

# L.D. COLLEGE OF ENGINEERING

**TECHPULSE** 

**OCTOBER-DECEMBER** 

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2024

# Vision and Mission

# Vision

To contribute for sustainable development of nation through achieving excellence in technical education and research while facilitating transformation of students into responsible citizens and competent professionals.

# Mission

- To impart affordable and quality education in order to meet the needs of industries and achieve excellence in teaching-learning process.
- To create a conducive research ambience that drives innovation and nurtures research-oriented scholars and outstanding professionals.
- To collaborate with other academic & research institutes as well as industries in order to strengthen education and multidisciplinary research.
- To promote equitable and harmonious growth of students, academicians, staff, society and industries, thereby becoming a center of excellence in technical education.
- To practise and encourage high standards of professional ethics, transparency and accountability

# **MAJOR EVENTS**



# **SAHYOG 2024**

Sahyog 2024 – an Industry-Academia Meet was held to strengthen collaboration between academia and industry. Professionals from ISRO, Adani Wilmar, GERMI, CIPET, IPR, i-ACE, and others engaged in open discussions with faculty from various Engineering departments, focusing on bridging the gap between theory and industry practices. Eminent speakers included Jigar Patel (CEO, Vianci Enterprise), Hiren Trivedi (Manager Manufacturing, Tenneco Automotive India Pvt. Ltd.), Anil Chunch (Founder, Auto Studio), Anal Sheth (Head of R&D, Concrete Pvt.

Ltd.), Apurva Soni (Proprietor, KHA Designs), Rohit Solanki (Director, Aartav Engineering Pvt. Ltd.), Jay Patel (Assistant Engineer, Road & Bridge Department, Ahmedabad), Kirit B. Nasit (Assistant General Manager, Infinite Civil Solutions Pvt. Ltd.), Keval R. Parikh (Director, RJP Infrastructure Pvt. Ltd.), Aditya Pratap Singh (Founder & Managing Partner, Tevoren Technologies LLP), Himanshu Patel (Head at MSCED/MSDG/MRSA, SAC, Ahmedabad), Nilesh Ranpura (Director ASIC, eInfochip), Nirmit Patel (Director, Microcircuit), Shridatt Dudhat (R&D Lead, Oizom), Joy Jacob (Product Owner, Oizom), Pratik Patel (Senior Verification Engineer, Alphanumero), and Vishnu Vaishnav (Technical Lead, Alphanumero). The event facilitated valuable exchanges, strengthening the connection between academia and industry.

# **Textile Laboratory**

The Textile Technology Department of L. D. The College of Engineering has been awarded a significant grant of ₹4.47 crores from the Ministry of Textiles, Government of India, under the National Technical Textiles Mission (NTTM) to facilitate the development of Advanced Laboratories dedicated to the field of Technical Textiles. The proposal for this initiative was spearheaded by a dedicated team led by Dr. Dharmendrasinh Bihola, Head of the Textile Technology Department, along with faculty members Prof. Selin Joseph and Dr. Sanjay Parmar.





# **MAJOR EVENTS**



# L. D. at PLEXPO India

The Plastic Technology Department of L.D. College of Engineering was provided with a complimentary stall at **PLEXPO India** – **the International Plastic & Packaging Exhibition**, organized by the Gujarat State Plastic Manufacturers Association (GSPMA) from 6th to 9th December 2024 at the Helipad Ground, Gandhinagar. The stall focused on raising awareness about the Plastic Technology course offered at L.D. College of Engineering. Many prominent industrialists, alumni, education professionals, and other visitors

attended the stall, providing valuable feedback. A significant outcome of the event was the placement of two students in M/s. ACTIONWARE INDIA PVT. LTD., Rajkot, where they secured internships with a stipend of Rs. 15,000 per month during their Semester 8 internship.

# **Placement of BKT Tyres**

The Rubber Technology department had arranged a Placement of BKT Tyres for BE &ME Rubber Technology students on 28th November 2024.



