

# TECH PULSE

The Quarterly Newsletter by L. D. College of Engineering



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## AROUND THE INSTITUTE

Lalbhai Dalpatbhai College of Engineering endearingly known as L.D.C.E is Ahmedabad's premier engineering college situated at city's heart surrounded by elite organization Like PRL, ATIRA, ISRO, IIM and CEPT. Started in 1948 with an aim of imparting quality higher education in various fields of engineering, it has seen unprecedented growth.

It is affiliated with Gujarat Technological University & administrated by Department of Technical Education, Government of Gujarat.

# FROM THE DESK OF PRINCIPAL

Dear students and faculty members,

Last few months have been quite a challenge for all of us and we gave our best to win over the situation. The remarkable talent and hard work of our students and faculty members has resulted in some amazing outcomes. The main focus of our institute is Research and Innovation. SSIP projects of our institute are getting good recognition. We have filed 10 patents in various fields in the last three months. Patent and publication of the best projects, research and consultancy are our priority. We have conducted advanced and futuristic technology training and workshops with National and International experts. Moreover, 270 faculty members of the institute successfully completed a comprehensive training on IPR organised by i-Hub and Education Department, Gujarat.

Simultaneously our students and faculties have been engaged very well in the social domain too. Tree plantation and Covid testing drives were organized along with webinars and competitions that would help one and all during this pandemic.

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**Dr. R K Gajjar**



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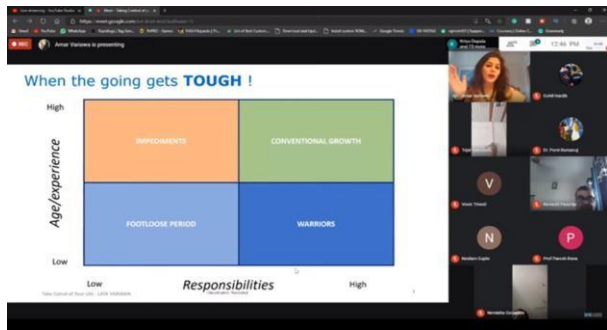
Shreya Parmar

Meet Koriya

# INDUSTRY-INSTITUTE INTERACTION:

- The department of Applied Mechanics coordinated a Webinar on “Emerging Trends in Geotechnical Testing and Design” on 8th August 2020, jointly collaborated by The Institution of Engineers India, Gujarat State Centre and Indian Geotechnical Society (IGS), Ahmedabad Chapter. Chief Guest of the webinar was Mr. Navinchandra Vasoya, Guest of Honour were Dr. Amit Prashant & Dr. R. K. Gajjar, key note speakers were Dr. Jaykumar Shukla, Er. Ravikiran Vaidya & Dr. C. S. Sanghvi & Dr. M. V. Shah were the Moderator & Co-ordinator respectively.
- Applied Mechanics department organized an Online Meet with Professionals and Stalwarts of Structural & Geotechnical Engineering. The aim of the Online Professional Meet was to deliberate on all the ongoing concerns of the industry and to provide an array of Dissertation topics to the students pursuing their Masters in Structural & Geo-technical Engineering. The professional meet was attended and leveraged by all the PG students pursuing Structural Engineering & Geotech engineering of Applied Mechanics Department from LDCE as well as GEC, Dahod. The webinar was rightly entitled as “Meet the Professionals” – Industry Academia Collaborative Talk and organized on 14th August 2020. The expert Panel of speakers from the domain of Structural Engineering comprised of Shri Vijay Shah ( Bhoomi Consultants), Shri Umesh Soni ( Ambuja Cements Ltd), Shri Bhavik Patel ( Blue Skyz Engineers), Shri Jignesh Gandhi ( CASAD Consultants), Shri Shailesh Desai & Shri Rakesh Mehta ( Saunrachana Strucon Pvt. Ltd), Shri Rakesh Shah ( S3M, Consultants), Shri Bhavin Shah ( SQVe Engineers). The panel of experts from Geotechnical Engineering comprised of Shri Arun Dave ( Geotech Soil Testing Lab), Shri Mahendra Bhavsar ( SAI SYSTRA India Consultants), Shri Mihir Vora ( KBM Engineering Research Laboratory), Shri Parag Dave ( M.K. Soil Testing Laboratory)
- Shri Nitin Desmukh ( Louis Berger India – Metro Rail). The webinar was meticulously planned and organized by Prof. D. R. Tarachandani, Prof. P. J. Mehta, Prof. (Dr.) M. V. Shah, Prof. C. D. Patel & Prof. Shalini R. Singh under the able guidance of Prof. (Dr.) C.S. Sanghvi.
- The department of Applied Mechanics & Civil Engineering coordinated a Webinar on “Water Resources Management” on 29th August 2020, jointly collaborated by The Institution of Engineers India Gujarat State Centre, LDCE A’bad and Water Management Forum (WMF) Ahmedabad. The Key note address was delivered by Shri Vivek Kapadia, Director, Sardar Sarovar Narmada Nigam Ltd. The session was moderated by Prof. Utkarsh Nigam, Asst. Professor, Civil Engineering department.
- Prof. P.J.Mehta and Prof. Kamini A. Parmar from Applied Mechanics department had successfully organized and coordinated webinar on “Career Opportunities (After Graduation)” on 5th Sept. 2020. The expert speaker for the day was department’s illustrious Alumni Mr. Vraj Pandya, Executive Engineer, Irrigation Department, GoG. All the students of Civil Engineering department attended the online session and found it useful to get conversant with the possible job avenues after completion of B.E.
- Webinar on “Taking Control of Life” was organized on 19/09/2020 on Google Meet and YouTube Live. Nowadays people are too much worried about their life so they do not have time to think on how to get satisfaction and take control of their life, especially for the ladies. For the same Mrs. Lata Variawa, Head of manufacturing, John Deere Technology Center limited has delivered session that included all the aspects of day to day life to make it better. More than 90 participants have attended this webinar and it was organized by automobile Engineering department in association with SAE Western section Gujarat Division.



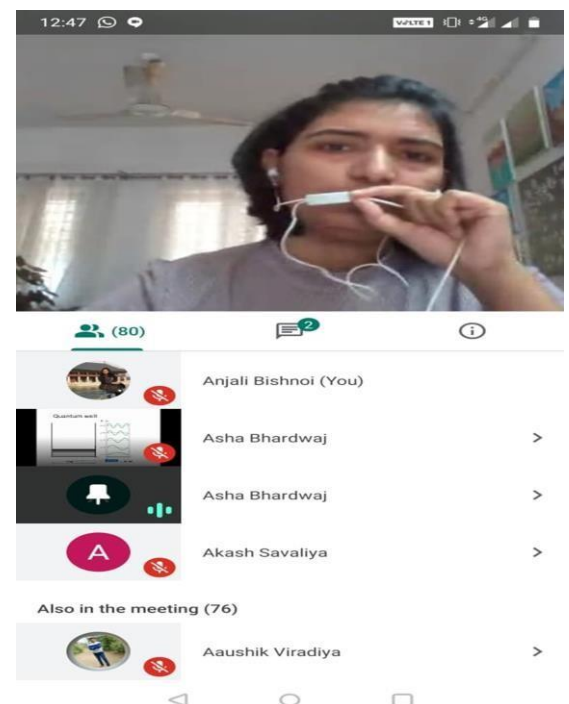


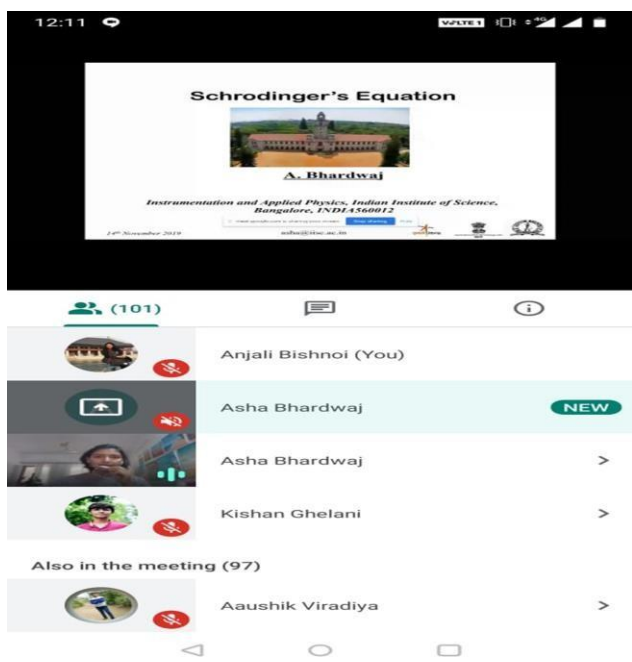
- Expert talk on “Scope in Automotive Industry” was organized by Automobile Department in association with Ellite Techno Group on 17/07/2020. Expert talk was delivered by Mr. Sundar Iyer.
- Bio Medical Department had organized a webinar on “Technical Overview of Molecular Diagnostics Instruments” on Friday, 4th Sept 2020. The speakers were Deepankar Ramteke (Product Specialist –II- BID) and Prashant Kabariya (AM- Genomic Science) Thermo Fisher Scientific.



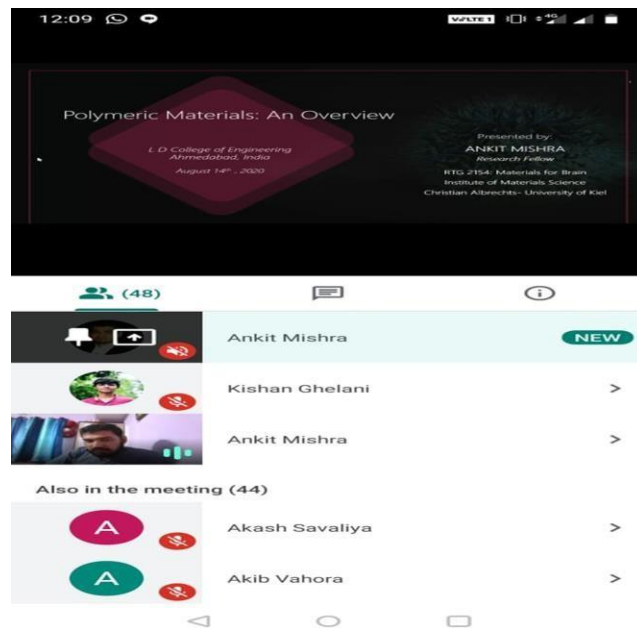
- Bio Medical Department had organized a webinar on “Skill Development for Entrepreneurship in Biomedical Engineering”, on 5th Sept 2020. The speaker was Nirav Gohel, Biomedical Engineer.
- Bio Medical Department organized a webinar for making students placement-ready on 10th September, 2020. The webinar was organized in association with Career Naksha®, an ed-tech startup, Vadodara. 73 final and pre-final year students attended this webinar. The resource persons, Mr. Maulin Shah and Mr. Nimish Gopal discussed scopes and demand of Biomedical graduates in the market.

- Civil department with 40 students of B. E. Sem. 3 attended an AutoCAD course of 40 hours duration.
- Expert lecture was delivered by Prof. Utkarsh Nigam on “Application of Fuzzy and Ann in Engineering and Technology” in a Faculty Development Program at SAGE UNIVERSITY, INDORE, on 31<sup>st</sup> July, 2020.
- Expert lecture was delivered by Prof. Sudhanshu Dixit on “Safety & Monitoring Parameters in Construction of Earthen Dam” at Institution of Engineers (India) Gujarat State Centre in association with Silver Oak University, Ahmedabad & Water Management Forum of IEI, on 09<sup>th</sup> September, 2020.
- Chemical Engineering Department had organized a webinar on “Schrodinger Equation” on 7/08/2020 through Google meet platform at 12 noon by Dr. Asha Bhardwaj, Assistant Professor, IAP, Indian Institute of Science, Bangalore. The webinar was coordinated by Dr. Anjali Bishnoi, Associate Professor, Chemical Engineering Department. It was a splendid presentation, which exposed students to the core of the subject. All the students and faculties were benefited by the expert talk.



