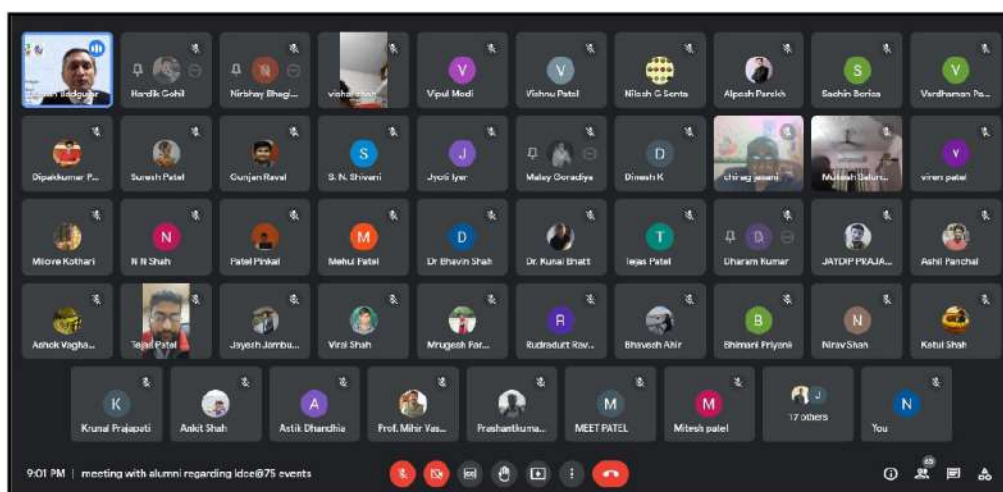


# Alumni activities & collaboration



The meeting took place on 25/12/2022 with an aim to give a chance to our fresh alumni to smell the fragrance of college once again.

Students who passed out between the years 2000 and 2022 were present in the meeting. Overall it was an interactive session where HOD and core faculty members were present. Alumni shared their anecdotes and memories and gave information about their current positions and how has their life changed. They revealed what extra tasks they pursued during their college in order to taste the fruits of success. A brief idea regarding GAC was also shared.





# Industry Outlook



- One such story which ignites a flame of motivation, dedication and perseverance is that of "Mr. Ashwin Patel" , a 1993-97 batch alumni who is currently serving as the Director of "SARK EPC Projects Ltd."
- He worked in the Middle-East and Far East for about 8 years, then returned to India and started his own company namely "SARK EPC Projects Ltd."
- It has an annual business of INR 51 crores in the field of Cathodic Protection system in Oil and Gas Industry. He has a team of 150 having projects in all PSUs like ONGC, HPCL, BPCL, IOCL and overseas project in far East and Africa.

# Global Alumni Convention

## TCS PANEL DISCUSSION



- A panel discussion was arranged by TATA Consultancy Services (TCS) during the Global Alumni Convention (GAC) in LDCE Campus regarding the Digitalization of the Indian Infrastructure. In this event, the panelists Alpesh Shah, Priyanka Chopra, Rajat Garg, Rakesh Lunia with moderator Pragnya Mishra from different working field came together and put their thoughts and ideas on the rapidly changing digital ecosystem of India.

- In this panel discussion many topics were discussed like telecom industry, digital adoption, removing illegal middle man power with help of technology. TCS is making effort to make India digital, innovative and developed country in the world. The panel members spoke about how start-ups will help people to develop unique mindset along with real time problem solving.



# Alumni activities & collaboration

- The panel members also discussed about the 3 themes of the public service transformation, "Ease of living, Ease of business and Ease of communication."



- And after that panellist spoke about the right technologies for Govt. services and Govt. programs & they also discussed, "People, Process and Technology."

- The conclusion of the discussion by this panel was to:
  - inspire the younger generation to develop the ability to identify the problems on the present infrastruc
  - get unique, simple, reliable and sustainable solutions of those problems
  - uplift the living standard of the people not only of this nation but of the whole world.