On the occasion of the World Standards Day, an expert session on the topic "Refreshing Fundamentals 456:2000" arranged on 14.10.24. The expert talk was delivered by eminent Structural Engineer and Consultant Mr.Bhavin Shah (Founder and CEO, SQVe consultants). Students of B.E. Sem V and M.E. (Structure and Geotech)participated... The session was coordinated by Prof.A.G.Hansora and Prof.A.J.Shah under the guideship Major Dr.C.S.Sanghvi.



The Textile Association (India), Ahmedabad Unit donated two Smart Boards to the Department, making it richer with 4 smart TV enabled classrooms..



Environmental
Engineering department
has organized a Poster
making Competition and
Rally on 3rd October 2024
as part of Swachhata hi
Seva Campaign.



The Electrical Engineering Department (EED) organized an Elocution Competition on 1st October 2024 at Chanakya Hall in coordination with the NSS Cell, LDCE, under the theme "Swachhata Hi Seva 2024." The topics included "Work-Life Balance" & "Swachhata: Duty of Every Citizen", inspiring students to reflect on cleanliness and balanced living as essential societal values.

Applied Mechanics The department in association with Lodge Fellowship No. 140, Ahmedabad organized an Expert lecture on "Road Safety" on 24.10.24. The session was delivered by Dr.Satyajit Dixit (Practising Neurosurgeon -Shalby Hospital).Dr.Dixit through his presentation gave crucial insights into the topic and motivated student the fraternity to observe due precautions while driving/riding in order to avoid any critical mishaps that can be life endangering.

In the 2023-2024 placement season, a total of 510 students from L.D. Engineering College secured placements, with annual packages ranging from 5 to 13 lakh. The Computer Engineering Department achieved the highest number of placements, with 90 students landing jobs in top companies like Amazon, Microsoft, and Oracle.

Plastic Technology The Department signed a 5-year MOU with Prutha Packaging Ltd. on 19th December 2024. This collaboration aims to enhance opportunities for both staff and students by facilitating activities such as industrial visits, training and internships, expert lectures, and placement support. The MOU underscores commitment to fostering a strong industry-academia partnership for mutual growth and development.

# Workshop by Bachapan NGO



The Information Technology Department organized several impactful events in late 2024. On 21st December, under the banner of NSS, a workshop titled "Journey towards the Magical World of Computers" was held for 35 children from the Bachapan NGO. The session, coordinated by Prof. Bakul Panchal, Dr. Shital Solanki, Prof. Jhanvi Patel, Prof. Jaimin Chavda, and Prof. Alka Patel, included educational talks and hands-on AR/VR demonstrations.

# Seminar on Foreign Education



The Department of Automobile Engineering organized a **seminar on Foreign Education** for final and pre-final year students on 22nd October 2024, at V J Jani Hall, Workshop. **Bittrack Foreign Education and Visa Consultants were invited** to provide **insights on eligibility, processes, and opportunities** for studying abroad. Dr. R. J. Jani, Head of the Department, and Prof. M. A. Shaikh attended the seminar, which was coordinated by Prof. K. V. Vaghela. Mr. Manminadarsingh and his team from Bittrack explained the student visa processes for Canada, Australia, the UK, and New Zealand.



# **National Mathematics Day**

The Science and Humanities Department celebrated National Mathematics Day on 22nd December 2024, with a Quiz Competition and a Workshop to inspire interest in mathematics. The quiz, which included sections on Dr. Ramanujan's life, general aptitude, and mathematical puzzles, saw 38 participants. Dr. S. K. Patel, Head of the Department, gave an inspiring talk on Dr. Ramanujan's educational

journey, and Dr. A. B. Patel conducted a workshop on polyhedra construction. The winners were Neel Suhagiya (CE) and Riyaz K. Dhebariya (EC) in first place, Ratnesh S. Nyati (BM) in second, and Maharshi Savani (EE) in third. Cash prizes were awarded to the winners, making the event a successful celebration of Dr. Ramanujan's legacy.