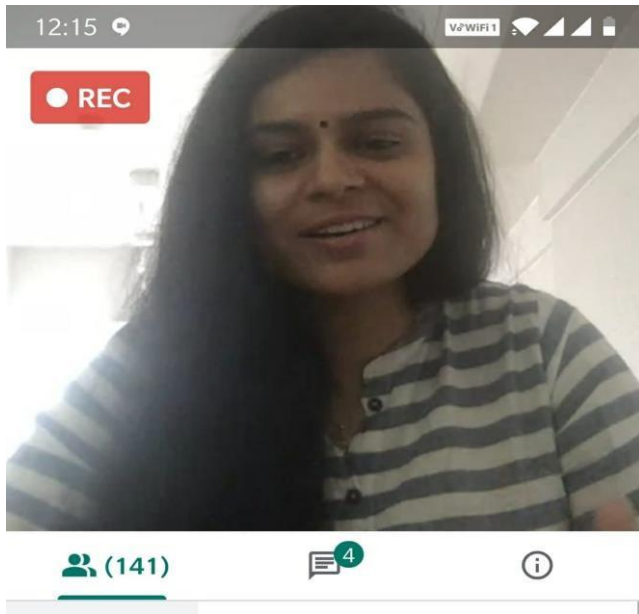


- Chemical Engineering Department, L. D. College of Engineering, Ahmedabad - Gujarat had organized a webinar on “Polymeric Materials: An overview” held on 14/08/2020 on Google meet platform at 12 noon by Mr. Ankit Mishra, Research Fellow RTG 2154: MATERIALS for Brain Institute of Materials Science Christian–Albrechts- University of Kiel Germany. The webinar was coordinated by Dr. Anjali Bishnoi, Associate Professor, Chemical Engineering Department. The webinar provided students significant knowledge.

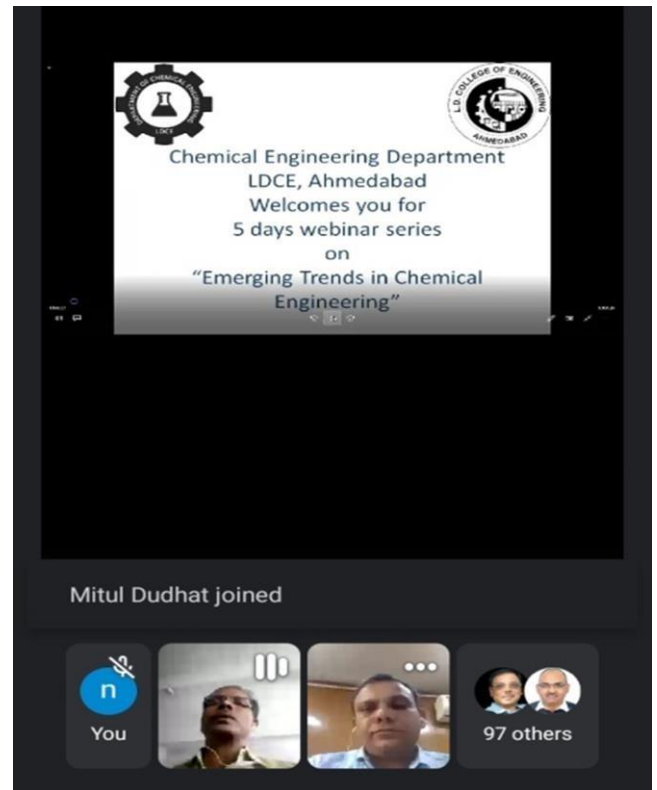


- Chemical Engineering Department, L. D. College of Engineering, Ahmedabad - Gujarat had organized a webinar on “My Story - Entrepreneur's Life & Crossroad” under stewardship of Institute Innovation Council (IIC) Cell, LDCE, supported by SSIP cell, LDCE Ahmedabad LDCE on 28/08/2020 at 12 noon on Google meet platform. This webinar was the part of the Three days webinar series on “Outreach program on innovation and entrepreneurship”. The eminent Speaker was Ms. Pallavi Bishnoi, Director & Co-founder, Real Time Renewable Pvt .Ltd. She is detailed and result-oriented consultant offering extensive background in water/wastewater management, sustainable solutions and renewable energy. She has hands-on global experience in the environment sector- UK, USA, Norway and India. The seminar was co-ordinated by Dr. Anjali Bishnoi, Prof. Pratik Patel, Prof. Vandana Gojiya. Students, Professionals, and Academicians, Industry partners have attended the webinar.

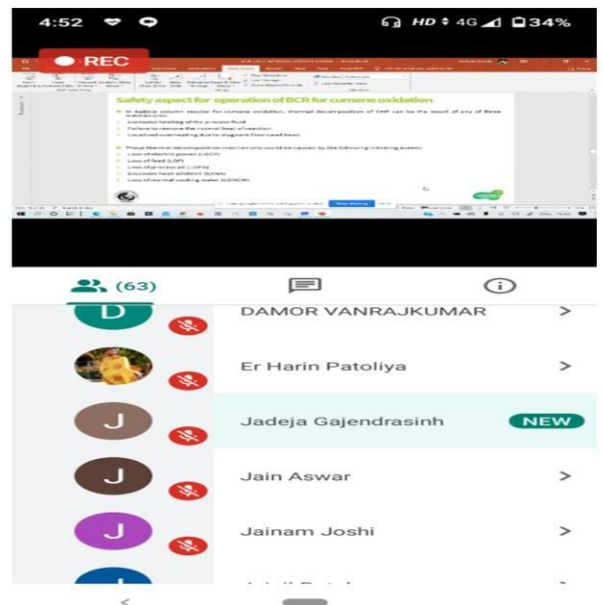
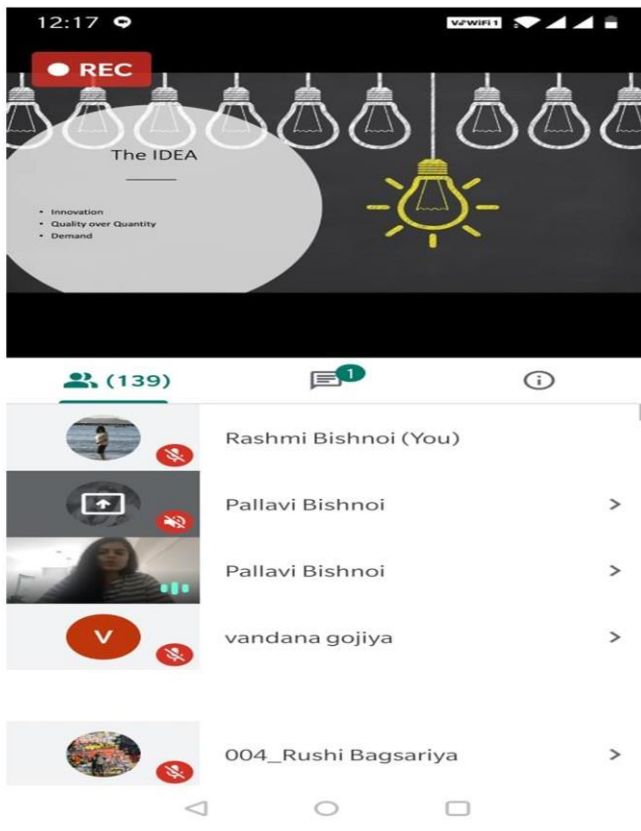




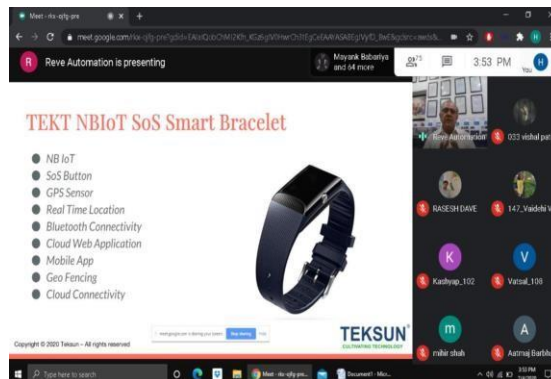
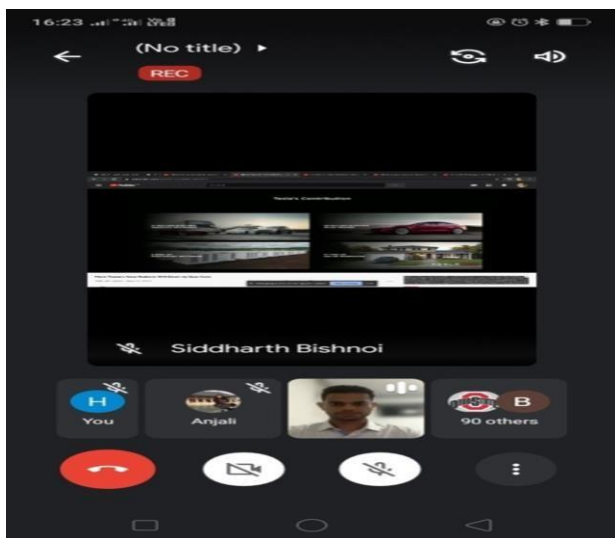
- Chemical Engineering Department, L. D. College of Engineering, Ahmedabad - Gujarat has organized a five days webinar series on “Emerging Trends in Chemical Engineering” from 28.09.20 to 03.10.20 daily at 4.00 to 5.30 PM. Inauguration of the event was on 28-09-20 at 3.30 pm to 4.00 PM. Webinars were conducted via Google Meet.



- The event was chiefly organized by Dr. P. H. Rana, HoD and nicely coordinated by Dr. Anjali Bishnoi, Prof. S. M. Dutta, Prof. Pratik Patel, Prof. Vandana Gojiya, Prof. Sandip Bhatt, Prof. Hiral Pandya, Prof Rupal Ruperi, Prof. T. S. Rajaraman. More than 500 participants were registered which includes Students, Academicians and Industry Professionals.







- IETE LDCE Student Forum in association with IETE Ahmedabad had organized webinar on “Online large Scale Recommendation System” by Viral Gupta (Communication AI LinkedIn, USA) and Natural Language Processing by Rajkiran Veluri (Sr. Manager, Data Scientist IBM, India) for students on 12<sup>th</sup> July, 2020. Around 150 students participated in the webinar. All participants were given e-certificates.
- The department had successfully organized online national conference named ECICIS 2020 on the occasion of Teachers day in collaboration with IETE, Ahmedabad. There were 15 teams shortlisted from all over India which presented papers in the conference.