# Alumni activities & collaboration



- The event was held on 8/1/2023 in Chanakya hall. Alumni from 1960 to 2022 were present.
- HOD as well as faculty members of the department welcomed them.

- Dr. Ketan Badgujar shared a few glimpses of the events which were held during the Global Alumni Convention like Talent Evening, Alumni Stories, Musical Night, B2B Exhibition, MoU Signing etc.
- Ketan sir introduced faculty of Electrical department and shared their achievements and activities.
- Alumni also shared their work experiences and the success mantra which earned them the current position.





# New Celer

## CELER – THE GREEN REVOLUTION

Team 'Celer' of final year students Ratnam Shah, Jay Shah and Shreyas Patel of the Electrical Department of L D Engineering College has developed an electric bike having battery charger and motor controller totally self-made by students through the support from faculty of the department.

The EV battery charger as well as the BLDC motor controller is developed with the help of grant received fromSSIP LDCE, under Government of Gujarat. This charger saves energy by reducing the wastage of energy as compared to the conventional charger and fast charges the battery within one hour.

એક કલાકમાં ફુલ ચાર્જ થઈ શકે  
તેવી ઇવી બાઈક તૈયાર કરી



અ. ડી. એન્જિનિયરિંગ કોલેજના ઇલેક્ટ્રિકલ ડિપાર્ટમેન્ટના અંતિમ વર્ષમાં અભ્યાસ કરતા શ્રેયસ પટેલ, જય શાહ, રત્નમ શાહ, દિપાંગ પટેલે પ્રોફેસર મિહિર વસાવડાના માર્ગદર્શન હેઠળ 'સેલર' ઇલેક્ટ્રિક બીકલ (ઇવી) બાઈક તૈયાર કરી છે. આ વિશે સ્ટુડન્ટ જય શાહે કહ્યું કે, હાલમાં આવતા ઇવી બીકલમાં બેટરી નોર્મલ રીતે પથી ૬ કલાકમાં ચાર્જ થઈ શકે છે ત્યારે અમે બેટરીમાં ચેન્જ કરીને એક કલાકમાં ચાર્જ થઈ શકે તેવી ઇવી બીકલ માટેની બેટરી તૈયાર કરી છે. ૪૮ વોલ્ટની આ બેટરી આ ચાર્જર કન્વેન્શનલ ચાર્જરની સરખામણીએ ઊર્જાનો દુર્વ્યય ઘટાડે છે અને ઊર્જાનો અચ્ચાવ કરે છે. ચાર્જર ઇકોફ્રેન્ડલી છે એટલે ઇલેક્ટ્રિક બાઈકમાં વપરાતી ઇલેક્ટ્રિક મોટરનું કંટ્રોલર જાતે તૈયાર કર્યું છે. આ કંટ્રોલરમાં રિજનરેટીવ બ્રેકિંગનું ફીચર પણ આપવામાં આવ્યું છે જે બ્રેક મારવામાં વ્યય થતી બાઈકની ગતિ ઊર્જાને વિદ્યુત ઊર્જામાં ફેરવીને બેટરી ચાર્જ કરશે જેનાથી બાઈકની રેન્જ વધશે અને બેટરીથી બાઈક ચલાવવા માટે સખ્લાય થયેલી ઊર્જાનો પણ વધુમાં વધુ માત્રામાં અચ્ચાવ થઈ શકે છે. આ ઇલેક્ટ્રિક બાઈક ચાર્જ થતી વખતે સારી કાર્યક્ષમતા દ્વારા ઊર્જાનો અચ્ચાવ તો કરશે જ પણ બાઈક ચાલતી વખતે પણ ઊર્જાનો ઉપયોગ સારી રીતે કરશે અને વ્યય થયેલી ઊર્જાને વધુ પ્રમાણમાં અચ્ચાવી શકશે.