# **Expert Talk**

The Chemical Engineering Department organized several notable events in October 2024. On 1st October, an expert talk titled "Research Avenues in Chemical Engineering" was delivered by Prof. Abhilasha Maheshwari from IIT Indore. On 5th October, an online session on "Advanced Separation Techniques" was presented by the esteemed Prof. M. M. Sharma, a Padma Vibhushan awardee, in association with InDA, IIChE KRC, Vibha Kanpur, and the Institution of Engineers. On 24th October, Dr. Charulata Dube conducted an online talk on "Basics of Surface Characterization". Additionally, 25 Chemical engineers in the Swachchhata Hi Seva essay competition organized by NSS LDCE on the occasion of Gandhi Jayanti.





# **Academic Engagements**

The Mechanical Engineering Department organized a one-day workshop on Split Air Conditioner and Inverter Technology for 6th semester students at the Blue Star Centre of Excellence, L.D. College of Engineering. The workshop, coordinated by Dr. Nisha V. Bora, featured expert sessions led by Mr. Kadam and his team from Blue Star Mumbai. Additionally, an expert lecture on "Advances in Welding" was held on 21st October 2024, coordinated by Dr. K. G. Dave and Prof. S. B. Shah. Over 60 students from the Mechanical and Automobile departments gained valuable insights into welding technologies from Prof. (Dr.) Vishvesh Professor and Head Badheka, PDEU, Mechanical Department Gandhinagar

# **Invisible Force**

The Institute of Electronics and Telecommunication Engineering (IETE) celebrated its Foundation Day on 17th October 2024, with a program titled "The Invisible Force: RF, Microwaves, and Antennas Shaping the Future". Dr. Dhaval Pujara, Director of PDEU, Gandhinagar, was the keynote speaker, sharing his insights on industry trends and technological advancements. Dr. Pujara, honored with the Dr. Sudhakar Rao Award 2024 for his contributions to science and technology, delivered an inspiring session.



# **Skill Development Events**

The Rubber Technology Department organized several enriching events under the guidance of Dr. R. N. Desai. Prof. Sunil Padhiyar coordinated an expert talk on "Foreign University Search and Admission Process" by Bit Track Consultancy Pvt. Ltd. for UG Rubber Technology students on 1st October 2024. A Hands-on workshop on "Differential Scanning Calorimetry" for ME Rubber Technology and ME CAPD students was held on 24th October 2024. On 11th October 2024, poster competitions on "Swachchta hi Seva" and "Bharat Vikas Varsh" were coordinated by Prof. Aanal Bhatt and Prof. Bhakti Patel, respectively. Dr. Desai also arranged an expert talk on "The Sustainable Choice: Biopolymer Solutions" by Mr. Prakash Patel, MD of Vision Industries, for UG & PG students on 6th December 2024. Additionally, the department arranged pedagogical sessions with Ms. Nilam Shah on global opportunities for rubber technologists and Mr. Vikram Dholeriya on advanced reinforcing additives for tyres in December 2024, both attended by faculty members.

# Mathematics Challenge 2024





Mathematics Day Celebration Quiz winner 2024

# INDUSTRY INTERACTION



students. On 22nd October. Mr. Jagrut Patel, an alumnus, spoke on "Design Software for **Electrical** Engineering" for 7th semester Additionally. students. on 20th December, ME 1st semester students visited the Research Park at IIT Gandhinagar, guided by Prof. N.V. Sinha, Prof. H.N. Raval, and Dr. J.K. Chavda.

150 students of the Applied Mechanics department visited the L&T skill center and tall building sites on the 3rd and 4th October 2024 which was coordinated by Prof. A J. Shah, Prof. D. H.Raval, Prof. A G Hansora, Prof. P.H.Andharia

The Environmental Engineering Department organized two insightful expert talks in October 2024. On 18th October, Dr. Bharat Jain, Member Secretary of Gujarat Cleaner Production Centre, delivered a talk on "Cleaner Production Technologies" for UG and PG students. On 25th October, Mr. Dareel Merchant, Co-Founder of Engineo-LLP, Ahmedabad, spoke on "Dust Handling and Controlling Systems in Industries." Both sessions provided valuable knowledge and were attended by students from various disciplines.



