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# TECH PULSE

# COLLEGE OF ENGINE COLLEGE OF ENGINE PAIMEDABAD

#### The Quarterly Newsletter by L. D. College of Engineering



### A SNEAK PEEK INSIDE

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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

A challenging year has come to an end with a lot of remarkable achievements and many lessons learnt. It is important that our enthusiasm has sustained throughout the year in spite of the Covid19 situation and has left us asking for more in the New Year. Our institute received "Best Institute" award at the hands of Shri Prakash Javadekar (Hon'ble Minister, Information and Broadcasting, Environment, Forests & Climate Change, Heavy Industries and Public Enterprises Government of India) for 'SSIP Prashansha Award 2020' at 'National Student Start-up Meet 2020 and SSIP Prashansha Award 2020' on 17th December 2020.

I am delighted to share that the institute has filed 10 patents and more than 10 research papers were published by various faculty members in the last three months. The professional and academic development of the faculty members did not stop due to Covid situation as we registered for and completed several MOOCs.

The last three months have been quite an active phase for academic give and take. Many faculty members were invited as experts at various academic events and we organised many such events as well. We also arranged online industrial visits.

For the first time we arranged an online induction programme for first year students. Every department organised an orientation programme to make the students familiar with the institute and its spirit.

I believe together we will definitely do more in the New Year so that we excel not just academically but also in other domains that affect the well-being of the society.

### *Patron:* Dr. R K Gajjar



### **EDITORIAL BOARD**

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### **Design Team**

Shreya Parmar Meet Koriya Ravi Parmar Dev Patel

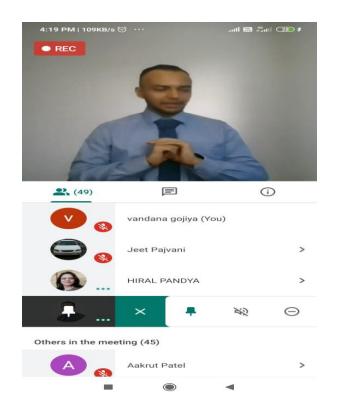
### **INDUSTRY-INSTITUTE INTERACTION:**

- The department of Applied **Mechanics** coordinated a Webinar on "Smart Cities" on 3rd October 2020, under the aegis of The Institution of Engineers (India) Students' Chapter. The webinar was delivered by Mr. Alok Desai. Senior Principal Engineer, SAI Consulting Engineers Pvt. Ltd A Systra Group Company, Ahmedabad. Webinar was coordinated by Prof Ashwin Hansora.
- The department of Applied Mechanics coordinated a Webinar on "Site Practices & Construction Management" on 23rd October 2020, under the aegis of The Institution of Engineers (India) Students' Chapter. The webinar was delivered by Mr. Pranay Kumar, Business Head Project Management Consultancy and Cost Management Practice, Mott MacDonald India. Webinar was coordinated by Prof. Poonam Modi.
- Prof. Poonam I. Modi & Prof. Alpa J. Shah delivered an Expert Session in One Week Online STTP on "Outcome Based Education and NBA Accreditation Process" during 28th Dec 2020 -2<sup>nd</sup> Jan 2021, organized by Civil Engineering Department, LDCE and approved by CTE, Gandhinagar, on 31<sup>st</sup> December'2020 & 1<sup>st</sup> Jan 2021 respectively.
- A Webinar on 'BS-VI Technology in Commerical • vehicle' by Mr. Anurag Saxena and Mr. Pramod Nichat from Ashok Leyland was organized by Automobile Department on 06-10-2020. 70 Participants attended the session.
- A Webinar on VR Technology was organized by Information Technology Department, under the co-ordination of Dr. Purvi Ramanuj on 26/10/2020 for the students of semester 3, 5 and

- Meghmani Organics Ltd., Ahmedabad, as a part of industry-institute initiative, has donated 16 very useful equipment for modernizing the laboratories of Chemical Engineering Department. The department appreciates the generous and benevolent gesture from M/s Meghmani Organics Ltd. which will benefit students immensely.
- An industry-institute interaction was organized with Indian Farmers Fertilizer Cooperative Ltd., Kalol unit on 8<sup>th</sup> October 2020. Head of the IIFCO Unit, Mr. D. G. Inamdar, Sr. Executive Director and Mr. S. Mohan, Deputy General Manager, IFFCO, Kalol unit interacted with the faculty members of Chemical Engineering Department, L D college of Engineering, Ahmedabad, Dr. P. H. Rana, HoD, Chemical Department, Dr. S. M. Dutta and Prof. R. R. Patel.



International Webinar on "The role of chemical engineering in the age of AI" by Mr. Neel Shah, Technische University, Berlin-Germany, was organised on 2<sup>nd</sup> Nov 2020. Mr Shah is an alumnus of Chemical Department of 2013 batch and worked as Sr. Engineer, Production in Cairn Oil & Gas (Vedanta Ltd).



- Expert lecture by Dr. Charulata Dubey, School of Nanoscience, Central University of Gujarat, Gandhinagar on Electron Microscope: Characterization tools for materials" was organised on 14<sup>th</sup> Oct 2020.
- Prof. R.N.Shukla has delivered an expert lecture on "Advances in Construction Field-Material, Techniques and Equipment" on 26<sup>th</sup> October 2020 organised by Civil Engineering department, Sir Bhavsinhji Polytechnic Institute (BPTI), Bhavnagar. And an expert lecture delivered on "Fundamentals of Traffic Engineering" on 26<sup>th</sup> November 2020 organised by Civil Engineering department, Darshan Institute of Engineering & Technology, Rajkot.
- Prof. C. N. Bhavsar has delivered an expert Lecture on "Water Treatment" on 20<sup>th</sup> October 2020 organised by Civil Engineering department, Government Polytechnic for Girls, Ahmedabad.

 Prof. R. N. Shukla has attended expert talks on

(1) "Smart Cities" by Mr. Alok Desai organized by Applied Mechanics Department, L.D. College of Engineering, Ahmedabad under the aegis of The Institution of Engineers (India) Student's Chapter of Civil Engineering on 3<sup>rd</sup> October 2020.

(2) "SMART Transportation - Are communication and connectivity key issues?"
by Dr Rajat Rastogi, Professor of Civil Engineering, Indian Institute of Tech., Roorkee on Wednesday, Oct 28,2020 organized by Adani Institute of Infrastructure – Ahmedabad.

(3) "Design concept of Adaptive Traffic Signal on Isolated Intersection" by Dr H R Varia, Professor & Head, Civil & Infrastructure Engineering Department, AIIE on Wednesday,Oct 28, 2020 organized by Adani Institute of Infrastructure – Ahmedabad.

(4) "Travel in Cities: Ensuring Sustainability" by Mr. Todd Litman, Victoria Transport Policy Institute ,Victoria, BC, Canada organized by Institute of Urban Transport (India) SVNIT Regional Chapter (Gujarat-Rajasthan) on 28<sup>th</sup> November 2020.

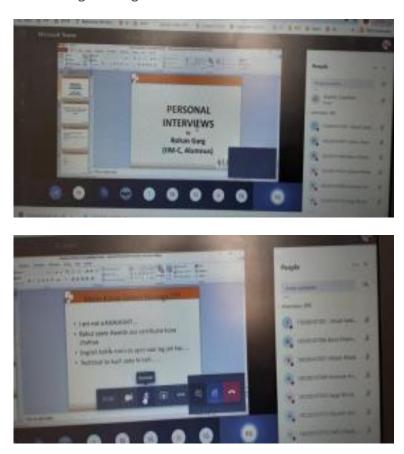
- Prof. R. N. Shukla has given an Expert advice to Food Corporation of India for FSD, Palanpur about Soil testing, CBR Test sample collection method, soil classification, commercial vehicle axle data collection.
- Prof. Parth Dave of Computer Engineering Dept., has organised a sensitization program for SSIP procedure awareness on 23<sup>rd</sup> Oct 2020 with 18 participants.



 Prof. Zishan Noorani and Jay K Dave of Computer Engineering Dept. have organized a seminar on "Ideas, Innovation, beyond Jobs". The expert for the session was Malav Shah. The seminar was organised on 22/10/2020 with 81 participants.



 A seminar was organized on "How to Crack Group Discussion and Personal Interview" by Prof. Maitrik Shah of Computer Engineering Department. The expert for the seminar was Mr Rohan Garg who is IIM-C alumnus and have many start-ups related to engineering education.