બ્રેક લગાવામાં  
વ્યય થતી  
ઊર્જાને વિદ્યુત  
ઊર્જામાં  
ફેરવીને બેટરી  
ચાર્જ કરશે

## Media Coverage



This controller will also have a feature of effective regenerative braking technique, which will convert the kinetic energy of the bike wasted in braking into electrical energy and charge the battery that will increase the range of the bike, and the energy supplied to run the bike from the battery can be saved to its maximum extent. Hence, this electric bike will not only save energy with a good efficiency charger, but will also use energy effectively while running the bike and will recover the wasted energy to a greater extent.

Jay Shah - 190280109125

Ratnam Shah - 190280109127

Shreyas Patel - 190280109091

(SEM- 7)



# Joy of Giving

A Mega Collection Drive was organized by the NSS unit of L D College of Engineering for the underprivileged people to help fight the winter. Joy of Giving - an event where we help those in need, instead of throwing the old clothes away, our department collected clothes and distributed among those people who are in need. We have heard that, "what might be waste for us could be a blessing for the less fortunate". In this event, our students' NSS volunteers and Prof. H N Raval managed the whole event of collection and distribution.



## Recognition from Ministry of Youth Affairs & Sports, Govt. of India

This activity was noted by Govt. of India and they shared this post along with this caption on social media:

"With winter comes the challenge of surviving the extreme odds and the colds. Together, with thoughtful donations, we can help people around us. Let's take a cue from our inspiring #NSSVolunteers of LDCE, Ahmedabad, and spread the joy of living!"



# E- Waste Management



- Everyone from first year to final year and also ME students came forward to contribute. Also, the E-waste brought by every student was measured so that the highest contributor could be rewarded.

- The E waste collection drive event was held on 15th September 2022 at Electrical engineering department main gate under the faculty coordinator Professor H.N Raval sir. It was a great initiative taken by our electrical department IEI student chapter in collaboration with 'Cycle Green'.



- At the end of the drive total e-waste was calculated and it turned out to be more than 130 kilograms. Top 10 contributors were applauded and were given certificate of appreciation.
- Overall, it was an awakening session for everyone and it turned out be impactful for the environment.





## NSS



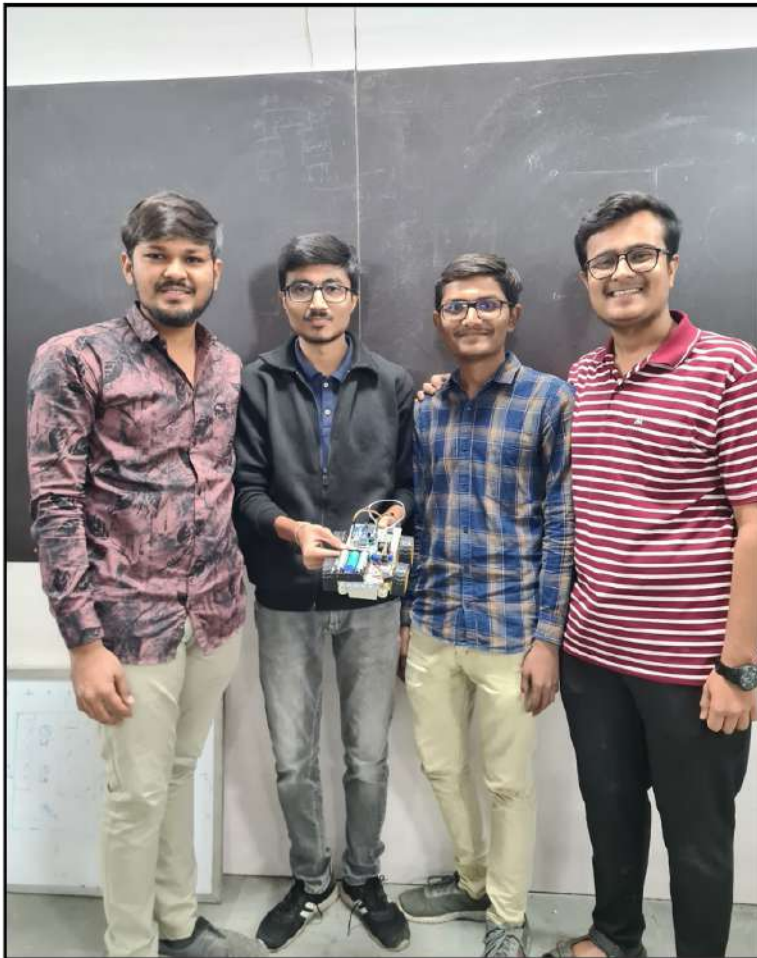
- It is a matter of great pride to serve the country and help in its service.
- We have a grand parade every year on Republic Day. It is a matter of great pride that Hepin Pipariya, a student of our department, has been selected for this Republic Day Parade in New Delhi.