An **expert talk on "Basics and Case Studies of Pumps"** was organized for 3rd semester students on 18th October 2024. The lecture was delivered by Mr. Rahul Goel.

# **INDUSTRY INTERACTION**

Dr. D.V. Bihola and Dr. S.K. Parmar accompanied GeM officials on a visit to Ankur Textiles, Texlab, Dynamic Looms, and Arvind Ltd. in Santej from 14th to 16th October 2024. Later, on 22nd December 2024, Dr. Bihola, Dr. Parmar, and Prof. S.J. Parapuram attended the inauguration of the Climate Smart Agrotextile Demonstration Centre and the Promotion of Agrotextiles under NTTM, MoT, GOI at Navsari Agricultural University, Gujarat.





Five students and three faculty members from the Chemical Engineering Department **visited the Bullet Train**Station, an ongoing project of the Government of India, for technical insights on 14th October 2024.



Students from LDCE's IC Department visited IFFCO, Kalol on 24th October 2024. The industrial visit provided practical insights into real-time applications, process control, and safety protocols. Students gained valuable hands-on experience and knowledge.



The Plastic Technology Department arranged a meeting with Mr. Nitin Pandya from Prasad Group of Industries on 19th October 2024. Discussions regarding planning for expert lectures for the students for the coming academic sessions were done.

# INDUSTRY INTERACTION

# **Basics of Pump**

All faculty members of Mechanical Engineering Department have successfully performed duty as experts for various ride inspections of Ahmedabad city. There were more than 30 rides successfully inspected. Members gave appropriate suggestions at each point during the inspection.

# Harms in Online World

L.D. College of Engineering hosted an expert talk on 21st November 2024, titled "Understanding Emerging Harms in the Online World" by Dr. Hridoy Sankar Dutta, Lecturer at Deakin University. The threats, detection strategies, and challenges in the digital space.

# **Technical Sessions**

The Computer Department organized a successful one-week online FDP on "Generative AI and Its Applications to Computer Vision" from 16th to 21st December 2024, with over 500 participants from 110 districts across 18 states. The event focused on AI models like GANs, VAEs, and Diffusion Models, their applications, and ethical challenges. During the "Vikas Saptah" celebrations, the department arranged a visit to i-Create, where faculty and students toured the labs and participated in an interactive session with MLA Shri Amitbhai Thakar. Additionally, Dr. Chirag Thaker conducted a session on NEP 2020, focusing on improving higher education and fostering research and innovation through the Research Park Vertical.

# **Technical Sessions**

The Rubber Technology Department organized several technical sessions in the latter half of 2024. On 19th October, a technical talk was conducted for BE and ME students, led by Prof. Bhakti Patel and Prof. Sunil Padhiyar. On 27th November, Dr. Rupande N. Desai and Prof. Sunil Padhiyar hosted a technical talk for BE 7th semester students online, in collaboration with BKT Tyres. A technical talk for BE 5th semester students took place on 27th December, led by Prof. Aanal Bhatt and Prof. Gyanu Bhatt. Additionally, on 30th December, Dr. Rupande N. Desai and Prof. R.Y. Modan provided technical guidance to BE 5th semester students.

# **FACULTY ACHEIVEMENTS**

### DR. S.K. PATEL

Delivered an expert lecture on "A Game of Cash Explained using Matrices" at the 61st Annual GGM Conference at Amreli during 10th to 12th November 2024.

### PROF. (DR.) K.P. BADGUJAR

Coordinated an orientation program for over 100 participants from various universities across Gujarat State on "Study in India" on November 2024. **GKS** organized bv in collaboration with EdCeIL & ICCR.

### PROF. (DR.) K.P. BADGUJAR

Delivered a full-day workshop on NBA Reaccreditation on 7th December 2024 at GP Ahmedabad for more than 70 participants from various Government Institutes.

### DR. MANISH THAKKER

Team "Samanvay," mentored by Dr. Manish Thakker, represented LDCE at Robofest 4.0, a robotics competition sponsored by GUJCOST, and secured a position in the final round, winning a prize of ₹2 Lac. Team members include Krisha Chokshi, Kirtan Patel, Bhavya Shah, Priyansh Prajapati, Sharad Patel.