- Environmental Engineering Department had organized an online lecture series on air quality, health, and climate change from 1<sup>st</sup> August to 6<sup>th</sup> September 2020 by Mr. Jay Mehta, Environmental Engineer, Environmental Management Centre LLP, Mumbai, Maharashtra, India and Mr. Sagar Rathod, PhD Student, Department of Atmospheric Science, Colorado State University, Fort Collins, Colorado, USA for UG & PG environmental engineering students.
- IETE Student Forum had organized webinar for students and faculty members on “Opportunities and Challenges in IoT, ML, and AI.” Webinar was conducted by Mr. Madhukant Patel (Former Scientist ISRO, CTO TeksunInc., MD Reve Automation LLP) on 4<sup>th</sup> July 2020. Around 60 students had participated in the webinar.

|       |                       |   |
|-------|-----------------------|---|
| Day 1 | 28/09/2020<br>Monday  | Design of Batch Reactor by <b>Prof. S. B. Thakore</b> , Associate Professor Chemical Engineering Department, VGEC Chandkheda<br><a href="https://meet.google.com/mha-yxxd-rpk">https://meet.google.com/mha-yxxd-rpk</a>                                   |
| Day 2 | 29/09/2020<br>Tuesday | Importance of Optimization and Simulation in Chemical Process Industries by <b>Prof. N. M. Patel</b> , Prof.& Head Chemical Engineering Department, GEC Valsad<br><a href="https://meet.google.com/wga-iwoo-oia">https://meet.google.com/wga-iwoo-oia</a> |

|       |                         |  |
|-------|-------------------------|--|
| Day 3 | 30/09/2020<br>Wednesday | Sustainability in solar power and energy infrastructure by <b>Mr.SiddharthBishnoi</b> , CEO – Real Time Renewables<br><a href="https://meet.google.com/gsk-qaiu-mnv">https://meet.google.com/gsk-qaiu-mnv</a>          |
| Day 4 | 01/10/2020<br>Thursday  | Hydrogels, grafting and it's applications by <b>Dr. P. N. Dave</b> ,<br>Professor Department of Chemistry, S. P. University<br><a href="https://meet.google.com/owx-wodh-owp">https://meet.google.com/owx-wodh-owp</a> |
| Day 5 | 03/10/2020<br>Saturday  | Bubble column reactor for cumene oxidation by <b>Mr.Vedant M. Danak</b> , Senior Executive, Deepak Phenolics Limited<br><a href="https://meet.google.com/hyj-uspb-oup">https://meet.google.com/hyj-uspb-oup</a>        |

- On 29th August 2020, a webinar on “GATE 2021: UPDATES AND OPPURTUNITIES” was organised. This webinar was mentored by Dr. Ravi V. Gandhi, Doctoral Researcher, South Korea, Ph.D. in Control andAutomation.
- On 6th September 2020, a webinar on “Networked Control System: Challenges, Application, and Future Scope” was organised. This webinar was delivered by Dr. Dipesh H. Shah, Doctoral Fellow, Department of Biological Engineering, IIT-Gandhinagar.
- Dr N M Bhatt, Head Mechanical Dept., is nominated as a Technical Expert by GTU in the technical committee for execution of project on CoE Solar Photovoltaic Testing and Calibration facility of EQDC, Gandhinagar.
- Dr N M Bhatt contributed as expert for evaluation of proposal of Student Open Innovation Challenge (a Flagship initiative of SSIP) Phase 7 at all the three stages viz. pre-evaluation, evaluation by domain experts and jury member in State Level Selection Committee.
- Prof. Hardik Shukla has coordinated online Hitachi factory visit on 29/8/2020 for Mechanical department students under ISHRAE, Ahmedabad chapter.
- Dr. S S Pathan coordinated Swayam NPTEL Local Chapter activities. A record break registration of 51 faculty members & 310+ students for 775 NPTEL MOOC courses for the semester of July-Dec 2020 is achieved.
- Dr. S S Pathan has been coordinating and representing the institute for IIRS-ISRO Outreach e-learning programmes. Total of 201 students have been registered for 6 different online outreach programmes based on remote sensing, GPS, Geo computation techniques & Geoweb services.

09/07/2020: Basics of Compact Chillers and MTC & its applications in Plastic Technology

1. 15/07/2020: Basics & Applications of Dehumidifier Air Dryer
2. 29/07/2020: Conveyer Belt system in Plastic processing automation
3. 11/08/2020: Basics & Applications of Blenders in Plastic Processing Advanced Technology
4. 24/08/2020: Basics of Granulator in Plastic Applications
5. 15/09/2020: Basics of Pneumatic Conveying Systems and its Application in Plastic Processing
6. 15/09/2020: Basics of Pneumatic Conveying Systems and its Application in Plastic Processing
7. 26/09/2020: Basics of Silo & Silo Feeding System & Applications in Polymer Materials

Webinars were conducted by different speakers from Prasad group of Industries on the following topics related to field of Plastic Technology:



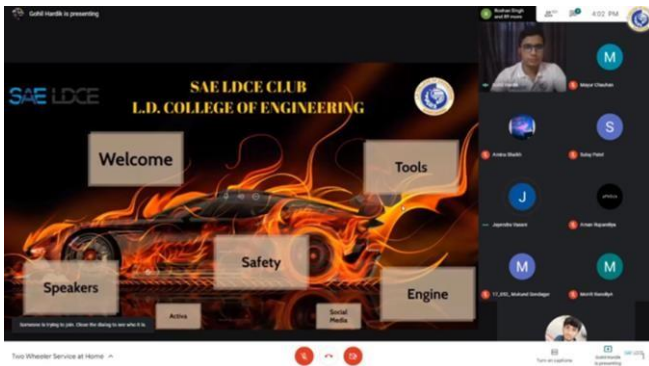
- A Webinar session was organized for Rubber Technology Students on “Customer Service Basics in Tyre Industry” delivered by Mr. Tirath Patel, Rubber alumni & Divisional Head – Commercial Vehicle- Customer Service at Apollo tyres Ltd. on 12th September, 2020.
- Prof. R.N.Desai had arranged an online pedagogy meeting with Mr. Ronak Panchal on 19th August, 2020 on “Recent advancement in the recycling of rubber waste”. Prof. A.D.Bhatt, Prof. B.D.Patel, Prof. S.J.Padhiyar, Prof. G.G.Bhatt, Prof. R.Y.Modan & Prof. P.N.Chavda attended the meeting through Google Meet.
- Prof. R.N.Desai had arranged an online pedagogy meeting with Mr. Atul Shah, Rubber alumni & MD, Pioneer Industries on “Identification and waste reduction in rubber Industries”.
- Prof. A.D.Bhatt, Prof. B.D.Patel, Prof. S.J.Padhiyar, Prof. G.G.Bhatt, Prof. R.Y.Modan & Prof. P.N.Chavda attended the meeting through Google Meet on 24th August, 2020.
- An Online session was organized for Rubber Technology Students on “Rubber compounds: A market opportunity study” delivered by Mr. Atul Shah, Rubber alumni & MD, Pioneer Industries on 13th July, 2020.
- Dr. Ashwin Thakkar delivered an expert talk during the webinar on “Energy Management – A Key to Economic Growth”, organized by The Textile Association (India) - Ahmedabad Unit in association with Felidae Systems on 25<sup>th</sup> July, 2020. All faculties of the Department attended the webinar.
- Dr. Ashwin Thakkar delivered an expert talk during the webinar on “The Role of Cloud Based Remote Technology in the Textile Manufacturing Industry”, organized by The Textile Association (India) - Ahmedabad Unit in association with iTexClouds ERP on 5<sup>th</sup> September, 2020. All faculties of the Department attended the webinar.

## Research & consultancy (Ex. SSIP/SOIC/Patent filed etc.)

- Patent published on SMART SALINE BOTTLE, Patent Application No. 202021029121 by students of Bio medical and Automobile department Hardik Gohil, Chintan Patel, Aman Rupareliya, Khevna Vasani, Derasari Aishwarya, Yukta Jetalpuria and Prof. Jayendra Vasani from Automobile Dept on 09-07-2020.
- 4 SSIP projects of Rs 412000/- are undergoing in Chemical Engineering Dept.
- Prof Dhaval Patel has filed the Patent on title “Adjustable stand with flexible height and angle setting” in the Indian patent Office, vide application no.: 202021044959, Date: 15/10/2020.
- Prof Dhaval Patel, Mechanical Dept., has published one patent in the Indian Patent office journal on the SSIP Project Fuel-meter with the title “Flow Rate Based Fuel Quantity Measurement and Advance SMS System for Passenger and Commercial Vehicle” through the application No. 202021029692 date of application: 13/07/2020 and Date of publication: 04/09/2020, journal no. 36/2020.
- 1 patent is filed by Chemical Engineering Dept.
- Prof Dhaval Patel was felicitated by award of best mentor ship in the COVID related projects category in the online felicitation and award ceremony of LDCE start-ups and innovators supported by SSIP organized at L D College of Engineering, Ahmedabad on 25/09/2020.

# Student's Achievements

- A Certificate of Merit was awarded to Rahul A. Dhanwani ( Student of M.E. Structural Engineering) for securing 1st Position in the Online Quiz competition “Technical Quiz on IS 456:2000” conducted by IAStructE-CEPT University Student Chapter on 8th August 2020.
- A webinar was arranged on “How to service two wheeler vehicles at home” on 01/08/2020 via Google meet and YouTube live. As of COVID 19 situation vehicles weren't used as much, so this webinar was arranged which showed as how to service our vehicle at home. Hardik Gohil, Aman Rupareliya and Mukund Sondagar have conducted and Prof. J P Vasani and Prof. S N Patel have coordinated this Webinar. 1650 participants have actively participated in this webinar.



- Shaziya Parveen Saiyed from 2nd year achieved certificate in training through online platform (Internshala) in Graphic Design, Web Development and Digital Marketing with distinction grade, which was held for six weeks in the month of July 2020.



- Chahana Panchal from 3rd year received appreciation certificate for project PRAN and NIVARAN under SSIP on 15th August, 2020. Also our project - NIVARAN got published in the newspaper on 26th September, 2020.



- Nidhi Patel from final year was selected as a circuitry team member for GRC (GTU Robocon Team) on 26/7/2020. Basic Training completed and advanced training on going since 14/9/2020.
- Kruti Desai from final year cleared round 1 of National Engineering Olympiad (NEO) conducted in April 2020 and in second round secured 27th rank all India in 3rd year other branch category, certificate received on 30/9/2020.



- Yesha Panchal from final year Bio Medical Dept. was selected as Member at International Youth Council, United Nations.
- Malav Shah and team of Computer Engineering Dept., has secured second position in National level HACK AND REBOOT Competition organized by IIT, Kanpur. Team leader Malav Shah won the EIR Fellowship of Rs.33K per month for one team and Rs. 9 Lakh for product development.

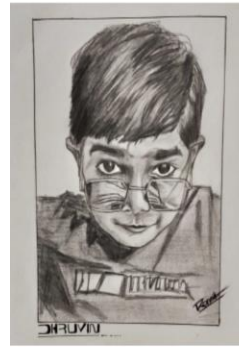


- One of the students from 5<sup>th</sup> semester, Mr. Shudra Ritesh has created a page related to the government exam taken by Gujarat government. This page has more than 500 posts which are useful for the government exam aspirant and also for the students and people who are interested in knowledge and daily current affairs. These posts include daily current affairs and important organization information and also science and technology news. It also includes the important articles of Indian constitution and important post of our country.



- The students of Chemical Engineering Department Mr. Ronak Adroja of final year and Mr. Sanket Chauhan of pre-final year have done some creative art work during this period.