- Department of Computer Engineering arranged a webinar on the "ParamShavak Deep Learning Supercomputer: Features &Use cases" on 9<sup>th</sup> October 2020 from 2:00 to 3:30 PM. The webinar was aimed to spread awareness about the Param Shavak deep learning supercomputer facility available at the institute. Mr. Samritkumar Maity and his team were the expert speakers from C-DAC, who covered sample project demonstrations Various faculties and and discussions. students from LDCE as well as from the other colleges participated in the webinar. Prof. Tushar Champaneria and Prof. Hitesh Raiput coordinated the seminar and total 112 participants enjoyed fruitful discussions in the webinar.
- The Department of Electrical Engineering has arranged an online webinar on "How to start up an enterprise considering global market and culture" by Dr. Ishavar Patel, Founder and CEO of KZCart Inc., Anderson SC. on January 2<sup>nd</sup> 2021 for pre-final and final year U.G and P.G. Students.
- Prof. Y. D. Vora, Prof J M Patel & faculty team from Mechanical department have done consultancy and testing work worth costing Rs 2,50,000/- during the period June to December 2020 in the area of trailer design approval, umbrella consultancy, cold storage capacity calculation, etc from M/S Gujarat Agro Industries Corporation Ltd, Gandhinagar and other industries.
- Prof. Swati Saraswat, Mechanical department conducted a webinar for ISHRAE Ahmedabad chapter on 23-10-2020 on the topic "Air Cycle Refrigeration" followed by panel discussion with Prof. S S Kachhawaha of PDPU and Prof. Kunal Khairaiya of GMIT Bhavnagar emphasizing on the use of Air as refrigerant for domestic and commercial use.

- Prof. Dr. Mihir Shah was invited as an External Expert
   in the DPC-II (Departmental Promotion Committee Meeting in PRL for scientist promotion of SC to SD).
- Prof. S.J.Padhiyar is in continuous interaction with M.D. of "Flexishine Industries" in terms of delivering technical sessions in order to optimize the properties of Thermoplastic Elastomers and its products.
- Prof. S.J.Padhiyar is co-coordinating with Mr. Parthiv
   Shah, Team manager, Trelleborg Marine Systems India Pvt. Ltd. for development of Industry - Institute Interaction.
- Prof. Anal Bhatt is interacting with Mr. Mayank Kaushik, Senior Technical officer, Ceat tyres, for technical session's delivery on "Improvement of Rolling Resistance".
- Webinars were conducted by different speakers from Prasad group of Industries on topics related to field of Plastic Technology which consists of "Compounding lines and its Automation" on 10<sup>th</sup> October 2020, and "PVC Pipes Processing & Mixing Technology" on 24<sup>th</sup> October 2020.
- Prof. R.N.Desai had arranged an online pedagogy meeting with Mr. Krunal Shah, MD at DentAct,
   Ahmedabad on "Use of Powdered Rubber in Dental Application". 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 16<sup>th</sup> October 2020.
- Prof. R.N.Desai arranged an online pedagogy meeting with Mr. Atul Shah, Rubber alumnus & MD, Pioneer Industries on "Scope of Carbon Nano Filler 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 19<sup>th</sup> October 2020.

- Prof. R.N.Desai had arranged an online pedagogy meeting with Mr. Ronak Panchal, Rubber alumnus & MD, Pravin Rubbers & Engineering works on "Novel Devulcanization Techniques of crumb rubber". 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 28<sup>th</sup> December 2020.
- Prof. R.N.Desai had arranged an online pedagogy meeting with Mr. Sandip Adesara, Director, Regius Ceramics, Morbi, on "International market and growth opportunities in field of Rubber Tiles". 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 30<sup>th</sup> December 2020.
- Prof. R.N.Desai had arranged an online pedagogy meeting with Mr. Tejas Patel, Marketing Manager, R.R. Enterprize., on "Awareness and scope of marketing as a career opportunity in field of Rubber Technology". 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 15<sup>th</sup> December 2020.
  - Prof. R.N.Desai had arranged an online pedagogy meeting with Mr. Joel Lalucherian, R & D Executive, Ami polymers Pvt. Ltd. on "New applications of Silicon hoses in surgical industry". 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 19<sup>th</sup> December 2020.

# RESEARCH AND CONSULTANCY: (SSIP, SOIC, PATENTS)

- A patent on **"lot Tyre Pressure and Temperature Monitoring and Alert System",** was published with patent application no. 202021043956, by Hardik Gohil, Jevin Chanchad, Rangwala Abbas, Rangwala Moiz, Patel Pranshi and Prof. Jayendra Vasani on 08-10-2020
- A patent on "DRIPTECT" was published with patent application no. 202022046515, by Hardik Gohil, Chintan Patel, Aman Rupareliya, Khevna Vasani, Derasari Aishwarya, Yukta Jetalpuria and Jayendra Vasani on 26-10-2020.
- A patent on "Electric Kit for converting IC engine scooter to EV" was published with patent application no. 202021048283 by Kishan Gohel, Arjun Nandaniya, Dodiya Vishal Chandubhai, Gajera Vedant Maheshbhai, Goswami Malharbharthi Arunbharthi, Prajapati Rahulkumar Pravinbhai, VekariaVatsal Mansukhbhai, Vekariya Shwetang Dineshbhai and Prof. Vasani Jayendra Pankajbhai on 5-11-2020
- A patent filed in Chemical Department: Study of utilization of industrial waste in manufacturing of building materials on 22/10/2020 by Kanksha Mehta guided by Prof. C. G. Bhagchandani.
- Dr. Manish V. Shah and PG Geotech Student Harsh Thakkar filed a patent entitled "Organo Clay for physisorption of CO2" on 27<sup>th</sup> April 2020, under provisional patent application no: 202021017888.
- Nos. of PoC entitled "U^2VP" and "Shake It up" were shortlisted and have been granted fund under the SSIP cell of institute. The PoC "U^2 VP" is mentored by Major Dr. C.S.Sanghvi and the PoC "Shake it Up" is jointly mentored by Major Dr. C.S.Sanghvi & Prof. C.D.Patel.

- Patent "Universal Power Circuit" is published on 06/11/2020 by Dr. Mahiplasinh Chudasama (Prof. & Head), Prince (Student), Mitul G Patel (Asst Prof.), Vishal Senta (student) vide number 201921048479.
- Provisional patent "Collar diagnosis belt" is filed by Tirth Mehta, Harsh Patel, Prof. C D Upadhyay and Prof. M C Chudasama on 06-01-2021 No. 1610101850039.
- Provisional patent filed on "Planetary geared ceiling fan with 12V DC" by Bhuva Meet Babubhai, Bodana Mahendrasinh Ratuji, Dabhi Chetan Bharatbhai, Dr. Vipul Jeshanker Upadhyay, Mitul Gordhanbhai Patel, Dr. Mahipalsinh Chudasama on 24/10/2020.
- Patent published on Advanced Data Logger on 13/11/2020 by Prof. M. T. Thakker, Prof.
   V. P. Patel and also BE 7th Semester students Oza Vishesh and Parekh Zarana.
- Design patent filled on UV disinfection box BIO\_GUARD M20 by 5<sup>th</sup> Semester student Milan Desai mentored by Dr. Manish Thakker and Prof. M.R.Vasavada.



 Prof. Y. D. Vora, Mechanical department had successfully reviewed more than 3500 innovative ideas as experts in the area of Mechanical Engineering, under the 'Innovation in Science Pursuit for Inspired Research' (INSPIRE Awards - MANAK) scheme - One of the flagship programs of Department of Science & Technology

- Prof. Dhaval Patel, Mechanical department 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. And published the same in Indian patent Office Journal No. 46/2020 Date: 13/10/2020
- Prof. Dhaval Patel has also filed the patent in the Indian patent office on the title "RSSR SS motion platform with stability control using Universal Joint" on 30/11/2020.
- SSIP Jay Maniar received approval for the SSIP proposal on "Multilayer fabric for electromagnetic shielding".
- SSIP Five 3rd year students of Textile Technology received approval for the SSIP proposal on "Designing of women specific clothing for women officers in Defence".
- Dr. Bhavin Sedani and Dr. Nirali Kotak along with the students of 6<sup>th</sup> semester published a patent titled "GREENSATS: REVOLUTIONIZING UNDERUTILIZED SURFACE" on 13.11.2020.
- A project titled, "Recycling of PVC films" by the students of 3<sup>rd</sup> semester was approved under SSIP under the guidance of Prof. Hetal C.Shah and Prof. Stuti R. Shah.
- Sarthak Bhavsar and team successfully passed the scrutiny for SSIP phase 7 on "Development of antimicrobial deproteinized natural rubber latex gloves comprising bio-inspired anti-microbial agent" under mentorship of Prof. P.N.Chavda.