### DR. DARSHIT SHAH

Contributed as a reviewer for the International Conference on Futuristic Advances in Mechatronics Engineering for Aerospace and Defence (ICFAMEAD-2024) held during 4th to 5th October 2024 at Symbiosis Institute of Technology, Symbiosis International (Deemed University), Pune, India.

### DR. C.H. VITHALANI

Actively participated in the International Conference on "Human Values in Higher Education (ICHVHE 2024)."

### DR. S. M. DUTTA

Published a book chapter titled "Thermo-economic analysis of separation of benzene-toluene-xylene system using modified design of divided wall column" in the book Futuristic Trends in Renewable & Sustainable Energy, e-ISBN: 978-93-6252-602-1 IIP Series, Volume 3, Book 4, Part 6, Chapter 1.

### PROF. S. H. BHATT

Published a patent on "Design of Water Sampling Unit."

### PROF. CHANDNI SHAH

Participated in the "Quality Walkathon" on 27th October 2024, organized by BIS to raise awareness about quality for a developed India by 2047.

### DR. S.K. PATEL

Delivered an expert lecture on "Sequence and Series of at the Numbers" Tenth Problem Solving Workshop Enrichment and in Mathematics organized by St. Xavier's College, Ahmedabad, 24th 27th during to December 2024.

### DR. DHARTRI GOHEL

Awarded Best Presenter Award at IIT Guwahati for the paper titled: An Affective Narratological Study of Mrityunjay.

### DR. BRIJESH TRIPATHI

Ms. Sadika Khan, a research scholar at GTU, successfully defended a PhD (Mathematics) pre-submission open seminar under the supervision of Dr. Brijesh A. Tripathi on 19th December 2024.

# **FACULTY ACHEIVEMENTS**

### PROF. (DR.) K.P. BADGUJAR

Published a patent on "Power Theft Detection in Distribution Network Using NodeMCU, Current Transducers, and Server Integration" on 20th December 2024.

### PROF. GNANU G. BHATT

Patent granted by the Patent Office, Government of India, for years for the "METHODS FOR SYNTHESIS OF NANO FIBER FROM RICE HUSK." (Applicant names: L.D. Engineering, College of Dhruvkumar Rameshbhai Patel, Gnanu G. Bhatt, Saumya Rathod, Sukanva Rathod, Shyam Chauhan, Maulik Chauhan, and Desnis Savaliya)

### PROF. GNANU G. BHATT

Team "Tire Mitra" mentored by Prof. Gnanu Bhatt selected for the grand finale of Smart India Hackathon 2024.

### PROF. (DR.) J.R. IYER

Published a patent on "Power Theft Detection in Distribution Network Using NodeMCU, Current Transducers, and Server Integration" on 20th December 2024.

### DR. MANISH THAKKER

Dr. Manish Thakker was felicitated by GTU on Teachers' Day for his contribution as a jury member in the Tech Guru Award 2024.

### PROF. (DR.) K. A. BHATT

Published a patent on "Power Theft Detection in Distribution Network Using NodeMCU, Current Transducers, and Server Integration" on 20th December 2024.





### LDCE Motorsports in FKDC

Students team LDCE Motorsports has designed and developed Go-kart "VIJAYA" and participated in FKDC season 8 at Coimbatore during 18th to 24th October, 2024. Vehicle has performed well in practice Round and stood 4th in Cost planning.

### Smart India Hackathon (SIH) 2024

Team Pure Rinse from the Environmental Engineering Department, Gujarat Technological University, won the first prize (Rs. 50,000) at the Smart India Hackathon (SIH) 2024 – Hardware Edition, held at IIT Roorkee (11th to 15th december 2024). The team included Nishit Modi, Rishu Yadav, Vatsal Patel, Rajeshwari, Ahaan Thakore, and Rudra Patel, mentored by Prof. Minarva Pandya and Prof. Vishwa Shah. Additionally Maahin Panchal from the Information Technology Department secured third prize in the Altair Data Science Contest held by IIT Kharagpur, using Altair® RapidMiner® as part of an industry outreach initiative by Altair India.