- Hepin is in fifth semester serving as a volunteer in LDCE NSS club. He has participated as volunteer in many NSS events.

- Our department faculty - Hemant N. Raval sir is actively involved in NSS club and gives significant contribution as a program officer in NSS LDCE.



# Voice Control Robot



- The voice control Robot Project is prepared by third semester students Yash Raval, Dharmik Vaja, Ravi Piprotar and Kevin Pathak. The purpose of developing this project is to control the Robot just by voice command. This voice command robot can be used in hospitals. It can help to collect patient's details or provide them medicine or food without human touch and just by giving it a voice command.

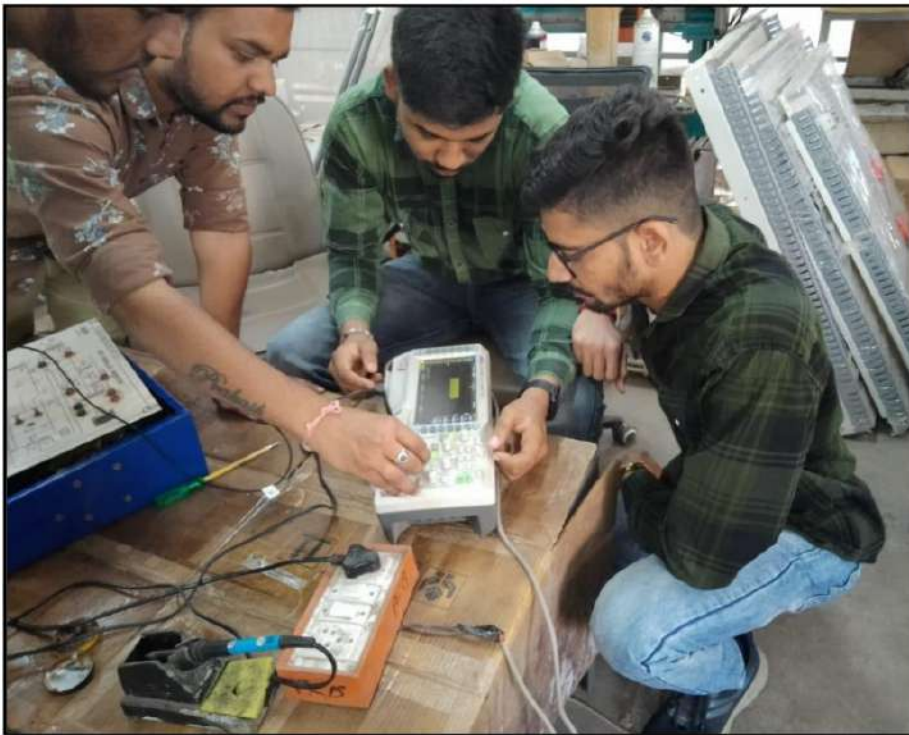
- It is also very helpful for physically challenged people. The students have developed this project just by using the basic components like motor, motor-controller, arduino. They also developed an app for controlling the robot.