- Dhruv Patel and team successfully passed the scrutiny for SSIP phase 7 on "Biodegradable packaging" under mentorship of Prof. G.G.Bhatt.
- Dhruv Patel and team have started working on "Alternating Packaging Solution for Foods and other packed goods to increase sustainability and regulatory compliance in the wake of restrictions on plastics" under mentorship of Prof. G.G.Bhatt for M2M ITC challenge.
- Daxit Soni and team have started working on "Storage of fuel tank in operational condition" under mentorship of Prof. G.G.Bhatt for M2M defense challenge.
- Prof. R.N.Desai and Prof. B.D.Patel are jointly working on "Soil fertilization and solid waste management" by interacting with Mr. Dharmendra D.Patel, Technical officer, Anand Agriculture University.
- Prof. R.Y.Modan is working on "Biodegradation of scrap foam products" by interacting with Mr. Jens Szymanska, M.D., LATEXFOAM TECHNOLOGY at USA.
- Prof. Anal Bhatt has done research work on "Ionic Liquid modified rubber composites" and submitted for review in Composite science and technology.
- Mr. Ankit Vandra, a student of M.E. sem I, is doing research work on "Armoured fighting vehicle for DRDO" under the mentorship of Prof. R.N.Desai & Prof. G.G.Bhatt and by communicating with DRDO team.

# STUDENTS' ACHIEVEMENT

- A project on "Three wheeler for COVID-19" by Parmar Mayur and his team from Automobile Dept. under Prof. R.J.Jani received grant of Rs. 18,800 under SSIP-Cell LDCE.
- A project on "Electric Vehicle with CVT" by Hasit Suthar and his team from Automobile Dept. under Prof. S.N.Patel received grant of Rs. 1,08,800 under SSIP-Cell LDCE.
- Suru Kartik from 3<sup>rd</sup> year Biomedical Engineering participated in GTU SSIP IP Projects Screening held at GTU Rajkot Center on 05.11.2020, where his project has been selected by GTU SSIP IP Screening Committee to provide financial assistance of up to Rs 25,000/- (Rs 25k) for Indian Patent Filing.
- Vaibhav Kubavat from 3<sup>rd</sup> year Biomedical Engineering has participated in 'IEP on FPGA based embedded systems- Covering Swadeshi Microprocessor' organized by NIELIT CALICUT during 5<sup>th</sup> October 2020 to 16<sup>th</sup> October 2020, supporting through C2SD (SMDP-III) Project.
- Dharvia Abhishek from 2<sup>nd</sup> year Biomedical Engineering has participated in 'IEP on FPGA based embedded systems- Covering Swadeshi Microprocessor' organized by NIELIT CALICUT during 30<sup>th</sup> November 2020 to 11<sup>th</sup> December 2020, supporting through C2SD (SMDP-III) Project.

- Aushik Viradiya and Akshay Sangani of Chemical Department, under the guidance of Prof. Ronak. R. Patel provided technical consultancy in "Pump and piping system" to Tata Chemicals Ltd., Mithapur.
- Malav Shah, a student of Computer Engineering Department, received Best Campus Startups/early birds award in 'SSIP Prashansha Award 2020' for the project/startup "Reolo". He additionally received a handsome amount of Rs. 50,000/- in the same category.



Students from including various branches Instrumentation and Control Engineering Department participated in National Level Robotics competition - National DD Robocon 2020 and represented L.D. College of Engineering among IITs, NITs, BITS and many other prestigious colleges and secured 7th place. The event was online this year due to Covid-19 norms and selection of teams and ranking was based on 3 minutes video of robots doing the theme based task.



- 3 students from Mechanical Department got four gold medals during 10<sup>th</sup> convocation of Gujarat Technology University for the year 2021 under different courses. All students were appreciated by Honorable Education Minister Shri Bhupandrashing Chudasama.
  - (1) Mr. Dishank Upadhyay, ME CAD-CAM, has secured branch topper position with gold medal. He has completed his ME Dissertation work on title "Experimental Investigation of Hot Turning Methodology for Hard to Cut Material" under guidance of Dr. Komal G Dave, Professor-Mechanical Department.
  - (2) Mr. Parth Shah, ME cryogenic has secured branch topper position with gold medal. He has completed his ME Dissertation work on title "Design of 2-Stream (He/2-Phase N2) Plate - Fin Heat Exchanger and Development of Design Software" under guidance of Prof. Rahul O Paliwal, Associate Professor, Mechanical Department and Dr. A K Sahu, Scientist Engineer - F grade, IPR, Ahemdabad.
  - (3) Mr. Hitendra Goswami, PDDC Mechanical Engineering is awarded two gold medals as branch topper and as course topper.



 Vishva Bhavsar, M.E CSE (EC) student of the batch 2018-2020 received a gold medal for being a branch topper in M.E (EC) at GTU Convocation 2020.



- Aditya Mistry of 1<sup>st</sup> semester secured 2<sup>nd</sup> rank in FASTEST FRESHER FIRST game at FUN-TASK-TICK event during 6-7<sup>th</sup> November 2020 and also attended the SECRET SANTA event on 25<sup>th</sup> December 2020, organized by NSS LDCE.
- Payal Vadher of M.E 3<sup>rd</sup> semester got selected in E-infochips during placement drive of December 2020.
- Jheel Makhijani has co-authored the anthology "Beautiful Ecstasy: A joy of growing together" published in Amazon Kindle under the ASIN: B08DFRZJC9 and ISBN: 9798668998692.
- Diya Thakor of 1<sup>st</sup> semester secured 2<sup>nd</sup> rank in FASTEST FRESHER FIRST game at FUN-TASK-TICK event during 6-7<sup>th</sup> November 2020 and also attended the SECRET SANTA event on 25<sup>th</sup> December 2020, organized by NSS LDCE.
- Anurag Rajput of 6<sup>th</sup> semester attended e-Conclave 2020 at SYMBIOSIS INSTITUTE OF INTERNATIONAL BUSINESS as a campus Ambassador.

- Anurag Rajput of 6<sup>th</sup> semester attended i5 Summit 2020 at IIM Indore, between 2<sup>nd</sup> and 4<sup>th</sup> October 2020, as a campus Ambassador and was awarded silver certificate for securing 2<sup>nd</sup> position among all Campus Ambassadors.
- Kevin Kakadiya, a student of BE Sem 3 Rubber Technology has attended Technology Transfer webinar "Application of Environmentally Friendly Accelerators in Rubber Compound Development" on 14<sup>th</sup> October 2020.
- Arth Shah, a student of BE Sem 7 Rubber Technology, served as "Unschool Community Leader" in Unschool e- learning platform during October 2020.
- Arth Shah, a student of BE Sem 7 Rubber Technology, has completed a course in "Marketing Management" at Unschool elearning platform during December 2020.
- Arth Shah, a student of BE Sem 7 Rubber Technology, has completed a course in "Digital Marketing" at Unschool e- learning platform during December 2020.
- Utkarsh Adhavaryu, a student of BE Sem 7 Rubber Technology, has participated in "Virtual Marathon" held by Step Step GO on 5<sup>th</sup> December 2020.
- Utkarsh Adhavaryu, a student of BE Sem 7 Rubber Technology, has completed a Project in "IPO Diagram Exercise in white belt certification" at Unschool e- learning platform during October 2020.
- Utkarsh Adhavaryu, a student of BE Sem 7 Rubber Technology, has completed a Project in "Blog campaign in content writing and marketing" at Unschool e- learning platform during November 2020.
- Utkarsh Adhavaryu, a student of BE Sem 7 Rubber Technology, has completed a Course in "Six sigma" at Unschool e- learning platform during October 2020.