- Domadiya Yash, Ajmeriya Deep, Panchal Kaushal's patent titled "Synchronous Phase Detector for Protection of Three Phase Operated Electronic Devices" has got published on 28-08-2020.
- Nakum Hasmukh, Domadiya Yash, Ajmeriya Deep, Parmar Harshba, Panchal Kaushal's patent titled "Laser Controlled Infusion Monitoring Unit for Smart Health Care System" has got published
- Sagar Dixit, Mr. Yagnik Thanki, Mr. Naresh Mungpara's patent titled "Machine Intelligence Based Smart Camera Surveillance System" has got published.
- Nakum Hasmukh, Solanki Jigar, Parmar Ashvin, Parmar Kaushik, Agnihotri Rohit, Makwana Hardik's patent titled "Optimized Energetic Solar Dryer" has got published.
- Darshan Makwana of 3<sup>rd</sup> semester has successfully completed the "QUarantIZ 2.0" quiz organized by NSSLDCE on 15<sup>th</sup> September, 2020
- Darshan Makwana of 3<sup>rd</sup> semester has successfully completed the online "AARI Quiz on Algology" with 87 % score. The quiz was conducted by Annakkili Amma Research Institute, Chennai on 22<sup>nd</sup> July, 2020.
- Darshan Makwana of 3<sup>rd</sup> semester has successfully completed the national level *E-Quiz* on "Operating System" with 75 % score. The quiz was organized by Department of Computer Science, Agarsen College, Madhavaram, Chennai in July, 2020.
- Praful Parmar of 3<sup>rd</sup> semester has successfully completed the national level *E-Quiz* on "Operating System" with 85 % score. The quiz was organized by Department of computer Science, Agarsen College, Madhavaram, Chennai
- Darshan Makwana of 3<sup>rd</sup> semester has successfully completed the online quiz on "Production Planning and Control" organized by Department of Mechanical Engineering, Bharat Institute of Engineering & Technology, Hyderabad, Telangana on 22<sup>nd</sup> July, 2020.
- Praful Parmar of 3<sup>rd</sup> semester has attended the online webinar on "Recent Trends on Antenna", hosted by Design innovation Center and Community Innovation and Co-Creation Center, GTU on 21<sup>st</sup> August, 2020
- Praful Parmar of 3<sup>rd</sup> semester has successfully completed the Scope English Proficiency Quiz-1 with 88% score. The quiz was organized by SCOPE Department of Education, on 7<sup>th</sup> September, 2020.

- Praful Parmar of 3<sup>rd</sup> semester has successfully completed the National level E-Quiz on 'NCC and Indian Armed Forces' with 100% score. The quiz was organized by NCC Air Wing, St. Aloysius College, Mangaluru, on 11<sup>th</sup> July, 2020.
- Ruhani Makhija of 3<sup>rd</sup> semester has successfully completed the Scope English Proficiency Quiz-1 with 92% score. The quiz was organized by SCOPE Department of Education, on 3<sup>rd</sup> September, 2020.
- Ruhani Makhija of 3<sup>rd</sup> semester has successfully completed the 15 days internship program at Pratham Notebook on 15<sup>th</sup> September, 2020.
- Bhumi Sharma, a student of semester 5 from IT Department along with her team members had launched their SSIP project, named Aarogya E Care, under the guidance of Prof. Madhuri Patel.
- Under the slogan "LET'S DESIGN WITH ADOBE XD", the Tech Brush team- of the IT department students, Mistry Devansh, Soham Modi, Jay Parmar, Gautam Panchal had organised an online event with Google meet on 13 September, 2020. Tech Brush team had also announced the launch of the new series "Design with XD". This series has been created by the Team to share their experience and give some advice to aspiring designers at any level, who wish to find out more about Graphic Design and the industry. In this



- Dhruv Patel, a student of BE Sem 3 Rubber Technology has successfully completed certification of "SIX SIGMA YELLOW BELT" on 6th September, 2020 and many other great certifications related to business strategies, inter and intra personal skills and many others from reputed organizations.
- Saumya Rathod, a student of BE Sem 3 Rubber Technology has successfully completed certification of "SIX SIGMA YELLOW BELT" on 20th September, 2020.
- Maulik Chauhan, a student of BE Sem 3 Rubber Technology has successfully completed course of "COVID-19 Tackling The Novel Coronavirus" on 15th August, 2020 on future learn platform.
- Rohan Rathod, a student of BE Sem 3 Rubber Technology has successfully completed course of "SCOPE ENGLISH PROFICIENCY QUIZ-1" on 7th September, 2020 conducted by Education department, Government of Gujarat.
- Yash Bhadani, a student of BE Sem 3 Rubber Technology has successfully completed course of "National Level Quiz on Python Programming" on 10th August, 2020, organized by Sigma Institute of Engineering, Vadodara, Gujarat.
- Kevin Kakadiya, a student of BE Sem 3 Rubber Technology has successfully completed course of "SCOPE ENGLISH PROFICIENCY QUIZ-1" on 7th September, 2020 conducted by Education department, Government of Gujarat.
- Poonal Surani, Varun Doshi, Saurav Pandya, Premsagar Kumbhar, Tejendra Makwana participated in Nation level poster making competition (Technical) organised by P.P. Savani University on 5<sup>th</sup> September, 2020.

- Darshit Tarapara, a student of BE Sem 5 Rubber Technology participated in Video making competition held by NSS, LDCE on 24<sup>th</sup> September, 2020.
- Darshit Tarapara, a student of BE Sem 5 Rubber Technology has successfully completed the “SCOPE ENGLISH PROFICIENCY QUIZ-1” organized

by SCOPE Department of Education on 2<sup>nd</sup> September, 2020.

- Final year student of M.E., Maniar Jay filed a patent on “Multilayer Fabric for Electromagnetic Shielding” under the guidance of Dr. Ashwin Thakkar and Prof. S.K.Parmar.

## Faculty Achievements

- Prof. (Dr.) C. S. Sanghvi, Prof. M. G. Vanza and Prof. C. D. Patel, Applied Mechanics Dept., were conferred Certificate of Appreciation for their commendable contribution towards activities carried out by them during the lock down period on 15<sup>th</sup> August 2020. It was phenomenal achievement for department as 3 of its faculty members were felicitated during the 74<sup>th</sup> Online Independence Day Celebration carried out at Institute level.
- Prof. D. R. Tarachandani was appointed as the Institute Level Coordinator for the Covid Testing of all the faculty members of the college. The testing program which was arranged on 5<sup>th</sup> Sep 2020 was efficiently coordinated by him with the help of all the department level coordinators under his guidance.
- Dr. C. S. Sanghvi conferred “Certificate of Achievement” to Prof. (Dr.) M.V.Shah & Prof. Poonam I. Modi during the Teachers’ Day Celebration on 5<sup>th</sup> Sept., 2020, for their noteworthy contribution and best practices in engineering education during academic year.
- It was a very proud moment for the Applied Mechanics Department as “The Institution of Engineers (India) issued the Certificate of Establishment of the Students’ Chapter at the Department of Civil Engineering, at L. D. College of Engineering on 10<sup>th</sup> Sep 2020. This was made possible by the relentless efforts put forward by Prof. (Dr.) R.B.Khasiya (HoD-Civil); Prof. (Dr.) C.S.Sanghvi (HoD-Applied Mechanics) and Prof. C.D.Patel (Asst.Prof, Applied Mechancis) under the able guidance of Dr. R.K.Gajjar.
- Prof. J. P. Vasani, Automobile Dept., has delivered expert lecture on “2 wheeler maintenance and service at home” on 1/09/2020, at RCTI, Ahmedabad.
- Faculty Mentor Award was given to Prof. Bhavesh Parmar in Felicitation and Award Ceremony of LDCE Startup and Innovator club organized by LDCE E-Cell supported by SSIP Student Startup and Innovation Policy (SSIP) on 25<sup>th</sup> September 2020.
- Prof. Hetal Joshiara of Computer Engineering Dept. coordinated a central level Event, HACK & REBOOT, dated 04 Sept 2020.



- Prof. Hetal Joshiara of Computer Engineering Dept. has been awarded with a Faculty Mentor appreciation for project REOLO under SSIP for noteworthy contribution during lockdown in COVID- 19 on 15th August 2020.



- Prof. Hetal Joshiara of Computer Engineering Dept. has been awarded with a Faculty Mentor appreciation for guiding REOLO HOLOGRAPHIC PRIVATE LIMITED under SSIP on 25th September 2020.



- Dr C D Upadhyay has cleared the ARPIT Examination – “Big Data Analytics for Smart Grid”, held on 15th September, 2020.
- Prof. Hiteishi Diwanji delivered an expert talk on online platform on the topic “Apps that steal data” in which the discussion was about colluding and collaborating app.
- Prof. Bakul Panchal attended a webinar on Virtual Artificial Intelligence Summit-Solutions to COVID-19 on 09-05-2020 on an online platform.
- Prof. Bakul Panchal attended a webinar on Intellectual Property of New India on 16-05-2020 on an online platform arranged by GTU.

- Prof. Hetal Joshiara of Computer Engineering Dept. mentored a Team Technocrates in Smart India Hackathon 2020. Team has secured position in Top 7 in the grand finale organized on 1st, 2nd and 3rd August 2020 in the Software Edition. Problem system was given by ISRO. They provided GIS based solutions.



- Prof. Bakul Panchal attended a webinar on Getting Started with Augmented Reality/Virtual Reality on 9th May 2020 on an online platform on 09-05-2020 on an online platform.
- Prof. Bakul Panchal participated in an online quiz named “National Level Quiz on NBA” arranged by P.V.Patil College of Engineering, Mumbai
- Prof. Shital Solanki attended a webinar on Intellectual Property of New India on 16-05-2020 on an online platform arranged by GTU.
- Prof. Pradip Patel attended a webinar on Accelerating Computations using MATLAB and Simulink organized by Dr. Dhruv Panchal from Mathworks India on 26-05-202
- Prof. Nirjari Desai attended a webinar on “The future of IOT, 5G and Computing” by Dr. Subhash Technical Campus, Junagadh on 14-06-2020.
- Dr. M.V. Shah has been awarded the appreciation certificate by honourable Principal Dr. R.K. Gajjar on the occasion of Independence Day, 2020.

- Dr. B.S. Sedani and Dr. N.A. Kotak have been the co-inventors of the patents titled “Synchronous Phase Detector for Protection of Three Phase Operated Electronic Devices” “Laser Controlled Infusion Monitoring Unit for Smart Health Care System”, “Machine Intelligence Based Smart Camera Surveillance System”, and “Optimized Energetic Solar Dryer”. All these patents have got published by Indian patent office.
- Dr. B.S. Sedani was awarded the appreciation certificate by AARAMBH Cell, LDCE Ahmedabad on 25th September, 2020 for all the patents published.
- Dr. N.A. Kotak was awarded the appreciation certificate by AARAMBH Cell, LDCE Ahmedabad on 25th September, 2020 for all the patents published.
- Dr. P.P. Prajapati was the reviewer in the USA based Scopus indexed international journal IJAMC, IGI global, Turkey
- Dr N M Bhatt and Dr. Komal G Dave, Mechanical department, worked as Reviewers for the 2nd International Conference (Digital) on Research and Innovations in Science, Engineering & Technology, ICRISSET-2020 held at Birla Vishvakarma Mahavidyalaya Engineering College, Vallabh Vidyanagar, Gujarat, India during 4th-5th September 2020.
- Dr N M Bhatt is granted extension till 18/02/2021 as member of Academic Council of Gujarat Technological University.
- Dr. Ragesh Kapadia and Prof Hardik Shukla, Mechanical department, has coordinated orientation sessions about students’ chapter activities for Acrex, aQuest and about ISHRAE with Revival of LDCE Student Chapter for SY 2020-21 along with Prashantbhai Pathak - President of ISHRAE Ahmedabad chapter.
- Prof. P R Rathod, Mechanical department, had delivered an expert lecture in a webinar on “Newer Machining Methods” on 25/09/2020 on the subject “Introduction to Micromachining” at Government Engineering College, Banswara.
- Prof. S S Pathan worked as an expert evaluation committee member for the Government of Gujarat's Student Open Innovation Challenge, one of the flagship initiatives of the Student Startup and Innovation Policy (SSIP) under the aegis of the Education Department, Government of Gujarat. The committee was constituted by the Hon' Principal Secretary Madam.
- Prof. G N Sutaria, Mechanical Dept. has been felicitated for mentoring Infosys award winner Oneceptual technologies pvt. Ltd. incubated at LDCE by Aarambh cell on 25/09/2020 by Shri. GT Pandya Sir, Director of technical education.