### Robofest 4.0 second round winner

Rathod Vaibhavi Maheshbhai, a 5th-semester student from the Electronics and Communication (EC) Department, emerged as the winner in the second round of Robofest 4.0, held on 26th October 2024.



### **GTU Interzonal Table Tennis Tournament**

Shubhangi Shukla, a student of the Electrical Engineering Department, won the GTU Interzonal Table Tennis Tournament 2024 at SVIT Vasad. This marks her second consecutive victory, as she previously won the same tournament in 2023.

### **ROBOFEST-GUJARAT 4.0**

Bhatti Mahammadsamir, a student of Sem.VIII Electrical Engg. shortlisted for the Grand Finale of ROBOFEST-GUJARAT 4.0 inFun Robotics & Maze Solving Robo category.



# AND CONTROL OF THE PROPERTY OF

# "Quiz Whiz" competition

Jay Gandhi, a B.E. Semester VII student of Civil Engineering, achieved first place in the "Quiz Whiz" competition organized by Nirma University. He was awarded a Certificate of Participation and prize money for his accomplishment, under the guidance of Prof. Dr. Poonam I. Modi.

Jani Arjun Rajeshkumar, a 4th-semester student from the Information Technology Department, represented L.D. College of Engineering at the State-Level Championship of the Viksit Bharat Youth Development Program 2025, held at IITE, Gandhinagar, on 28th December 2024. He delivered an outstanding performance and ranked among the top 50 students in the competitions.



Disha Solanki, a 7th-semester student from the Electronics and Communication Department, was honored with an award on 19th October 2024, for her dedicated service as a writer during the examinations of higher secondary girls at Andh Kanya Gruh, Memnagar, for an entire week.

The following students participated in the "Trash to Treasure Ideation Hackathon, 2023" under the Crop Residues category at the National Level Hackathon organized by GPCB: Godhani Jayraj Nileshbhai, Shabhya Prince, Pansuriya Dhrupan, Pethani Harshil, and Vekariya Dixit.

Kartik Amrut Prajapati, a 5th-semester student, secured a position among the top 10 participants at the National Level Meshmerize Competition held on 6th October 2024 at IIT Bombay

Krushi Mistry, a 4th-year student, achieved national recognition by excelling in the AIU National Cricket Tournament held on 27th November 2024 in Udaipur. She was also the runner-up in the Inter-Zonal Cricket Tournament held on 15th October 2024 in Baroda, earning accolades at the state level.

Patil Bhavinkumar Mukeshbhai, a 7th-semester student, participated in the National Level Army Attachment Camp with the 16 Maratha Light Infantry through NCC on 8th October 2024 in Gandhinagar, receiving recognition at the national level.

Atharva Chitre, a 5th-semester AI & ML student, has been appointed as a Microsoft Learn Student Ambassador - Lead. This achievement highlights his expertise and dedication to technology and leadership, setting a benchmark for his peers.



Rathod Mitali Ashokbhai, a 7th-semester student from the Electronics and Communication Department, received the Best Sportsperson Award at the Army Attachment Camp held on 12th October 2024. She also emerged as the winner in volleyball and runner-up in basketball at the event.



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Jay Champaneri, a 5th-semester student of the Electronics and Communication Department, secured the 1st rank in the Intercollege Yogasan competition held on 21st October 2024.

Singh Foram and Rathwa Mayankkumar, final-year students of the Chemical Engineering Department, have been selected as Graduate Engineer Trainees (GET) at Tata Chemicals Ltd.

Nirmal Jadeja, Sujal Sapariya, Chintan Gadhavi, Prince Sabhaya, and Subhankar Dey, final-year students of the Chemical Engineering Department, have been selected as Graduate Engineer Trainees (GET) at UPL.

Krish Bhimani, a final-year student of the Chemical Engineering Department, has been selected as a Graduate Engineer Trainee (GET) at Prakash Chemicals.