- Chintan Chaudhari, a student of BE Sem 7 Rubber Technology, has completed a Course in "Business Management and Entrepreneurship" at Unschool e- learning platform during November 2020.
- Chintan Chaudhari, a student of BE Sem 7 Rubber Technology, has completed a Project in "IPO Diagram Exercise in white belt certification" at Unschool e- learning platform during October 2020.
- Dhruv Patel, a student of BE Sem 3 Rubber Technology, has successfully completed Professional certification of "SIX SIGMA GREEN BELT" on 23<sup>rd</sup> November 2020.
- Dhruv Patel, a student of BE Sem 3 Rubber Technology, has successfully completed certification course of "BUSINESS ANALYTICS FOR DECISION MAKING" on 25<sup>th</sup> October 2020.
- Dhruv Patel, a student of BE Sem 3 Rubber Technology, has successfully completed certification course of "INTRODUCTION TO CORPORATE FINANCE" on 21<sup>st</sup> October 2020 offered by Corporate Finance Institute.
- Rohan Rathod, a student of BE Sem 3 Rubber Technology, has successfully completed certification exam of "THE FUNDAMENTALS OF DIGITAL MARKETING" on 12<sup>th</sup> October 2020 offered by Google Digital Workshop.
- Maulik Chauhan, a student of BE Sem 3 Rubber Technology, has successfully completed course of "National Level Quiz on Python Programming" on 14<sup>th</sup> October 2020, organized by Sigma Institute of Engineering, Vadodara, Gujarat.
- Maulik Chauhan, a student of BE Sem 3 Rubber Technology has attended 37<sup>th</sup> National webinar on "INDIA-CHINA LECTURE SERIES-10" on 15<sup>th</sup> December 2020.

- Maulik Chauhan, a student of BE Sem 3 Rubber Technology, has attended 36<sup>th</sup> National webinar on "IMPORTANCE OF NATIONAL CYBER SECURITY IN THE AGE OF CYBER WARFARE" on 13<sup>th</sup> December 2020.
- Maulik Chauhan, a student of BE Sem 3 Rubber Technology, has attended 35<sup>th</sup> National webinar on "CAREER COUNSELLING FOR CHARTERED ACCOUNTANTS" on 11<sup>th</sup> December 2020.
- Maulik Chauhan, a student of BE Sem 3 Rubber Technology, has attended 30<sup>th</sup> National webinar on "INTELLECTUAL PROPERTY RIGHTS" on 22<sup>nd</sup> October 2020.
- Maulik Chauhan, a student of BE Sem 3 Rubber Technology, has participated in a Five days national workshop on "EMERGING TOOLS & TECHNOLOGY IN CLOUD COMPUTING: AWS, VMWARE &AZURE" on 06<sup>th</sup> December 2020.
- Yash Bhadani, a student of BE Sem 3 Rubber Technology, has successfully completed course of "National Level Quiz on Python Programming" on 14<sup>th</sup> October 2020, organized by Sigma Institute of Engineering, Vadodara, Gujarat.
- Denis Savaliya, a student of BE Sem 3 Rubber Technology, has successfully completed course of "National Level Quiz on Python Programming" on 14<sup>th</sup> October 2020, organized by Sigma Institute of Engineering, Vadodara, Gujarat.
- Sarthak Bhavsar, a student of BE Sem 5 Rubber Technology, has successfully participated and helped in carrying out orientation programme for B.E. First Year students on 15<sup>th</sup> October 2020.

- Jay Mavani, a student of BE Sem 3 Rubber Technology, has successfully completed course of "National Level Quiz on Python Programming" on 14<sup>th</sup> October 2020, organized by Sigma Institute of Engineering, Vadodara, Gujarat.
- Shyam Chauhan, a student of BE Sem 3 Rubber Technology, has successfully completed course of "National Level Quiz on Python Programming" on 14<sup>th</sup> October 2020, organized by Sigma Institute of Engineering, Vadodara, Gujarat.
- Daxit Soni, a student of BE Sem 5 Rubber Technology, has successfully participated and helped in carrying out orientation programme for B.E. First Year Students on 15<sup>th</sup> October 2020.
- Daxit Soni, a student of BE Sem 5 Rubber Technology, has attended the webinar on "Tyre curing Press: Latest Developments from HF Machinery" on 12<sup>th</sup> November 2020.
- Daxit Soni, a student of BE Sem 5 Rubber Technology, has successfully completed "Six Sigma and the Organization (Advanced)" an online non-credit course authorized by University System of Georgia and offered through Coursera on 27<sup>th</sup> October 2020.
- Vala Jaydipbhai, a student of BE Sem 5 Rubber Technology, has successfully completed 5 hours online course on "Basics of Disaster Risk Management" on 19<sup>th</sup> September 2020.
- Mohamedaman Shaikh, a student of BE Sem 5 Rubber Technology, has successfully participated and helped in carrying out orientation programme for B.E. First Year Students on 15<sup>th</sup> October 2020.

## **Faculties' Achievement**

- Prof. Sulay Patel has delivered expert lecture at GUJCOST sponsored two days webinar dated 25 and 26 November 2020 on "Electric vehicles modelling and future adoption" organized by Gandhinagar Institute of Technology.
- Dr. Mehul C. Parikh of Information Technology Department delivered an online expert talk for students of 3rd Sem CSE/CE/IT at Devang Patel Institute of Advance Technology and Research (DEPSTAR), a constituent of Charotar University of Science and Technology (CHARUSAT), on 06<sup>th</sup> October 2020.
- Dr. Mehul C. Parikh of Information Technology Department, delivered an online expert session on "DEEP LEARNING MODELS AND ARCHITECTURE" at GUJCOST sponsored National Level STTP on Machine Learning organized by Ahmedabad Institute of Technology on 11<sup>th</sup> November 2020.
- Dr. Purvi Ramanuj of Information Technology Department delivered an expert lecture at CE Department, GP Gandhinagar on 16<sup>th</sup> October 2020.
- Prof. Swati Patel of Information Technology Department delivered an expert lecture on "Database Management System - Hands on with SQL" to the diploma 3rd semester students of CE department, GP Gandhinagar on 19<sup>th</sup> October 2020.

- Prof. S. M. Dutta of Chemical Engineering Department completed PhD from Gujarat Technological University, Ahmedabad.
- Prof. Prachi Pancholi of Computer Engineering Department published a technical book as Co-Author with a title "Data Structures" for the students of Gujarat University studying in Bachelor of Computer Applications 2nd Semester. The publication house for the same is Computer World Publication and its ISBN number is 978-93-88092-28-9. The book is issued by MHRD, Dept. of Higher Education.
- Dr. M C Chudasama delivered an expert talk on the topic "Program level preparations and expert visit" on 31-12-2020 during one week STTP "Outcome based accreditation and NBA accreditation process" organized by the Civil engineering department, LDCE Ahmedabad.
- Dr. Manish Thakker, (SSIP Cell) has been awarded for his initiatives and noteworthy contribution during Lockdown due to COVID -19 Pandemic.
- Dr. Manish Thakker, has been awarded for his efforts guide outstanding to innovation/startups during NATIONAL STUDENT STARTUP MEET 2020 on December 17, 2020 in the presence of Shri. Prakash Javadekar Central minister, Smt. \_ Vibhavariben Vijaybhai Dave, Shri. Bhupendrasinh Chudasama.
- Prof. V. P Patel, (Placement Cell) has been awarded for his initiatives and noteworthy contribution during Lockdown due to COVID -19 Pandemic.

- Dr. Manish Thakker and Dr. Ankit Shah received appreciation certificate for guiding SSIP project and publishing patent respectively during online felicitation of PoC, Patent Grantees. Felicitation ceremony was supported by SSIP and organized by Aarambh Innovation Cell, LDCE on 25<sup>th</sup> September 2020.
- Prof. Y. D. Vora and Dr. A. V. Patel from Mechanical department had worked in the Ahmedabad District Rides Inspection Committee as an expert member in the area of Mechanical Engineering to check design of rides and have given valuable suggestions to improve layout modification, maintainability and safety of the rides located at various locations in Ahmedabad district.
- Prof B K Patel, Prof Mitul M Makwana and Prof Dhaval K Patel, Mechanical department have published book on title "Operations Research" as per the revised syllabus for the students of BE SEM 5th of Gujarat technological university, through the ATUL Prakashan, Ahmedabad. (ISBN No.: 978-93-85173-07-3)
- Prof B K Patel delivered 3 expert lectures on 5<sup>th</sup> Nov, 22<sup>nd</sup> and 23<sup>rd</sup> Dec 2020, in STTP "Multiple Attribute Decision Making and Its Industrial Applications" organized by SVNIT Surat, during 02<sup>nd</sup> to 06<sup>th</sup> Nov 2020 and 21<sup>st</sup> to 25<sup>th</sup> Dec 2020.
- Prof Dhaval K Patel has published a book on title "Manufacturing Technology" as per the revised syllabus for the students of BE SEM 5<sup>th</sup> of Gujarat Technological University, through ATUL Prakashan, Ahmedabad. (ISBN No: 978-93-85138-34-8)
- Dr. M. D. Chaudhari, Mechanical department delivered an expert talk on 14<sup>th</sup> October 2020 on the topic of "Electron Microscopy" during one week webinar series on "Processing and Characterization of Materials" held at Government Engineering College, Gandhinagar.