- Prof Dhaval Patel, Mechanical department, published two books on title “Manufacturing Technology” and “Operation Research” respectively as per the revised syllabus for the students of GTU, BE Semester 5th, ATUL Prakashan, Ahmedabad.
- Prof Dhaval Patel was felicitated by Dr. R K Gajjar, Principal – L D College of Engineering with an appreciation certificate for the contribution to society through Innovative projects (COVID19 Projects) on 15/08/2020.
- Dr. Mrunalkumar Chaudhari, Mechanical dept., delivered an expert talk at Indus University on 2nd Sept, 2020 on the topic of “Strengthening Mechanisms in Metals and Alloys”. Around 50 students have participated in the talk.

- Dr. Mrunalkumar D. Chaudhari, Dr. F. B. Sayyad and Dr. Janak B. Valaki have written a technical book titled “Materials and Metallurgy” published by Tech Knowledge Publications, ISBN: 9789389889925 in September 2020.
- Prof. Rupande Desai, Prof. Gnanu Bhatt and Joel Lalucharian are proudly awarded for publishing a patent on “Modification of FKM with Ultra High Molecular Weight Polyethylene for Pharmaceutical Hoses” by AARAMBH Cell, L. D. College of Engineering during September, 2020.
- Prof. Rupande Desai, Prof. Gnanu Bhatt, Prof. Bhakti Patel and Divya Jyoti are proudly awarded for publishing a patent on “Antimicrobial Silicone Rubber” by AARAMBH Cell, L. D. College of Engineering during September, 2020.
- Prof. R.N.Desai, Prof. A.D.Bhatt, Prof. B.D.Patel, Prof. S.J.Padhiyar, Prof. G.G.Bhatt, Prof. R.Y.Modan & Prof. P.N.Chavda attended the webinar on “Emulsion Polymerization of NBR and its characterization” organized by Apcotex Industries Limited and delivered by Mr. Rabin Santra, through Zoom platform on 13th August, 2020.
- Prof. R.N.Desai, Prof. A.D.Bhatt, Prof. B.D.Patel, Prof. S.J.Padhiyar, Prof. G.G.Bhatt, Prof. R.Y.Modan & Prof. P.N.Chavda attended the webinar on “Apcoflex NBR- Compounding and application” organized by Apcotex Industries Limited and delivered by Mr. Bhagaban Panda, through Zoom platform on 27th August, 2020.
- Prof. R.N.Desai, Prof. A.D.Bhatt, Prof. B.D.Patel, Prof. S.J.Padhiyar, Prof. G.G.Bhatt, Prof. R.Y.Modan & Prof. P.N.Chavda attended the webinar on “Characterization of Nitrile Rubber & its Vulcanizate” organized by Apcotex Industries Limited and delivered by Mr. Kishor Rajdeo, through Zoom platform on 3rd September, 2020.
- Dr. Mrunalkumar D. Chaudhari and Dr. Janak B. Valaki have written a technical book titled “Engineering Materials and Metallurgy” published by Tech Knowledge Publications, ISBN: 9789389889826 in September 2020.
- Prof. R.N.Desai, Prof. A.D.Bhatt, Prof. B.D.Patel, Prof. S.J.Padhiyar, Prof. G.G.Bhatt, Prof. R.Y.Modan & Prof. P.N.Chavda attended the webinar on “Transform Regular LSR into Self-Bonding LSR” conducted by Lord Corporation on 23rd September, 2020.
- Prof. G.G.Bhatt has attended webinar on “Rubber Chemicals to Improve Tire Balancing Performance and Appearance” on 11th September, 2020.
- Prof. G.G.Bhatt has attended webinar on “Bio-Based Polyols: Challenges and Opportunities in the Polyurethane Foam Market” on 10th September, 2020.
- Prof. S.J.Padhiyar and Prof. G.G.Bhatt have attended Technology Transfer webinar on “Advanced Characterization of Polymers & Rubber Compounds by Static & Dynamic Testing” on 4th September, 2020.
- Prof. S.J.Padhiyar has attended Technology Transfer webinar on “Reduce cycle Time and Eliminate Defects in Over-molding Rubber Products” on 25th September, 2020.
- Prof. R.Y.Modan has attended webinar on “Anti Defection Law in India” organized by Ministry of home affairs on 18th August, 2020.
- Prof. R.Y.Modan has attended webinar series on “Emerging trends in chemical engineering” during 28th September to 3rd October, 2020.
- 100% placement has been achieved for Rubber Technology students.



# COMMUNITY ENGAGEMENT

NCC, NSS, Clubs of college, other community activities



- **Tree plantation  
(September 28, 2020)**

Tree plantation was organized by SAE LDCE Club on 28/09/2020. Faculty members and students gathered to plant saplings in the campus, with each of them adopting a plant and taking pledge to take care for the growth of the plant. The saplings were fenced to provide protection with posters having the name of the person taking care of the plant. While this drive was conducted social distancing was not neglected and all the norms related to the prevention of spreading of covid-19 were followed.

Dr. S S Pathan designed a course curriculum “Basics of Remote Sensing for the school children” (Std. 8 to 12), on request from an NGO. The intention was to inculcate interest among the school kids and motivate them to move towards space research. They said online course will be taught by the scientists of ISRO upon acceptance to the course suggested.



- **Art From Heart Contest With VoSAP**  
(July 10, 2020 to August 31, 2020)

NSS unit of LDCE collaborated with Voice of Especially Abled People in organizing an “International Art Competition-Art From Heart” on online platform. This competition included various categories and thus there was no restriction for participation. Participants were supposed to present their ideas about the theme ‘Disability’ through their art in the form of painting or digital art. More than 4000 people from more than 28 countries actively participated in this online art contest.





- **Art From Heart Contest With VoSAP  
(July 10, 2020 to August 31, 2020)**



During the situation of COVID-19 pandemic, NSS LDCE did not fall back from the responsibility of Saving the Environment. The Volunteers of NSS and NCC came forward to save the environment by taking the initiative of “Tree Plantation” in the college campus. They planted 15+ different varieties of saplings which included plants like Gugal, Dadam, Chandan, Charoli, etc. In this event, the Principal of L.D.C.E., Dr. R. K. Gajjar along with Dr R B Khasiya, Head, Civil Engineering Department, NSS–NCC Program Officer Major (Dr.) C.S.Sanghvi and HODs of various departments, planted the trees with a pledge. Also, they took the initiative by adopting one of the trees which they had planted. This means that they will take care of that particular plant by regularly watering it once in a week and take the other measures of care.



- **COVID-19 TESTING  
(September 5, 2020)**

“COVID-19 Testing” was organized by the institute on September 5, 2020 (Teachers’ Day) at L.D. College of Engineering. It was coordinated by Prof D R Tarachandani & Team. In this event, all the department faculties, staff, security guards, workers, and some of the hostel students passed through the Covid Test. In total, around 309 Covid Tests were done out of which only one tested positive. The volunteers of NSS unit of LDCE have given services as volunteer. There were four counters for Covid Testing, two of which were in 301 (Civil Drawing Hall) and another two in 401(Mechanical Drawing Hall) so that social distancing could be maintained.



7th Semester student (Plastic Technology) Jadav Jenish has undergone online internship as a Community Influencer at Unschool (UCI).



# PUBLICATIONS/PAPERS PRESENTED

- **Dr. Rajul K. Gajjar, Prof. Poonam I. Modi, & Vidhi Modi** published a research paper entitled “**REVIEW PAPER ON MECHANICAL PROPERTIES OF MASONRY UNITS**”, in Compliance Engineering Journal; UGC Care approved Group II Journal, Volume 11, Issue 6, ISSN: 0898-3577 on June 2020.
- **Karan Patel and Prof. Bhavesh Parmar** published a research paper entitled “**ASSISTIVE DEVICE USING COMPUTER VISION AND IMAGE PROCESSING FOR VISUALLY IMPAIRED; REVIEW AND CURRENT STATUS, DISABILITY AND REHABILITATION**” in Assistive Technology, Taylor and Francis, 2020, DOI: 10.1080/17483107.2020.1786731
- **Karan Patel and Prof. Bhavesh Parmar** published a research paper entitled “**ENHANCING RADIOGRAPHIC DENTAL IMAGE VISUALISATION WITH COLOURISATION AND GRAPHICAL USER INTERFACE**”, Journal of Image Processing & Pattern Recognition Progress, 2020; 7(2): 7–19p. DOI: <http://dx.doi.org/10.37591%2Fjoipprp.v7i2.2471>
- **Uttam Vaghani, Prof. Yogita Parikh, Snehal Kasavala, Priya Vadoriya** published a research paper entitled “**DESIGN AND DEVELOPMENT OF ASSISTIVE DEVICE FOR VISUALLY IMPAIRED PERSON**”, Compliance engineering journal, UGC care group-II, ISO: 7002-2018, volume 11, issue-8, August 2020. DOI: 16.10089.CEJ.2020.V11I8.285311.3280
- **Prof. Hetal Joshiara** from Computer Engineering Dept. and **Dr. Chirag S. Thaker** published a paper “**PERFORMANCE OPTIMIZATION IN BIG DATA PROCESSING USING ENHANCED SPECULATIVE APPROACH**” in Journal of Critical Reviews ISSN-2394-5125 Vol7, Issue 13, September-2020
- **Prof. Jay K Dave** of Computer Engineering Department, **Avijit Dutta, Parvez Faruki, Vijay Laxmi, and Manoj Singh Gaur** have published a paper on “**SECURE PROOF OF OWNERSHIP USING MERKLE TREE FOR DEDUPLICATED STORAGE**” in Automatic Control and Computer Sciences 54, no.4 (2020): 358-370.
- **Prof. Nikunj H Domadiya** of Computer Engineering Department has published a paper titled “**IMPROVING HEALTHCARE SERVICES USING SOURCE ANONYMOUS SCHEME WITH PRIVACY PRESERVING DISTRIBUTED HEALTHCARE DATA COLLECTION AND MINING**” in Journal: Computing, Publisher Springer Vienna, DOI: <https://doi.org/10.1007/s00607-020-00847-0>
- **Prof. Parth Dave** of Computer Engineering Department has published a paper titled “**SATELLITE IMAGE CLASSIFICATION WITH DATA AUGMENTATION AND CONVOLUTIONAL NEURAL NETWORK**” in Advances in Electrical and Computer Technologies, [http://doi-org-443.webvpn.fjmu.edu.cn/10.1007/978-981-15-5558-9\\_9](http://doi-org-443.webvpn.fjmu.edu.cn/10.1007/978-981-15-5558-9_9), Springer, Singapore.
- **Dr. Purvi Ramanuj and Palak Chatwani**, an ME scholar along with **Shivani Shah**, presented a paper on the subject “**VOLUME RENDERING FOR WEATHER DATA USING RAY-CASTING ALGORITHM ON WEB**” at National Level Research Conference “2ND NATIONAL CONFERENCE ON RESEARCH TRENDS IN INFORMATION AND COMMUNICATION TECHNOLOGY”.
- **Prof. Mital Panchal**, along with **Dr. Nimisha Patel**, presented a paper on the subject “**KEYWORD SEARCH SCHEME OVER ENCRYPTED CLOUD DATA**” at International Journal AEGAEUM.
- **Prof. Shital Solanki**, along with **Ms. Sweety Sindhav**, an ME scholar, presented a paper on the subject “**REVIEW OF NON-LINEAR FILTERS FOR NOISE REMOVAL IN DIGITAL IMAGES**” at International Level Research Conference “INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS”.
- **Prof. Alka Patel and Hinal Patel**, an ME scholar, presented a paper on the subject “**A SURVEY ON DIFFERENT TECHNIQUES AND ALGORITHMS FOR IMAGE IN PAINTING**” at National Level Research Conference “INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS”.