Uttam Mangoroliya and Shubham Pipaliya, final-year students of the Chemical Engineering Department, have been selected as Graduate Engineer Trainees (GET) at Academor.

Kuldip Jashvantlal Patel and Vaidehi Vinodbhai Savaliya, final-year students of the Chemical Engineering Department, have been selected as Graduate Engineer Trainees (GET) at Aditya Birla Group.

The following final-year students of the Chemical Engineering Department have been selected as Graduate Engineer Trainees (GET) at Atul Ltd.: Dhrupan Dineshbhai Pansuriya, Darshitkumar Maheshbhai Mori, Urvi Ajaykumar Sharma, Meghkumar Bipinbhai Tailor, Jaykumar Dineshbhai Dharaviya, Kenilkumar Sanjaybhai Vadariya, Suraj Jitendrakumar Maru, Jeniskumar Ramanbhai Patel, Akshkumar Jagdishbhai Darji, Princekumar Vishnubhai Patel, Vimal Rajubhai Baraiya, Aaravkumar Jatanbhai Rathwa, Ronaksingh Rajeshsingh Kshatriya, Pranaliben Sadashivbhai Borse, M. Gufran Nagdawala, Navneet Kumar Singh, Mohitkumar Ashokbhai Patel, Darshan Sunil Patil, Parshva Atulbhai Somani, and Devendrasinh Mahendrasinh Vadher

Riddhi Patel and Rushikesh Kulkarni, final-year students of the Chemical Engineering Department, have been selected as Graduate Engineer Trainees (GET) at Worley.

Uttam Patel and Piyush Sarvaiya, final-year students of the Chemical Engineering Department, have been selected as Graduate Engineer Trainees (GET) at Suzuki Motor Gujarat Pvt Ltd.

The "Hexapod Robot" project by a team from L.D. College of Engineering, Ahmedabad, has advanced from Level II (Proof of Concept) to Level III (Prototype) in India's largest robotics competition, ROBOFEST-GUJARAT 4.0. For their creative presentation and demonstration, the team has been recommended for a cash prize of ₹2,00,000.

The LDCE Mechanical Team, comprising Maulik Chauhan, Dhruvkumar Patel, Tushar Dholariya, Meetkumar Patel, Aayush Sharma, and Chinmayi Dholam, along with Dr. Nisha Bora, participated in the Grand Finale of the Smart India Hackathon 2024 – Hardware Edition at MIT Pune.

Patel Sneha Bharatbhai, Pal Gaurav Rameshprasad, Shailendra Gupta, Pandya Vaibhav Umeshbhai, Raj Thwani, Prince Goswami, and Adwani Deepak from the Electrical Engineering Department published a patent titled "Power Theft Detection in Distribution Network Using NodeMCU, Current Transducers, and Server Integration" on 20th December 2024.

Around nine final-year students from the Electrical Engineering Department secured placements in renowned companies such as Welspun, Nissan Syntex Pvt. Ltd., and Arvind.

Priya Chaudhari and Deep Mehta, students of B.E. Semester VII (Civil Engineering), secured the 2nd prize in the All-India Level Geotechnical Competition "GEOVISLESHANA 2024," organized by the Indian Geotechnical Society. Their achievement was guided by their mentor, Dr. M.V. Shah

Students of Computer Department have showcased their exceptional talent and innovation by advancing to the Grand Finale of SIH 2024, mentored by Dr. Hetal A. Joshiyara

Vihaan Joshi, a 4th-semester student of the Electronics and Communication Department, earned several medals in Karate tournaments:

Bronze medal in Kumite (-75 kg) at the All India Inter-Zone Championship held on December 13, 2024, in New Delhi.

Bronze medal in Kata and Silver medal in Kumite (-75 kg) at the Kio Federation Cup National Championship held from 19th–23th December 2024.

Qualified among the Top 8 participants in the All India University Games at the All India South West Zone Championship held from 4th –8th December 2024.