- Prof D U Panchal, Mechanical department is working for intellectual property facilitation centre at i-Hub.
- Prof. D.V. Bihola was conferred PhD in Textile Engineering.
- Prof. Dr Mihir V. Shah delivered expert lecture on "Low Power VLSI-Design" on Foundation Day Celebration of IETE Ahmedabad Centre on Dated 11<sup>th</sup> October 2020.
- Prof. Sanjay B. Prajapati completed his PhD on "Design of Nanoscale Spin-Torque Memory and Logic" from INDIAN INSTITUTE OF TECHNOLOGY, ROORKEE.
- Prof. Pinky Brahmbhatt completed her PhD on "Investigation on Speaker Recognition System" from Gujarat Technological University.
- Prof. Pankaj Prajapati and Prof. Seema Gonsai were toppers in the course "Digital Circuits" organized by NPTEL MOOC COURSE.
- Prof. Nirali Kotak was topper in the course "Introduction to wireless and Cellular communication" organized by NPTEL MOOC COURSE.
- Prof. G.G.Bhatt and Prof. P.N.Chavda have attended technology transfer webinar titled "Green Rubber Recycling: Technolgy Innovations & Case Studies" on 29<sup>th</sup> October 2020.
- Prof. G.G.Bhatt and Prof. P.N.Chavda have attended research & innovation webinar titled "Natural Rubber Composites for Motion Sensors and future Applications" on 2<sup>nd</sup> December 2020.

- Prof. R.Y.Modan has attended a webinar on "Composite materials-metal matrix composite" organized by Institute for Engineering Research on 20<sup>th</sup> October 2020.
- Prof. R.Y.Modan has attended a webinar on "Recent Development in Nanostructured metals and alloys" organized by Institute for Engineering Research on 25<sup>th</sup> October 2020.
- Prof. R.Y.Modan has attended a webinar on
  "Kaizen: A Japanese Management Technique"
  organized by Department of Production &
  Industrial Engineering, M.B.M. Engineering
  College, Jodhpur on 6<sup>th</sup> October 2020.

### **MAJOR EVENTS**

L. D. College of Engineering, Ahmedabad • received "Best Institute" award at the hands of Shri Prakash Javadekar (Hon'ble Minister, Information and Broadcasting, Environment, Forests & Climate Change, Heavy Industries and Public Enterprises Government of India) for 'SSIP Prashansha Award 2020' at 'National Student Start-up Meet 2020 and SSIP Prashansha Award 2020' on 17th December 2020 through online mode. The award was received by the honourable Principal, Dr. R Κ Gajjar.



Orientation for the fresher students at L. D. College of Engineering was held on 15<sup>th</sup> October, 2020 on the virtual platform of Microsoft Teams. In the history of L. D. C.E, this was the first online orientation to be conducted and it went pretty smoothly. It was held during the first half of the day and began with a warm prayer continued with a special message from Principal Dr. Rajul K. Gajjar Ma'am and a virtual tour of the campus.

The virtual tour was a pre-recorded shooting of the entire campus and encompassed all aspects of the same. The students were also given a virtual tour of their specific departments which included small introductions and welcome messages from all of their professors. Presentations that described the central and departmental working of the college were also included. To say in a few words, an attempt to take the on campus college experience to the students, at the comfort and safety of their own homes, was successfully made. The program was successfully co-ordinated by Prof. D R Tarachandani and Prof. P J Mehta of Applied Mechanics.

The department of Applied Mechanics successfully organized a National level online FDP Design on "Earthquake Safe and Construction Practice" from (01/12/2020 to 05/12/2020) under the aegis of AICTE Training and Learning (ATAL) Academy. The inauguration of the esteemed Online FDP was conducted in the august presence of DR C V R Murty, Institute Chair Professor, IIT, Madras as the Chief Guest & Dr B. S. Munjal, Scientist (Engineer-G), Indian Space Research Organization (ISRO) as Guest of Honour. The complete FDP was well coordinated by Major Dr. C.S.Sanghvi, Professor & Head Applied Mechanics Dept.

Noted Speakers from esteemed academic institutes such as National Forensic Science University, IIT Gandhinagar & British Columbia Institute of Technology, Canada were pitched in for the expert talk. Insightful lectures were also delivered by notable Experts from various bodies of GoG such as Road & Building department, Office of RERA. Expert from technology based organization such as National Centre for Peoples' Action in Disaster Preparedness (NCPDP) and People in Centre had also delivered talk in this FDP.

- The valedictory function of the FDP was chaired by Shri M.N.Patel (Ex. Principal of LDCE, Ex. Vice Chancellor of Gujarat University). The following faculty members Prof. P.J.Mehta, Prof. A.J.Shah, Prof. A.G.Hansora, Prof. K.A.Parmar, Prof. C.D.Patel, Prof. B.R.Patel, Prof. S.R.Singh were felicitated with "Certificate of Appreciation" for having worked relentlessly for the successful organization of the FDP.
- Environment Engineering Department has successfully organized a five days Faculty Development Program (Online) titled "Advances in Waste Treatment Technologies" from 02/11/2050 to 06/11/2020. This program was approved by DTE (Department of Technical Education), Gujarat Government and supported by AICTE Training and Learning (ATAL) Academy.
- The main objective of this program was to provide detailed understanding and training on the latest, innovative technologies of waste treatment. In addition, a comprehensive understanding of the latest technologies to address the challenges posed human health as a result of rapid to industrialization, urbanization and environmental degradation will be imparted by 14 different experts at the national level. Various topics were covered including wastewater recycling and reuse, waste to energy, biomedical waste management, ewaste recycling and disposal, air pollution control hazardous and management, and waste management. This online program was attended by 75 faculty members of various engineering colleges, research scholars and M.E. students.

- Orientation Program for 1<sup>st</sup> year students was organized on 15/10/2020 on MS-teams Platform. 50 students participated in the online event and all participants were briefed about Automobile Department, Department Faculties, Activities and Events and various active clubs. Virtual tour of entire Department and Institute was given to all participants. This event was coordinated by Dhaval Patel, Saumitra Jha, Mohit Rajpurohit, Parmeet Singh, Hardik Gohil, Aman Rupareliya and Prof. B.H.Kadiya.
- A two day boot-camp workshop on "From Idea to Incorporating Company" was organized by Automobile department jointly with Aarambh Cell. 110 participants were present on Google meet platform on 20-21/10/2020. Mr. Hardik Gohil was session expert and briefed on process to file patents and Mr Malav highlighted on Startups.



- Gaming event: COD was organized by SAE LDCE Club on 19/12/2020. 188 participants joined this online gaming event. Event was coordinated by Saumitra Jha and Hardik Gohil. All the winners were appreciated with awards and participation certificates were also given to all.
- One week GUJCOST Sponsored & DTE Approved Online Short Term Training Program on "Application of GIS & Remote Sensing in Civil Engineering" was scheduled from 15/12/20 to 19/12/20, coordinated by Prof. R. N. Shukla, Prof. Utkarsh Nigam co-coordinated by Prof.Sudhanshu Dixit and Prof. J. S. Kamble.

 Mechanical Department had organized FDP on "Energy Conservation and Renewable Energy for Sustainable Development (ECRESD-2020)" under aegis of AICTE Training and Learning (ATAL) Academy during 15<sup>th</sup> to 19<sup>th</sup> December, 2020. The program was coordinated by Dr N M Bhatt, and Dr R G Kapadia. More than 150 participants from different states have participated in the program.