- **Dr. Purvi Ramanuj and Vaibhavi S. Ghelani**, an ME scholar, presented a paper on the subject **“BIG DATA ANALYTICS SYSTEM FOR HEALTH CARE: A LITERATURE REVIEW”** at National Level Research Conference **“2ND NATIONAL CONFERENCE ON RESEARCH TRENDS IN INFORMATION AND COMMUNICATION TECHNOLOGY”**.
- **Dr. Purvi Ramanuj**, along with **Mr. Nikul Jayswal**, presented a paper on the subject **“SOFTWARE-DEFINED NETWORK: IMPORTANCE AND ISSUES”** at National Level Research Conference **“2ND NATIONAL CONFERENCE ON RESEARCH TRENDS IN INFORMATION AND COMMUNICATION TECHNOLOGY”**.
- **Prof. Vidisha Thakkar and Vaibhavi Prajapati**, an ME scholar, presented a paper on the subject **“A SURVEY ON CLOUD SYSTEM FAILURE PREDICTION”** at National Level Research Conference **“2ND NATIONAL CONFERENCE ON RESEARCH TRENDS IN INFORMATION AND COMMUNICATION TECHNOLOGY”**.
- **Prof. Pradip Patel**, along with **Mr. Narendra Patel**, presented a paper on the subject **“COMPARISON OF VARIOUS CLASSIFIERS FOR INDIAN SIGN LANGUAGE RECOGNITION USING STATE OF THE ART FEATURES”** at International Level Research Conference **“CONGRESS ON INTELLIGENT SYSTEMS”** organized by Soft Computing Research Society.
- **Prof. Pradip Patel and Vrustik Patel**, an ME scholar, presented a paper on the subject **“A SURVEY ON VISION-BASED REAL-TIME SYSTEM FOR INDIAN SIGN LANGUAGE RECOGNITION”** at National Level Research Conference **“2ND NATIONAL CONFERENCE ON RESEARCH TRENDS IN INFORMATION AND COMMUNICATION TECHNOLOGY”**.
- **Dr. P.J. Gundalia and Mohammedshakil Malek** published paper on **“VALUE FOR MONEY FACTORS IN INDIAN PUBLIC-PRIVATE PARTNERSHIP ROAD PROJECTS: AN EXPLORATORY APPROACH”** in Journal of Project Management, in September 2020
- **Prof. Swati Patel and Keshani Vyas**, an ME scholar, presented a paper on the subject **“METEOROLOGICAL BIG DATA MINING: A SURVEY”** at National Level Research Conference **“2ND NATIONAL CONFERENCE ON RESEARCH TRENDS IN INFORMATION AND COMMUNICATION TECHNOLOGY”**. The paper got published in **“Test Engineering and Management”**.
- **Hetal R. Khasiya, Rena N. Shukla, Amardeep Singh B. Bhalla** published paper on **“ANALYSIS OF PARAMETERS AFFECTING PRIVATE VEHICLE OWNERSHIP BY CITIZENS IN URBAN AREA”** in 2<sup>nd</sup> International Conference (Digital) in Science, Engineering & Technology ICRASET-2020 held at B.V.M. Engineering College, Vallabh Vidyanagar, in September 2020
- **Rena N. Shukla, Kavisha Shah** published paper on **“ANALYSIS OF PRIVATE VEHICLE OWNERSHIP AND IPT VEHICLE SCENARIO IN AHMEDABAD”** in 2<sup>nd</sup> International Conference (Digital) in Science, Engineering & Technology ICRASET-2020 held at B.V.M. Engineering College, Vallabh Vidyanagar in September 2020
- **Rena N. Shukla** published paper on **“ANALYSIS OF PASSENGER TRIPS BY PUBLIC TRANSPORT-BUS TRANSIT IN WEST ZONE OF AHMEDABAD”** in 2<sup>nd</sup> International Conference (Digital) in Science, Engineering & Technology ICRASET-2020 held at B.V.M. Engineering College, Vallabh Vidyanagar in September 2020
- **Rena N. Shukla & Dhruv Trivedi** published paper on **“ANALYSIS OF PARKING DEMAND AND SUPPLY FOR RESIDENTIAL LAND USE”** in 2<sup>nd</sup> International Conference (Digital) in Science, Engineering & Technology ICRASET-2020 held at B.V.M. Engineering College, Vallabh Vidyanagar in September 2020
- **Rena N. Shukla & Daltej Singh Gill** published paper on **“ADVANCE TECHNIQUE FOR POTHOLE REPAIR USING RECYCLED MATERIALS AND ASPHALT BASED WATERPROOF FIBER REINFORCED MEMBRANE”** in Journal of Construction and Building Materials Engineering in September 2020.

- A research paper, **“A CLUSTERING ALGORITHM FOR CONNECTED ENTITIES IN A TRANSACTIVE ENERGY SYSTEM FOR OPTIMAL BATTERY USAGE”**, has been presented in IEEE Conference - SEGE 2020, Ontario Tech University, Canada on 13th August, 2020 by **Dr. C. D. Upadhyay, Jeet Dhoriyani and Renison Macwan**.
- **Dr. N. M. Bhatt** published a paper titled **“NUMERICAL INVESTIGATION OF EFFECT OF TEMPERATURE PROFILE IMPOSED ON THE CRUCIBLE SURFACE ON OXYGEN INCORPORATED AT THE CRYSTAL MELT INTERFACE FOR 450 MM DIAMETER SILICON SINGLE CRYSTAL GROWTH IN PRESENCE OF CUSP MAGNETIC FIELD USING CZOCHRALSKI TECHNIQUE”** with **Mitesh S Vegad, Nilesh Bhatt**, Silicon (2020), doi.org/10.1007/s12633-020-00655-3
- **Dr. N. M. Bhatt** published a paper on **“ASSESSMENT OF MANGANESE OXIDE AND COBALT OXIDE CATALYSTS FOR THREE WAY CATALYTIC CONVERTER”** with **Charula Patel, Nilesh Bhatt, Srinivas Palanki**, Catalysis in Industry, Vol. 20 (4), 2020, 286-302, DOI 10.18412/1816-0387-2020-4-286-302
- **Dr. N. M. Bhatt**, along with **Chetan Vora, Virang Oza, Nilesh Bhatt**, published a paper titled **“REVIEW OF PASSIVE HEAT TRANSFER AUGMENTATION TECHNIQUES FOR SOLAR AIR HEATERS”**, Journal of Critical Review, Vol. 7 (19), 2020, pp.8404-8419
- **Prof. S. S. Pathan** published a journal paper titled **“PERFORMANCE EVALUATION AND COMPARISON OF MEASURED SOUND INSERTION LOSS OF CORRUGATED PLATES”** in Journal of Acoustical Society of India.
- **Prof. Gnanu Bhatt** and **Daxit Soni** have presented a paper titled **“STATIC ANALYSIS OF AUTOMOTIVE WHEEL RIM OF DIFFERENT DESIGNS”** in the International Conference on Smart Sustainable Materials and Technologies organized on 12-13 August, 2020.
- **Dr. Komal G. Dave** and **Maulik Patel**, Ph.D scholar have published technical paper on title **“A REVIEW ON TOOL ROTATIONAL SPEED AND TOOL TRANSVERSE SPEED EFFECTS THE MECHANICAL PROPERTIES OF FRICTION STIR WELDING”** in Zeichen Journal, Vol 6, Issue 9, Sept 2020, ISSN No: 0932-4747, Impact factor 4.7
- **Faizal Belim, Vijay Teraiya** and **Dr. Pankaj Rathod** have published a paper on **“EXPERIMENTAL INVESTIGATION OF JOINT STRENGTH FOR VARIABLE JOINT DESIGN DURING BRAZING OF ALUMINIUM TO COPPER”** in Journal of Emerging Technologies and Innovative Research (JETIR), (ISSN-2349-5162), July 2020, Volume 7, Issue 7, pp. 344-353.
- **Hardik Nadiyadi, Dr. Hiren Gajera, Rajnikant Bidajwala, Kumar Abhisek** and **Dr. Komal G Dave** have published technical paper on title **“EFFECTS OF POWDER BED FUSION PROCESS PARAMETERS ON HARDNESS FOR INCONEL 718”** in Materials Today: Proceedings, Elsevier publication, <https://doi.org/10.1016/j.matpr.2020.06.388>, Online July 2020
- **Prof. M. K. Vyas** and Mechanical Engineering students **Dhruv Panchal, Dhrumil Panchal, Anand Desai, Sachin Patel** have presented a paper titled **“PROCESS PARAMETERS OF SINGLE SCREW PLASTIC EXTRUSION MACHINE – REVIEW”** in ETEMR 2020 E-conference held by SPEC in Sept, 2020.
- **Prof. P. M. Mistry** presented a paper on **“RECENT DEVELOPMENTS IN HIMALAYAN NETTLE FIBRE AND ITS COMPOSITES – A REVIEW”** at 5<sup>th</sup> International Conference on INDUTECH 2020 organized by PSG College of Technology, India and The M.S. University of Baroda, Gujarat during 21<sup>st</sup> to 23<sup>rd</sup> August, 2020.
- **Prof. Sunil Padhiyar** and **Parth Dhrangdhariya** have published a research paper titled **“HOMOPOLYMER BASED MAGNETORHEOLOGICAL ELASTOMER”** in the International Journal of Scientific Research in Science, Engineering and Technology, Volume 7, Issue 5 during September-October, 2020.



# Professional Development

(STTP/FDP/Workshop/Conference etc. attended only)

| Sr. No | Title  | Name of Faculty   | Department             | Organized by  | Duration                 |
|--------|--|---|------------------------|---|--------------------------|
| 1      | Innovation Management  | Prof. C.D.Patel<br>Prof. B R.Patel                                | Applied Mechanics      | Online AICTE Training & Learning (ATAL)                             | 24-08-2020 to 28-08-2020 |
| 2      | Concrete Technology and Sustainable Construction Practices                                     | Prof. Kamini A. Parmar<br>Prof. C.D.Patel<br>Prof. Poonam I. Modi | Applied Mechanics      | Online Mode under aegis of AICTE Training & Learning (ATAL) Academy | 21-09-2020 to 25-09-2020 |
| 3      | Creativity, Innovation & Entrepreneurship and its Relevance in Educational Practice            | Prof. V. G Trivedi  | Automobile             | AICTE Training and Learning (ATAL) Academy's virtual GTU FDP Online | 24/08/2020 - 28/08/2020  |
| 4      | Inculcating Universal Human Values   | Prof. B. H. Kadiya  | Automobile             | AICTE   | 24/08/2020 - 28/08/2020  |
| 5      | Scientific Computing using MATLAB  | Prof. D. J. Parmar  | Automobile             | SWAYAM MOOC IIT Delhi   | 20/07/2020 – 09/10/2020  |
| 6      | Universal Human Value on the theme "Inculcating Universal Human Values in Technical Education" | Prof. J. P. Vasani  | Automobile             | AICTE   | 24/08/2020 - 28/08/2020  |
| 7      | Orientation to Universal Human Values/ Module of SIP   | Prof. P. L. Gohel   | Biomedical Engineering | L.D. college of Engg.   | 24/09/2020<br>1 Day      |