# Trouble Shooting of Power Electronic Kits

"Nobody is bothered about an institution more than it's alumni."



- Rightly coined by Shri Narayana Murthy. Our department has a living example of a person whose actions and zeal to serve his institution reveals much about his personality.
- It is a pride for our department that our 1998 batch alumni Shri Valkesh Prajapati - currently the Managing Director of Oritech Solutions provides voluntary assistance to Electrical department by repairing the damaged Power Electronic kits of our laboratory free of cost. He even nurtures our students by providing them technical assistance regarding the repairing & maintainance of the kits.

# Hackathon

- Team :-1 (NIRMAL JAL)
  1. HARSH MEHTA (EC ENGG.)
  2. RAXITA CHAVADA (ELECTRICAL ENGG.)
  3. DEVANG KANZARIYA (EC ENGG.)
  4. JIGNESH CHAUHAN (EC ENGG.)
  5. NEHA RAI (EC ENGG.)
  6. VISHWA RANCHAL (ENVIRONMENT ENGG.)



- The students have come up with an amazing project to make sea salt water drinkable. Student developed an IoT-based system that purifies sea water using solar energy.

- TEAM:-2 (SMART MCB)
  1. ABHAY GOSAI (ELECTRICAL ENGG.)
  2. OM BHATT (ELECTRICAL ENGG.)
  3. JALAK ANJARIYA (ELECTRICAL ENGG.)



- The students have come up with the idea to operate MCCB with remote facilities for power distribution network.



# Students' Achievements

- Team :-3 (HEAT SENSITIVE BATTERY MANAGEMENT SYSTEM FOR EV)

1. VEDANT SONI (ELECTRICAL ENGG.)
2. DISHA SATHVARA (ELECTRICAL ENGG.)
3. SHLOK MANDALIYA (ELECTRICAL ENGG.)
4. SWAYAM MODI (ELECTRICAL ENGG.)
5. AYUSH PATEL (ELECTRICAL ENGG.)
6. NIRAJ PRAJAPATI (ELECTRICAL ENGG.)
7. PRATIK DHAMI (ELECTRICAL ENGG.)



- The students have solved the problem of heat sensitive battery for electrical vehicle.
- Students have developed air cooling system and cut off system for the management of heat sensitive battery for EV.

---

- TEAM:-4 (FESS)

1. VISHWAM PATEL (MECHANICAL ENGG.)
2. DHARMIK VAJA (ELECTRICAL ENGG.)
3. SMARTH PASAWALS (MECHANICAL ENGG.)
4. AAYUSH VASAVA (MECHANICAL ENGG.)
5. JYOT SHYARA (MECHANICAL ENGG.)



- The students have solved the problem of variation in frequency in power grid system.
- They made a flywheel to store energy to make a constant frequency.

# SAHYOG

The event took place on 17/09/22.  
A signature event which aims to bridge the lacuna between institute and industry.



Successful SSIP projects were presented which reflected the innovative ideas of our students. It aimed to provide job essential skills and make them entrepreneurship and start-up ready.



This initiative provides students with an atmosphere to have an open interaction with the industrial panel. Professor presented a brief idea about the institute and department, placement, internship statistics, testing activities and consultancy undertaken in the department.



Some of the companies who visited the campus were L&T, Reliance, Adani, Torrent. They also showed readiness to provide assistance to students as and when required.



# Project Management



The event was held on 16/09/22. PMI Student's Chapter is an initiative by Project Management Institute and L D College of Engineering for nurturing Project Management skills in students studying Engineering. Generating maximum creativity with least available resources by utilizing them optimally is known as productivity. By conducting various seminars, events and discussions, PMI LDCE Chapter inculcates Project Management skills in students - a platform where students work, discuss and think together for contributing positively for the benefit of the society.