- Dr. Ashwin Thakkar joined as a Member of Editorial Board of Journal of Textile Association.
- Faculty and students of Textile Technology department attended the National Student Startup Meet 2020 & SSIP Prashansa Awards 2020 meeting organized on 17<sup>th</sup> December 2020.
- Online Orientation for the newly admitted students of year 2020 was organized on MS Teams platform by the department of Plastic Technology on 15<sup>th</sup> October 2020. The newly admitted students were given information regarding the college campus, online classes and subjects, examination pattern, different clubs running in LDCE etc. Prof. Bharat Basantani, Head of the Department of Plastic Technology addressed the students and briefed them about the department and scope of Plastic technology field. Dr. Mamta Saiyad, Associate Professor, Nirma University who is also the alumnus of the department, was invited as the chief guest for the event who also addressed the students and shared her thoughts.
- SSIP Sensitization Program was organized by Rubber Technology Department for the students of B.E. Sem 1 and B.E. Sem 3 D2D on 24<sup>th</sup> November 2020.

## **COMMUNITY ENGAGEMENT**

NCC, NSS, Clubs of college, other community activities



### • FIT INDIA FREEDOM RUN (October 2. 2020)

NSS volunteers organized and participated in the 'Fit India Freedom Run' campaign on the auspicious occasion of Gandhi Jayanti as well as Rashtriya Swachhta Divas. Giving tribute to Mahatma Gandhi by doing a 2 km long run and collecting the plastic waste nearby LDCE campus keeping the safety measures in check issued by GOI, the NSS volunteers made the surroundings Plastic free.

### • WEBINAR ON NATIONAL EDUCATION POLICY (October 4, 2020)

NSS unit of LDCE had organized a seminar on New Education Policy in order to spread awareness regarding the new points introduced in the current education policy. Also, they got to know how this policy would prove beneficial for a better tomorrow as the concentration will not only be on knowledge, but its application too. The speaker for the same was Dr. Bhavesh Pandya, who, originally from Palanpur, Gujarat, is a renowned creator and innovator and serves as a coordinator of PMU, GCERT. He also serves as a government teacher and is the author of many educational books. Apart from this, he holds position in LIMCA Book of National Record (2008), INDIA Book of Record (2010), ASIA Book of Record (2012) and GUINNESS Book of Record (2014). Moreover, he has been awarded with Sir Ratan Tata Innovative Teacher's Award in 2005 in Madurai. Having received a doctorate from British Council in 2015, he also received the Srishti Sanman at Rashtrapati Bhavan in 2015.

### • BENEFITS OF LOCKDOWN (October 16-17, 2020)

As the COVID-19 pandemic undoubtedly lasted more than anyone could have imagined, NSS unit of LDCE provided a medium where people could showcase those new skills they learnt, those things they did, that they thought they might have never done or got the time to learn during those work hours and daily routine. Over 64 participants utilized this platform to showcase their skills like singing, dancing, painting, public speaking, etc. This motivated them to learn even more and share their experiences with others.



### NATIONAL UNITY DAY (October 31, 2020)

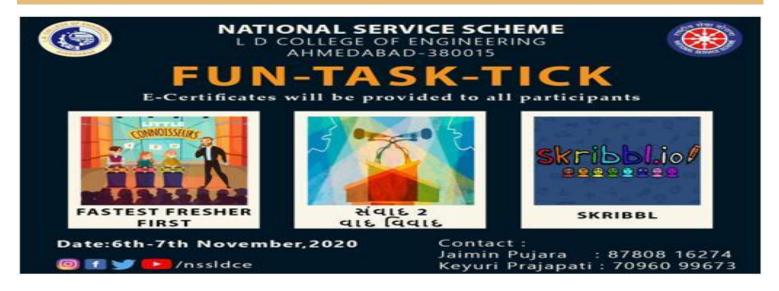
Volunteers of NSS LDCE conducted an oath taking ceremony for "National Unity Day" that is celebrated on the birth anniversary of Sardar Vallabhbhai Patel maintaining all the guidelines given by the Central committee. Also, a virtual meet was arranged by NSS volunteers wherein everyone took an oath on "Pledge for Unity" to strengthen the unity and integrity of our nation. This was specially arranged virtually so that volunteers from everywhere can join and the safety remains maintained.

### FUN-TASK-TIC (November 6-7, 2020)

A welcoming gesture with a set of activities for freshers of LDCE was conducted by NSS LDCE. Under this event, three activities were done;

- 1. Samvaad 2 Vaad-vivaad a debate competition
- 2. Skribbl a pictorial guessing game
- 3. Fastest Fresher First Rapid fire

The main focus of this event was to make freshers interact with each other and with people via exchange of their point of views and showcase their presence of mind. Nearly 300 students participated in the event and they performed well with enthusiasm and connected well which made this event successful.





An average person usually expects to spend the old age with care and ease. But this grandma, even at this age, does not want to become a burden over anyone. She sells these idols so that she could be of some help to her family. Let's support such local and eco-friendly products and thus the local sellers!

Name : Sumitra Bai. Location : Rajwadha ,Indore Time : 11am to 7 pm . Product : Statue of Iaxmi Mata and Deepak.  VOCAL FOR LOCAL (November 13-15, 2020)

NSS LDCE in association with Vishwakarma 1.0 conducted an event "Vocal for Local" to support the initiative of our respected Prime Minister. Here, the participants contributed by sending photos/videos of any local vendors who toil day and night to earn their meals. Also, details like:

- Name of the vendor
- Location and time of their availability
- Products that they sell

Because of this details any viewer would find it easy to connect with the vendor. Nearly 20 such local vendors were featured on our social media stories.

#### • FIT INDIA (December 6, 2020)

A Prabhat Pheri on a weekend was organized by NSS LDCE in the campus of LDCE for Fit India campaign during corona for an hour. During this various other jogger who visit the campus daily morning were asked about their understandings for fitness and how should youth adopt the concept of fitness by our volunteers. The best of them was "Youth nowadays is mistaking being muscular and slim to fitness, look at me I'm not muscular or lean but I am lean and healthy."



#### • SVEEP (December 7, 2020)

The volunteers of NSS unit of LDCE, created awareness regarding Systematic Voters' Education and Electoral Participation program (SVEEP), which is the flagship program of the Election Commission of India for voter education, spreading voter awareness and promoting voter literacy in India. Under this, they created and circulated various posters signalling the importance behind the initiative and digital campaigning through social media platforms for the same. Emphasis was laid on the ease of operating it with it being highly secure which would lead to having voter ids without having much trouble.



### • SECRET SANTA (December 22-25, 2020)

The volunteers of NSS unit of LDCE carried out an event during Christmas titled "Secret Santa" in collaboration with "Wrighter Writing Solutions." The main aim of the event was to celebrate the festival of happiness despite the prevailing pandemic and that too without violating any norms. Thus, this event was held on the online platform where participants sent their best works like drawing, audio songs, poems, etc. which were then anonymously circulated among them. This effort was to make sure that the joy in the lives of people does not vanish due to the prevailing conditions where they are unable to meet and greet each other in person. The event was a great success with more than 100 participants who showed their gesture of kindness and gratitude.

#### WOMEN DEVELOPMENT CELL ACTIVITY (December, 2020)

#### Healthy Environment – Healthy Women

L D College of Engineering has duly received 01 (one) incinerator (sanitary napkin disposal machine) machine on 28th December 2020 and installed in the campus for creating healthy environment which is useful for women health. Incinerator encourages safe disposal of sanitary waste and it also promotes cleanness as well as awareness. Shri Jain Swetamber Terapanth Mahila Mandal donated this incinerator to our college.