|    |  |   |                      |  |  |
|----|--|---|----------------------|--|--|
| 8  | AICTE Universal Human Values in Education  | Prof. Bhoomi Trivedi<br>Prof. Jay K Dave  | Computer Engg.       | AICTE  | 19-23 August,20                                  |
| 9  | Nurturing Innovation and Startup Ecosystem   | Prof. Hetal Joshiara  | Computer             | i-Hub , Gujarat  | 08/9/2020 to 24/10/2020                          |
| 10 | Latest Trends in IoT   | Prof. Hetal Joshiara  | Computer Engineering | Government MCA College, Maninagar                      | 26/10/2020 to 30/10/2020                         |
| 11 | Swayam MOOC “Accreditation of Undergraduate Engineering Program”                       | Dr. Anjali Bishnoi<br>Prof. H.N. Pandya<br>Prof. R. S. Ruperi<br>Prof. V. V. Gojiya   | Chemical Engineering | Swayam MOOC  | 27/01/2020 to 20/04/2020 completed on 30/09/2020 |
| 12 | Nurturing Innovation and Startup Ecosystem   | Prof. T.S. Rajaraman  | Chemical Engineering | iHub Ahmedabad   | 08/09/2020 to 24/10/2020                         |
| 13 | Creativity, Innovation And Entrepreneurship And Its Relevance In Educational Practice” | Prof. R. S. Ruperi  | Chemical Engineering | ATAL-AICTE online FDP                                  | 24/08/2020 to 28/08/2020                         |
| 14 | FDP on UHV   | DR. PURVI RAMANUJ,<br>PROF.SWATI PATEL,<br>PROF.MITAL PANCHAL,<br>PROF. JAIMIN CHAVDA | IT                   | AICTE  | 10-8-2020 To 14-08-2020                          |
| 15 | AICTE 5-day FDP-SI UHV-1 Online Workshop   | PROF. MADHURI PATEL   | IT                   | AICTE  | 05-09-2020 To 09-09-2020                         |
| 16 | National webinar on Cryogenic Engineering (NWCE – 2020)                                | Prof. S A Saraswat  | Mechanical           | Parala Maharaja Engineering College, Berhampur, Odisha | 10-09-2020to12-09-2020                           |
| 17 | ICRISET2020 E Conference   | Prof. M K Vyas  | Mechanical           | BVM, Vallabh Vidyanagar                                | 04-09-2020to05-09-2020                           |
| 18 | EEMR 2020 E-conference   | Prof. M K Vyas  | Mechanical           | SPEC, Vallabh Vidyanagar                               | 15-09-2020                                       |

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|----|---|--|------------|--|--|
| 19 | Research Paper and research proposal writing                                      | Prof. A G Momin  | Mechanical | Online –NITTTR Bhopal  | 31-08-2020 to 04-09-2020                           |
| 20 | Comprehensive Online (IPR)  | All Faculty Members  | LDCE       | Gujarat Student Startup and Innovation Hub ( i - Hub )   | 06/07/2020 to 14/09/2020                           |
| 21 | UDAYM E-Content Development course"   | All Faculty members  | LDCE       | KCG, Ahmedabad   | 28/07/2020 to 18/8/2020                            |
| 22 | Recent Advances in Forensic Analysis of Sub and Super Structures                  | Prof. R. N. Shukla<br>Prof. J. S. Kamble   | Civil      | Online hosted by Velagapudi Ramkrishna Siddhartha Engineering College, Andhra Pradesh (AICTE approved) | 24/8/2020 to 29/8/2020                             |
| 23 | FDP on Universal Human Value  | U.P.NIGAM<br>Sudhanshu S. Dixit  |            | Online Organized by AICTE.   | 19-08-2020 to 23-08-2020                           |
| 24 | Geospatial Inputs for Enabling Master Plan Formulation                            | Sudhanshu S. Dixit   |            | IIRS, Dehradun, India  | 27-07-2020 to 31-07-2020                           |
| 25 | Remote Sensing Applications in Agricultural Water Management                      |  |            | IIRS, Dehradun, India  | 03-08-2020 to 07-08-2020                           |
| 26 | SWAT Modelling  |  |            | Online Organized by NIH Roorkee, India   | 21 <sup>st</sup> - 25 <sup>th</sup> September 2020 |
| 27 | Advanced Research Trends of Satellite Image Processing in Land Surface Monitoring | Sudhanshu S. Dixit   |            | Online by HRDC, Integral University, Lucknow, UP, India  | 24-28 Aug, 20                                      |
| 28 | FDP on Universal human values   | Dr. N. H. Pancholi,<br>Prof. D. M. Chandra,<br>Prof. N Pranami,<br>Prof. A. G. Momin | Mechanical | AICTE  | 5-9 Aug '20  |



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|----|--|--|--------------------|----------------------------|--------------------------------|
| 29 | FDP on Universal human values  | Prof. Yagni Rami<br>Prof. Hetal Panchal    | Environment        | AICTE                      | 19-23 Aug '20                  |
| 30 | E-Content Development Course   | All teaching staff                         | EC                 | Online Platform            | 28-7-20 to 08-08-20.           |
| 31 | Antenna and Microwave Fundamentals, Theory, Modelling, Test and Application for Space, Air and Ground Systems. | Prof. M.C. Sahoo<br>Prof. S.K. Rana        |                    |                            | 26-09-20 to 30-09-20.          |
| 32 | Online workshop on "Inculcating Universal Human Values in Technical Education"                                 | Prof. Kintu P. Jain<br>Prof. Stuti R. Shah | Plastic Technology | AICTE                      | 10-08-2020 to 14-08-2020       |
| 33 | Online "Nurturing Innovation and Startup Ecosystem"(NISE ) certificate course                                  | Prof. Hetal C. Shah                        |                    | i- Hub                     | 12-09-2020 to 24-10-2020       |
| 34 | Universal Human Values   | Prof. R.Y.Modan                            | Rubber Technology  | AICTE<br>(Online Platform) | 5th August to 9th August, 2020 |

# M.E Dissertation

## • Computer Engineering Dept

| Sr. No | Name                              | Title   | Guide                   |
|--------|-----------------------------------|---|-------------------------|
| 1      | BhattMeghnaJayeshbhai             | Efficient and confidentiality preserving proof of ownership for deduplicated cloud storage system | Prof. J. K. Dave        |
| 2      | Bhusara Archanakumaree Dineshbhai | Sentiment Analysis on Social Media  | Prof. P. V. Pancholi    |
| 3      | Pancholi Deep Dharmeshbhai        | Secure and efficient key management for deduplicated cloud storage system                         | Prof. J. K. Dave        |
| 4      | Aditya R Mishra                   | Text summarization  | Prof. B. A. Oza         |
| 5      | Dhritesh Patel                    | Live Subtitle generation  | Prof. P. R. Dave        |
| 6      | Shah Rohan Jigneshkumar           | Face detection & Recognition with small amount of data Prof. M. K. Shah                           | Prof. H. A. Joshiyara   |
| 7      | Goswami Jaimin Jagdishgiri        | Deep learning based conversational question answering system                                      | Prof. M. K. Shah        |
| 8      | Khushbu A Chauhan                 | Lightweight intrusion detection system for IoT botnets using ML                                   | Prof. B. H. Trivedi     |
| 9      | Shah Poojan Vipulbhai             | Prediction of missing sensor data using ML for IoT  | Prof. T. A. Champaneria |
| 10     | Mehta Shilpa Vinod                | Improving a QoS parameter for Load Balancing in Cloud Computing Environment                       | Prof. H. A. Joshiyara   |
| 11     | Patel Jini Jitbhai                | Enhancing a load balancing algorithm with the use of data deduplication                           | Prof. R. Jaiswal        |
| 12     | Rana Zalak Nileshbhai             | Improve performance of data privacy in electronics health records system using blockchain         | Prof. P. G. Patel       |
| 13     | Tandel Daksh Ashokkumar           | Cloud Computing Load Balancing using Genetic and Index Approach                                   | Prof. Y. B. Patel       |
| 14     | Namrata Ggovind Ambekar           | Use of Comprehensive Technique for Preserving Privacy in Data Mining                              | Prof. R. Jaiswal        |
| 15     | Patel Hemalben Mukeshkumar        | Privacy preserving association rule mining in vertically partitioned data                         | Prof. N. H. Domadiya    |
| 16     | Patel Sanket Chandrakant          | Pothole detection using enhanced Object detection   | Prof. P. D. Salot       |
| 17     | Tadvi Anjaliben Arvindbhai        | Reducing the complexity in IoT device with lightweight Cryptography Technique /Algo               | Prof. Z. Y. Noorani     |

● **Chemical Engineering Dept**

| Sr. No | Name                              | Title  | Guide                    |
|--------|-----------------------------------|--|--------------------------|
| 1      | Prajapati Ankit                   | Synthesis of nanosheet for lithium Ion batteries.  | Prof. B.Domadia          |
| 2      | Prajapati Mayankkumar Bhagvanbhai | Separation of azeotropic mixture of alcohol - water using salts/ionic liquid at atmospheric pressure | Prof. R.P. Bhatt         |
| 3      | Sauravkumar Rajeshkumar Bhatiya   | Thermodynamic Analysis of Bio-butanol Reforming Processes for PEMFC Applications: A Simulation Study | Prof. Ronak Patel        |
| 4      | Kanksha Mehta                     | Study of utilization of industrial waste in manufacturing of building materials                      | Prof. C G Baghchandani   |
| 5      | Prajapati Mitulbhai Harkishnbhai  | Techno-Economic Analysis Of Geothermal Desalination System   | Dr. Sachin P. Parikh     |
| 6      | Tala Manthan Jentibhai            | Optimization of gas flow in city gas distribution  | Dr. Sachin parikh        |
| 7      | Mahera Dvarkeshbhai Bhalabhai     | Microbubble cavitation as a novel technology for wastewater treatment                                | Prof. S.R.Shah           |
| 8      | Patel Harshal Rajeshkumar         | Synthesis Of Heterogeneous Catalysts And Their Application For Biodiesel Production                  | Prof. Hiral N.Pandya     |
| 9      | Patel Rupal                       | Modification of surface, physical and chemical properties of activated carbon for effluent treatment | Prof. Amar Vaghela       |
| 10     | Patel Snehal Kamleshbhai          | Black TiO <sub>2</sub> based photocatalysts for waste water remediation                              | Prof. T. S. Rajaraman    |
| 11     | Jay Hasmukhbhai Bhalsod           | Recovery of Heavy Metals from E-Waste  | Prof. Nikita Ambegaonkar |
| 12     | Panchal Harshkumar Amulbhai       | Application of ionic liquid as draw solute in natural osmosis  | Prof. S.M.Dutta          |