# Poster Presentation



A poster presentation event on Effect of Electric Mobility on Climate Change was held in our college. Participant students were given 2 hours to make posters relevant to the theme after which they displayed their posters to the faculty. Eventually, Shryanshu was declared the winner.





# Placement Details & Toppers

Sr No	On/Off Campus	Name of Employer	Number of Students Recruited
1	On Campus	ADANI GROUP	15
2	On Campus	RELIANCE	10
3	On Campus	TCS	10
4	On Campus	TORRENT POWER	9
5	On Campus	GARDEN SILK MILLS	3
6	On Campus	RSPL	3
7	On Campus	ADANI WILMAR	2
8	On Campus	ATUL	2
9	On Campus	GSPL	2
10	On Campus	IRM ENERGY	2
11	On Campus	SECUREMETER	2
12	On Campus	ACCENTURE	1
13	On Campus	ALPHA TECH	1
14	On Campus	GGL	1
15	On Campus	IMEG	1
16	On Campus	KEYENCE	1
17	On Campus	LINDE	1
18	On Campus	SAURASHTRA CEMENT	1
19	On Campus	SCHINDER ELECTRIC	1
20	On Campus	SCHAEFFER	1
21	On Campus	SHAPOORJA AND PALONJI	1
22	On Campus	TATA MOTOR	1
23	On Campus	WELSPUN	1
Total No. of Students Placed			72

## • Toppers:

### Semester 8

- Patil Vishal Ashok  
CPI: 9.45 (190283109017)
- Joshi Jeet Maheshbhai  
CPI: 9.20 (180280109037)
- Ghadiyali Aryan Manishkumar  
CPI: 9.07 (180280109025)

### Semester 6

- Sharma Ghanshyam Rajesh  
SPI: 9.35 (190280109128)
- Mori Samatbhai Khimabhai  
SPI: 9.33 (200280109519)
- Prajapati Pradipbhai Hareshkumar  
SPI: 9.30 (190280109103)

### Semester 4

- Rayrikar Shashwat Rakesh  
SPI: 9.22 (200280109079)
- Sourya Sarkar  
SPI: 9.04 (200280109112)
- Soni Vedant Ravindrabhai  
SPI: 8.83 (200280109003)

### Semester 2

- Heer Vipul Dave  
SPI: 9.23 (210280109096)
- Patel Pooja Nileshkumar  
SPI: 9.05 (210280109013)
- Vaja Dharmik Vijaybhai  
SPI: 8.77 (210280109031)

## Creative Corner



Bambhaniya Nayan  
(220283109001)



## **Builders of ELECTRI.CT**



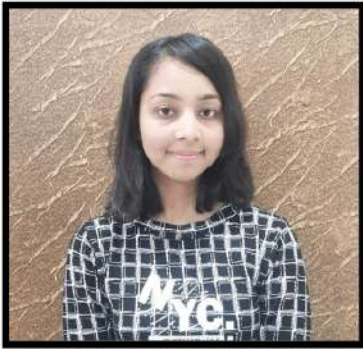
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**Yash Raval**  
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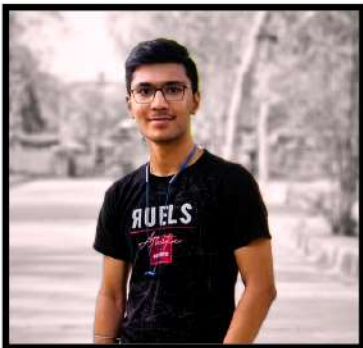
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**Apexa Patel**  
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**Harshit Shah**  
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(210280109017)



**Urmi Shah**  
(Graphic Designer)  
(210280109097)



**Harshil Nakiya**  
(Art Director)  
(210280109019)





Oldest and youngest alumni of the dept together -  
Wg Cdr (Retd.) C. G. Pandya (1961 batch) and Vishal Patil (2022 batch)

**Global Alumni Convention-2023**