### PAPERS PRESENTED/PUBLISHED

- Prof. Alpa J. Shah and Pandey Bhuvnesh, have published a paper titled "INTERRELATIONSHIP BETWEEN CBR AND ELECTRICAL RESISTIVITY IN GRAVELLY SOIL" in proceedings of Indian Geotechnical Conference 2020 held at Andhra University, Visakhapatnam.
- Book chapter Titled "SMART NANO SENSORS FOR TEXTILES: AN INTRODUCTION" for the book Nanosensors And Nano Devices For Smart Multifunctional Textiles is published in Elsevier by Dr. Anjali Bishnoi, Prof. T.S. Rajaraman and Prof. N. J. Ambegaonkar of Chemical Engineering Department.
- MODE CHOICE MODELLING FOR SHOPPING MALL TRIPS IN METROPOLITAN CITIES by R.N.Shukla & Kavisha Shah in Journal of Xidian University, A UGC Care Approved Group 2 Journal Scopus Indexed ISSN NO:1001-2400, Impact Factor: 5.4 in Volume 14, Issue 11, November 2020 on page no:1-12
- Dr. Mohammed Shakil Malek and Dr. P. J. Gundaliya have published a paper titled "VALUE FOR MONEY FACTORS IN INDIAN PUBLIC-PRIVATE PARTNERSHIP ROAD PROJECTS: AN EXPLORATORY APPROACH" in Journal of Project Management, Volume 6, on October 2020. Doi: 10.5267/j.jpm.2020.10.002

- Dr. Mohammed Shakil Malek and Dr. P. J. Gundaliya have published a paper titled IMPLEMENTING "NEGATIVE FACTORS IN PUBLIC-PRIVATE PARTNERSHIP IN INDIAN ROAD PROJECTS" in International Journal of Construction Management ISSN: (Print) (Online), Journal homepage: https://www.tandfonline.com/loi/tjcm20, on 16<sup>th</sup> December 2020. DOI: 10.1080/15623599.2020.1857672.
- Prof. D. V. Raninga has published a paper titled "EXPLICIT NONLINEAR PREDICTIVE CONTROL ALGORITHMS FOR LAGUERRE FILTER AND SPARES LEAST SQUARE SUPPORT VECTOR MACHINE-BASED WIENER MODEL" in Transaction of the institute of measurement and control, SAGE publication, online https://doi.org/10.1177/0142331220938532
- Dr. Komal G Dave, Prof Jignesh Parmar, Dr. A V Gohil, Dr. H S Trivedi have published technical paper on "PREDICTION OF END MILLING PROCESS PARAMETERS USING ARTIFICIAL NEURAL NETWORK" in Material Today: Proceeding, Publisher Elsevier, online from 31<sup>st</sup> October 2020, https://doi.org/10.1016/j.matpr.2020.09.644
- Dr. Komal G Dave, Prof Nirav Mehta and Dr. A V Gohil and Dr. V B Patel have published technical paper on "DEVELOPMENT OF CASTING DEFECT ANALYSIS MODULE THROUGH INTEGRATED APPROACH FOR SMALL AND MEDIUM SCALE INDUSTRIES" in Material Today: Proceeding, Publisher Elsevier, online from 21<sup>st</sup> October 2020, https://doi.org/10.1016/j.matpr.2020.09.244

- Technical Paper on **'PERFORMANCE** EVALUATION OF CU-W-SI GREEN P/M COMPOSITE ELECTRODE FOR SURFACE MODIFICATION OF P20+NI STEEL USING ELECTRICAL DISCHARGE MACHINE' in International Journal of Machining and Machinability of Materials, Inderscience Publications has been accepted for publication. Prof Ramdatti J. L., Dr.Gohil A. V., Dr. Jain Vineet and Dave K. G. are the authors of paper.
- Dr. Komal G Dave and Prof Maulik Patel, Ph.D scholar have published technical paper on "DESIGN, DEVELOPMENT AND FINITE ELEMENT ANALYSIS OF TWIN TOOL FOR FRICTION STIR WELDING" at 32 World conference on Applied Science Engineering and Technology ,GOA during 30<sup>th</sup> 31<sup>st</sup> December 2020 and secured first rank in paper and presentation section.
- Prof. D U Panchal, Dr. B. K. Patel and Dr. D. R. Shah Published a paper titled "APPLICATION OF SHAININ® COMPONENT SEARCH™ APPROACH AS ROOT CAUSE ANALYSIS TOOL FOR DROP IN TWO-WHEELER FUEL ECONOMY", Scopus listed Int. Journal, Six Sigma and Competitive Advantage, Inderscience Journal (ISSN: 1479-2494), DOI: 10.1504/IJSSCA.2020.10032569"
- Prof. Stuti Shah published a paper titled "EFFECT OF BARIUM SULPHATE ON TENSILE, FLEXURAL AND RADIOPAQUE PROPERTIES OF LDPE-BASO<sub>4</sub> COMPOSITES" in International Journal of Advance Engineering and Research Development, Volume 07 Issue 1, December-2020 e-ISSN : 2348-4470, p-ISSN : 2348-6406

# **PROFESSIONAL DEVELOPMENT**

Sr. No	Title	Name of Faculty	Department	Organized by	Duration
1	Earthquake Safe Design and Construction Practice	3	Applied Mechanics	Online Mode under aegis of AICTE Training & Learning (ATAL) Academy	01/12/2020 to 05/12/2020
2	Strategic Civil Infrastructure - Recent Advances in Civil and Structural Engineering	Major Dr. C.S.Sanghvi		Online Mode under aegis of AICTE Training & Learning ( ATAL) Academy	23/11/2020 to 27/11/2020
3	Outcome-Based Education & NBA Accreditation Process	Major Dr. C.S.Sanghvi		LDCE, DTE, Ahmedabad	28/12/2020 to 02/01/2021
4	Nurturing Innovation and Startup Ecosystem	Prof. Jayendra P. Vasani		i-HUb	08/09/2020 to 23/10/2020
5	Green Technology & Sustainability Engineering	Prof. Mazar A. Shaikh, Prof. Vimal R. Patel		AICTE Training And Learning (ATAL) Academy	15/12/2020 to 19/12/2020
6	Active and passive vehicular safety standards	Por. R J Jani	Automobile	SIAM	27/11/2020 4/12/2020 11/12/2020
7	Indian auto industry's BS-VI milestone: Experience and learning	Por. R J Jani		SIAM	9/10/2020 16/10/2020 30/10/2020
8	Accreditation for Undergraduate Engineering Programmes	Swati J Patel	Information Technology	Online Mooc	27/01/2020 to 20/04/2020 (Certificate awarded in

					October, 2020)
9	Accreditation for Undergraduate Engineering Programmes	Madhuri Patel		Online Mooc	27/01/2020 to 20/04/2020
10	Accreditation for Undergraduate Engineering Programmes	Vidisha Thakakar		Online Mooc	(Certificate awarded in October, 2020)
11	High Performance Computing and Deep Learning	Shital Solanki		GUJCOST and C-DAC	12/10/2020 to 15/10/2020
12	Block chain	Shital Solanki		ATAL-FDP	19/10/2020 to 23/10/2020
13	Internet of Things	Prof. Hetal Joshiara	Computer Engineering	Government MCA College Maninagar- Ahmedabad.	26/10/2020 to 30/10/2020
14	Nurturing Innovation and Start-up Ecosystems	Prof. Hetal Joshiara		i-Hub Gujarat.	08/09/2020 to 23/10/2020
15	ATAL sponsored FDP on "Energy Conservation and Renewable Energy for Sustainable Development"	Prof. R O Paliwal, Prof S A Saraswat, Prof. B K Patel, Prof. Harish Ravat, Prof. D R Shah, Prof. D U Panchal, Prof. G N Sutaria, Prof. H R Patel	Mechanical	LDCE	15/12/2020 to 19/12/2020
16	Software Applications: A Modern Platform for Smart City and Smart Village Infrastructure Development (ATAL)	Prof. R.N.Shukla. Prof. N.J.Dalal	C: 1	BVM, V V Nagar	12/10/2020 to 17/10/2020
17	Recent trends in Waste Management Technologies (ATAL)	Prof. C.N.Bhavsar, Prof. J.P. Modi Prof. Z.J.chovatiya	Civil	University College of Engg., Anna University, TIruchirappalli	12/10/2020 to 16/10/2020
18	Application of GIS & Remote Sensing in Civil Engineering	Dr. P. J. Gundaliya Prof. S.H.KAZI Prof. J.P.MODI		LDCE, Ahmedabad	15/12/2020 to 19/12/2020