● **Mechanical Engineering Dept**

| Sr. No | Name                                  | Title   | Guide                                   |
|--------|---------------------------------------|---|---|
| 1      | Shah Parth Kamleshkumar               | Design of 2-stream (He/2-phase N <sub>2</sub> ) plate - fin heat exchanger and development of design software   | Dr. A. K. Sahu<br>Prof. R. O. Paliwal   |
| 2      | Prajapati Vijaykumar<br>Tribhovanbhai | Development of sample holder attachment to measure thermoelectric power by seebeck effect at 77k  | Prof. U. S. Joshi<br>Dr. J. M. Patel    |
| 3      | Shah Jaykumar<br>Bhavyakant           | Thermal analysis and development of Cryogenic charcoal adsorber for TIFR  | K.V.Srinivasan<br>Prof. H. A. Shukla    |
| 4      | Kasundra Navneetkumar<br>Dineshbhai   | Numerical analysis of geysering effect in transfer pipe of cryogenic propellant with different two-phase flow models  | Dr. R. G. Kapadia<br>Prof. H. A. Shukla |
| 5      | Jangid Pintu Laxminarayan             | Development of a layout of piping and valves for cold box of helium refrigeration plant of cooling power about 1 kw at ~15 k  | Dr. A. K. Sahu<br>Prof. S. A. Saraswat  |
| 6      | Patel Nirav Bharatbhai                | Design and development of cryostat setup for thermoelectric power measurement   | Prof. U. S. Joshi<br>Dr. J. M. Patel    |
| 7      | Belim Faizal                          | Experimental investigation of joint strength for variable joint design during brazing of Aluminium to Copper  | Dr. P. R. Rathod                        |
| 8      | Hardik Nadiyadi                       | Experimental investigation of selective laser melting for inconel 718   | Dr. H. M. Gajera                        |
| 9      | Jay Pandya                            | Use of viscoelastic damping for the dynamic design of an automotive structure   | Dr. S. S. Pathan                        |
| 10     | Sumit Mori                            | Improving the design of a wing of an ultra-light aircraft and its analysis with & without stringers using CAD/CAE technologies  | Prof. Y. D. Vora                        |
| 11     | Vijay Teraiya                         | Investigating the effect of change in various process parameters on the mechanical and metallurgical properties of a brazement with Aluminium 6061 as the base material | Prof. M. M. Makwana<br>Dr. P. R. Rathod |
| 12     | Dishank Upadhyay                      | Experimental investigation of hot turning methodology for hard to cut material  | Dr. K. G. Dave                          |

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|----|--|---|---------------------|
| 13 | Kateja Kinnari<br>(180280703007)<br><br>(Instrumentation & Control Branch) | Development of Data acquisition system to capture vibration signature for health monitoring of rotating machines.           | Dr. S. S. Pathan    |
| 14 | Dave Madhviben Jayendrakumar   | Investigation of performance and Emission of various blends of Algae oils with Diesel Engine under varying injection system | Prof. G. N. Sutaria |
| 15 | Jaiminkumar Jayantibhai Gadhiya  | Application of Shainin® Method as Root Cause Analysis Tool for Drop in Two Wheeler Fuel Economy                             | Prof. D. U. Panchal |
| 16 | Gardhariya Nareshkumar Jayeshbhai  | Study and development of diesel particulate filter to reduce particulate matter particles from diesel engine emission.      | Prof. S. N. Patel   |
| 17 | Jayrajsinh Aniruddhasinh Gohil   | Numerical Analysis of different configurations of fins using CFD for application in IC Engine                               | Prof. Mayur Makwana |
| 18 | Joshi Dixitkumar Ashokbhai   | Exhaust Emission reduction in compression ignition engine using fumigation technique fuel with alcohol                      | Prof. M. A Shaikh   |
| 19 | Khanpara Harshkumar Vinodbhai  | Design optimization of single plate clutch  | Prof. H. P. Patel   |
| 20 | Merja Mayurkumar Gordhanbhai   | Study on Reduction Characteristics of Photolytic Based TiO <sub>2</sub> Catalytic Convertor on Engine Exhaust Gases         | Prof. S. K. Dabhi   |

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|----|-------------------------------------|--|---|
| 21 | Vaishnav<br>Mayurkumar<br>Parshuram | Investigation Diesel particulate filter behaviour using alcohol as fuel in Diesel Engine.(Simulation and optimization of bus chassis in different dynamic loading condition)             | Prof. V. G. Trivedi Prof.<br>M. A. Shaikh |
| 22 | Saurabh Kirad                       | Effect and analysis of different injection pressure on the performance and exhaust emission of four stroke diesel engine fueled with hydroxygen as an additive in diesel.                | Prof. R. J. Jani<br>Prof. S. K. Dabhi     |
| 23 | Jay Panchal                         | Investigation of variable flow of hydroxyen addition effects on performance and emission of four stroke diesel engine.   | Prof. R. J. Jani                          |
| 24 | Vyas Monika K                       | Combined Effect of orifice plate diameter and injection pressure on performance of C.I. Engine fueled with mixture of various Bio-Diesel and diesel blends using response surface method | Prof. V. D. Sonara                        |

- **Civil Engineering Dept**

| Sr. No | Name                | Title  | Guide                               |
|--------|---------------------|--|-------------------------------------|
| 1      | eel Panchal         | Estimation of Level of Service of AMTS Routes  | Prof. V. J. Chitaria                |
| 2      | Ishan Patel         | Feasibility of Providing Pedestrian Facility at Mid-block  | Prof. V. J. Chitaria                |
| 3      | Yash Shah           | Estimation of Saturation Flow at Signalized Intersection Under Mixed Traffic Condition in Ahmedabad City | Prof. V. J. Chitaria                |
| 4      | Mer Vivek Ramjibhai | Travel Time and Congestion Analysis - A Case Study of Ujala Circle (S.G. Highway, Ahmedabad)             | Prof. V. R. Patel<br>Prof. AK Patel |

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|----|--------------------------|--|---|
| 5  | Shivani Dineshbhai Patel | A Study on Improving Conventional Mix of Flexible Pavement using Additive  | Prof. V. R. Patel                         |
| 6  | Rohan Gupta              | Travel Time Reliability of Bus Rapid Transit System in Ahmedabad   | Prof. V. R. Patel                         |
| 7  | Jayesh Sharma            | Development Of A System For Estimating The Real Time Hydraulic Characteristics Of Canal/River Using Suitable Modern Approach | Dr.R.B.Khasiya<br>Prof. UP Nigam          |
| 8  | Pratik Nanavati          | Simulation Of Rainfall Data And Water Level Using Ann And Fuzzy Logic For Sabarmati River, Ahmedabad District                | Dr.V.M.Patel<br>Prof. UP Nigam            |
| 9  | Pooja Patel              | High Inflow Mitigation By Designing The Storm Drainage Network Of Navrangpura, Ahmedabad                                     | Prof. N. N. Borad<br>Prof. UP Nigam       |
| 10 | Chirag Parmar            | Experimental Study Of Flows At A Breached Levee  | Dr. V.M.Patel<br>Prof. S.S.Dixit          |
| 11 | Pranjal Ranpura          | Design of traffic actuated signals based on queue length for heterogeneous Traffic   | Dr. P. J. Gundaliya                       |
| 12 | Chetan Gothaliya         | Development of Prediction model for vehicular emission at selected intersection of Ahmedabad city                            | Dr. P. J. Gundaliya<br>Prof. J. S. Kamble |
| 13 | Vivek Solanki            | Evaluating lateral friction parameter for design of horizontal curves  | Dr. P. J. Gundaliya<br>Prof. Dipika Gupta |
| 14 | Vikas Gajjar             | Data Acquisition system for onboard emission monitoring of moving vehicles.  | Dr. P. J. Gundaliya<br>Prof. J. S. Kamble |



- IC Dept

| Sr. No | Name of student  | Title   | Name of Guide     |
|--------|------------------|---|-------------------|
| 1      | Aditya Chaudhari | Driver's Health Management System with artificial intelligence  | Dr. A. K. Shah    |
| 2      | Devanshi Jani    | Printed Circuit Board defect detection using Image Processing   | Dr. R. C. Patel   |
| 3      | Yash Kansagara   | Integrated frame work for data driven process monitoring and diagnosis system using machine learning and cloud computing                                | Prof. V. P. Patel |
| 4      | Himanshu Parmar  | Design of hybrid PID plus fuzzy control for inner loop and outer loop control of dc motor   | Prof. U. V. Shah  |
| 5      | Maulin Patel     | Identification of human emotions by facial expression using artificial intelligence techniques.   | Mrs. M. C. Patel  |
| 6      | Harshit Raval    | Sound characterization and its application in fault identification  | Dr. M. T. Thakkar |
| 7      | Palak Patel      | Application of Deep Learning in Respiratory Diseases Diagnosis  | Dr. M. T. Thakkar |
| 8      | Sana Vohra       | Artificial Neural Network based ECG analysis for Arrhythmia Detection   | Mrs. V. V. Patel  |
| 9      | Shersiya Trupti  | Performance Evacuation of text blurred image restoration on embedded platform   | Dr. R. C. Patel   |
| 10     | Maharsh Thaker   | Application development of Autotuner for PID controller tuning with machine learning and optimization techniques on remote server using cloud computing | Prof. V. P. Patel |

- **Textile Engineering Dept**

| Sr. No. | Name of Student | Title   | Name of Guide                            |
|---------|-----------------|---|--|
| 1       | Maniar Jay      | To Study Electromagnetic Shielding Effectiveness of Multilayer Textile Fabric   | Dr. Ashwin Thakkar and Prof. S.K.Parmar  |
| 2       | Mali Bhavin     | To study effect of layers and braid angle for basic mechanical properties of solid braided composite structure made up of high tenacity polyester | Dr. Ashwin Thakkar and Prof. H.J.Jaiswal |
| 3       | Parapuram Selin | To Study the Effect of Structural Parameters of Geogrid Fabric on Evaluation of Soil-Fabric Interface Friction in Reinforced Earth Wall           | Dr. Ashwin Thakkar                       |
| 4       | Vala Ankit      | To Study Effect of Different Weft Count, Proportion of Elastane Fibre and Weave on Physical and Stretch Properties of Denim Fabric                | Dr. Ashwin Thakkar and Prof. S.K.Parmar  |
| 5       | Deshmukh Sagar  | Evaluation of Physical Properties of Kenaf Fibre Reinforced Concrete  | Prof. D.V.Bihola                         |

- **EC Engineering Dept**

| Sr. No. | Name of Student               | Title of Dissertation  | Guide               |
|---------|-------------------------------|--|---------------------|
| 1.      | Apoorva                       | Different placement strategy of low power component and its impacts on lower technology node | Prof. K.V. Patel    |
| 2.      | Bhatt Keyuri<br>Nitinkumar    | Enhancement of ATPG and simulation at block level with target test coverage                  | Prof. A.B. Upadhyay |
| 3.      | Chavda Trushaben              | Speech De-noising Using Artificial Intelligence  | Prof. K.G. Vaghela  |
| 4.      | Gadge Minal Anil              | Algorithms for the next generation 5G mobile system  | Dr. B.S.Sedani      |
| 5.      | Luhar Jigarkumar<br>Ramesh    | Impact of Physical Cell Placement of Floor-plan stage on Design in Physical Design           | Dr. S.B. Prajapati  |
| 6.      | Nikeetababen<br>Manubhai Bhoi | Floor-plan optimization with pin placement strategy  | Prof. S.K. Rana     |
| 7.      | Prasad Swati<br>Baleshwar     | Impact of physical cell in signoff stage   | Dr. S.B. Prajapati  |

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|-----|--------------------------------|---|--------------------|
| 8.  | Rana Jigna<br>Shankarbhai      | YIELD improvement using DFM technique                               | Prof. S.K. Gonsai  |
| 9.  | Rathod Ajay                    | Image forgery   | Prof. K.R. Sheth   |
| 10. | Ray Yesha<br>Jitendrabhai      | Impact of Macro Placement on Design Qor in<br>Physical Design       | Prof. S.L. Bharvad |
| 11. | Solanki Deep Jitesh            | Enhancement of DFT-ATPG Techniques at<br>Lower Technology Node.     | Dr. P.P. Prajapati |
| 12. | Susmita Bera                   | Importance of Different Checks for Better QoR<br>in Physical Design | Dr. M.V. Shah      |
| 13. | Vadher Deepkumar<br>Kishorbhai | DFT Methodology for pattern generation with<br>Low Power            | Dr. M.V. Shah      |
| 14. | Vadher Payalben<br>Shardulbhai | Lower geometry DRC challenges and solutions                         | Dr. Mihir Shah     |