19	Infrastructure Engineering	Prof. R. M. Jadav		GEC Bilaspur, Chhattisgarh	12/10/2020 to 16/10/2020
20	Innovation Ambassador	Prof. J. S. Kamble		Online. Innovation Institute Council,MHRD	28/4/2020 to 20/12/2020
21	Outcome Based Education & NAP	Prof. U.P.Nigam	Civil	LDCE, Ahmedabad	28/12/2020 to 02/01/2021
22	Research Methodology and Technical Writing	Prof. Z.J.Chovatiya		S.S.Gandhi, GEC, Surat	01/12/2021 to 05/12/2021
23	Advances in Waste Treatment Technologies	Prof. Chetna Patel		Online (AICTE Sponsored)	02/11/2020 to 06/11/2020
24	Remote Sensing Essentials	Prof. Yagni Rami	Environment	Online MOOC training	27/01/2020 to17/04/2020
25	Water Supply Engineering	Prof. Chetna Patel, Prof. Bina Patel	•	Online MOOC training	27/01/2020 to17/04/2020
26	ANSYS HFSS Training	Prof. P J Brahambhatt, Prof. P J Muliya, Prof. M. C. Sahoo Prof. Anil Kshatriya, Prof. Hitesh Desai, Prof. Nirali Kotak and Prof. U.V.Unnagar		Khodiyar CAD Center India Pvt. Ltd.	23/12/2020 to 24/12/2020
27	DIGITAL CIRCUITS	Prof. Seema Gonsai, Prof. Pankaj Prajapati, Prof. Anil Kshatriya, Prof. Kirit Patel, Prof. Dhaval Patel, Prof. Hardik Tank	EC	NPTEL MOOC COURSE	14/09/2020 TO 04/12/2020
28	Introduction to Wireless and Cellular Communication	Prof. Nirali Kotak		NPTEL MOOC COURSE	14/09/2020 TO 04/12/2020
29	Nurturing Innovation and Start-up Ecosystem	Prof. G.G.Bhatt	Rubber	By i-Hub, SSIP (Online Platform)	08/09/2020 to 23/10/2020
30	Chromatography- Advancements in Instrumentation and Applications	Prof. R.Y.Modan	Technology	AICTE (Online Platform)	12/10/2020 to 16/10/2020

31	Cyber Forensic investigation and ethical hacking	Prof. R.Y.Modan		GTU under information security education and awareness Project (ISEA)	26/10/2020 to 31/10/2020
32	Introduction to Accounting and Financial in Civil Engineering	Prof. D H Raval, Prof. A G Hansora & Prof. K A Parmar		NPTEL MOOC	December 2020
33	Advanced Topics in the Science & Technology of Concrete	Prof. PI Modi		NPTEL MOOC	December 2020
34	Design of Reinforced Concrete Structures	Major Dr C S Sanghvi, Prof. D H Raval, Prof. K A Parmar, Prof. PH Andhariya		NPTEL MOOC	December 2020
35	Geosynthetics and Reinforced Soil Structures	Prof. AJ Shah, Prof. SR Singh	Applied	NPTEL MOOC	December 2020
36	Understanding Design	Prof. AJ Shah	Mechanics Department	NPTEL MOOC	December 2020
37	NBA Accreditation and Teaching – Learning in Engineering (NATE)	Major Dr C S Sanghvi		NPTEL MOOC	December 2020
38	Structural Systems in Architecture	Major Dr C S Sanghvi		NPTEL MOOC	December 2020
39	Structural Dynamics	Major Dr C S Sanghvi		NPTEL MOOC	December 2020
40	Electrical Vehicle Part-1	H. N. Raval		NPTEL online course on	December 2020
41	Electrical Machines - II	Lalji K Katariya	Electrical Engineering	NPTEL online course	December 2020
42	DC Power Transmission Systems	Dr. Bhavin J Shah		NPTEL online course	December 2020

43	Introduction to mechanical Micromachining	Dr. P R Rathod,		NPTEL MOOC	December 2020
44	Advances in welding and joining technologies	Dr. P R Rathod		NPTEL MOOC	December 2020
45	Inspection and Quality Control in Manufacturing (04 weeks).	Prof. M K Vyas		AICTE approved MOOC on SWAYAM Portal	December 2020
46	Nurturing Innovation and Startup Ecosystem (NISE)	Dr. M. D. Chaudhari	Mechanical Engineering	Online course	8th September 2020 to 23rd October 2020
47	Effective Engineering Teaching in Practice	Prof. S.K. Parmar		NPTEL MOOC	December 2020
48	TestingofFunctionalandTechnicalTextiles	Prof. S.K. Parmar		NPTEL MOOC	December 2020

# **M.E. DISSERTATION**

Instrumentation and Control Department					
SR. NO.			NAME OF GUIDE		
1	Devanshi Jani	Printed Circuit Board defect detection using Image Processing	Dr. R.C.Patel		
2	Yash Kansagara	Integrated frame work for data driven process monitoring and diagnosis system using machine learning and cloud computing	Prof. V.P.Patel		
3	Himanshu Parmar	Design of hybrid PID plus fuzzy control for inner loop and outer loop control of dc motor	Prof. U.V.Shah		
4	Maulin Patel	Identification of human emotions by facial expression using artificial intelligence techniques.	Mrs. M.C.Patel		
5	Harshit Raval	Sound characterization and its application in fault identification	Dr. M.T.Thakkar		
6	Palak Patel	Application of Deep Learning in Respiratory Diseases Diagnosis	Dr. M.T.Thakkar		
7	Sana Vohra	Artificial Neural Network based ECG analysis for Arrhythmia Detection	Mrs. V.V.Patel		
8	Shersiya Trupti	Performance Evacuation of text blurred image restoration on embedded platform	Dr. R.C.Patel		
9	Maharsh Thaker	Application development of Auto tuner for PID controller tuning with machine learning and optimization techniques on remote server using cloud computing	Prof. V.P.Patel		
10	Aditya Chaudhari	Driver's health management system with artificial intelligence	Dr. A.K.Shah		
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	Electronics and Communication Department					
1	Agrawal Manojkumar Madanlal	Novel Approach for dielectric resonator antenna for GNSS & Satellite communication.	Prof M C Sahoo			
2	Apoorva	Different placement strategy of low power component and its impacts on lower technology node	Prof K V Patel			
3	Bhatt Keyuri Nitinkumar	Enhancement of ATPG and simulation at block level with target test coverage	Prof. A B Upadhyay			
4	Bhatt Pranav Manojbhai	A Novel Approach to Improve the Performance of Free Space Optical Communication System	Prof. (Dr.) B S Sedani			
5	Bhoi Manishaben Shankarbhai	Effect of DRC on wafer fabrication	Prof. (Dr.) P J Brahmbhatt			
6	Chauhan Manish A	Object Detection using Machine learning	Prof. K G Vaghela			
7	Gadge Minal Anil	Algorithms for the next generation 5G mobile Network	Prof.(Dr.) A J Kshatriya			
8	Gohil Khushbu Hasmukhbhai	Wearable flexible antenna design for healthcare	Prof. P J Muliya			
9	Luhar Jigarkumar Ramesh	Impact of Physical Cell Placement of Floorplan Stage on Design in Physical Design	Prof. (Dr.) S B Prajapati			
10	Maheta Abhighna Vasantkumar	Optimizing speech enhancement technique	Prof (Dr.) Nirali Kotak			
11	Meghanathi Shradhaben Mukeshgiri	Optimization of POLAR and LDPC codes for 5G communication system	Prof. (Dr.) B S Sedani			
12	Nikeetabahen Manubhai Bhoi	Floorplan optimization with pin placement strategy	Prof. D N Patel			

13	Patel Tulsiben Mukeshbhai	Design of Point Multiplication for Elliptic Curve Cryptography	Prof. D N Patel
14	Prasad Swati Baleshwar	Impact of physical cell in sign-off stage	Prof. (Dr.) S B Prajapati
15	Rana Jigna Shankarbhai	YIELD improvement using DFM technique	Prof. S K Gonsai
16	Ray Yesha Jitendrabhai	Impact of Macro Placement on Design Qor in Physical Design	Prof Suresh Bharwad
17	Solanki Deep Jitesh	Enhancement of DFT-ATPG Techniques at Lower Technology Node.	Prof. (Dr.) P P Prajapati
18	Susmita Bera	Importance of Different Checks for Better QoR in Physical Design	Prof. (Dr.) M V Shah
19	Vadher Deepkumar Kishorbhai	DFT Methodology for pattern generation with Low Power	Prof. (Dr.) M V Shah
20	Vadher Payalben Shardulbhai	Lower geometry DRC challenges and solutions	Prof. (Dr.) M V Shah