Leeza Pathan, a 5th-semester student of the Electronics and Communication Department, published a paper titled "Case Study: AI Blueprint of India" on 1st December 2024

Sujal Makwana from the 7th semester of the Electronics and Communication Department presented a research paper titled "A Hexacopter-Mounted Automated 1f WMS System for Vertically-Resolved Measurement of Ambient Water Vapour" at India's largest photonics conference held at IIT Kharagpur.

A team comprising Maulik Chauhan, Dhruvkumar Patel, Tushar Dholariya, Meetkumar Patel, Aayush Sharma, and Chinmayi Dholam represented their project at the national level in the Grand Finale of the Smart India Hackathon (SIH) 2024 Hardware Edition, organized by the Ministry of Education Innovation Cell and AICTE, from 11th–15th December 2024.

Final-year students of the Rubber Technology Department secured placements in renowned companies, including Balkrishna Industries (BKT Tires), where Maulik Chauhan (Post-Graduate), Pratik Bagul, Mikhil Perinchery, Siddhant Patil, Devanshsingh Bhadoriya, Kritik Bhardwaj, and Raj Vasani (Undergraduate) were placed; Welspun Living, where Ketan Jamdade was placed; and Flextron Rubber Pvt. Ltd., where Rutvik Mehta was placed.

A patent titled "Method for Synthesis of Nano Fiber from Rice Husk" was granted on 4th December, 2024, to Maulik Chauhan, Dhruvkumar Patel, Shyam Chauhan, Denis Savaliya, Sukanya Rathod, and Saumya Rathod under the guidance of Prof. Gnanu Bhatt from the Rubber Technology Department.

Sarthak Patil, a 5th-semester student of the Rubber Technology Department, participated in a workshop titled "Mastering Data Science: A Journey from Fresher to GenAI Expert" conducted by Innomatics Research Labs on 28th September, 2024.

Dhruvi Vadadoriya, a 3rd-semester student of the Rubber Technology Department, participated in "Basic Business Decisions Using Fundamental Knowledge of E-Commerce" on 16th November 2024, while Priya Umaretiya from the same semester participated in the Eat Right Quest on 3rd December 2024.

Students of the Rubber Technology Department undertook multiple industrial visits, including Vision Industries at Motibhoyan, Ahmedabad, on 7th October 2024 (M.E. Final Year), Sabarmati Bullet Train Station on 14th October 2024, and the iCreate Innovation Hub on11th October 2024, as part of the Vikas Saptah Celebration.

Students from the 3rd, 5th, and 7th semesters of the Plastic Technology Department actively participated in the PLEXPO India 2024 exhibition held at the Helipad Ground in Gandhinagar from 6th to 9th December 2024, where they helped set up the department's complimentary stall and created awareness about the Plastic Technology course.

Aryan Raiyani, Jaimie Shah, Niket Vaishnav, Vardhman Solanki, Parth Parmar- students of Semester-V of Electrical Engineering and Mentored by Dr. K. A. Bhatt along with Prof. F. A. Makwan participated in grand finale of SIH 2024, at MIT, Pune during 10th to 15th December

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# PROFESSIONAL DEVELOPMENT

### Industrial Training in Various Sectors

### Macro Polymers Pvt. Ltd.

Dr. T. S. Rajaraman

Underwent Industrial Training at Macro Polymers Pvt. Ltd for 2 weeks in Ahmedabad.

Prof. Gnanu G. Bhatt and Prof. Hetal Shah

Participated in Industrial Training at Macro Polymers Pvt. Ltd. from 2nd to 14th December 2024.

### • Meghmani Organics Pvt. Ltd.

Prof. Y.S. Rami, Prof. A.S. Kuhikar, Prof. C.S. Patel, and Prof. Vishwa V. Shah

Participated in Industrial Training at Meghmani Organics Pvt. Ltd., Ankleshwar, from 4th to 16th November 2024.

Prof. Bina B. Patel

Participated in Industrial Training at Meghmani Organics Pvt. Ltd., Vatva, Ahmedabad, from 15th to 29th July 2024.

Prof. D.P. Shah

Participated in Industrial Training at Meghmani Organics Pvt. Ltd., Vatva, Ahmedabad, from 29th July to 10th August 2024.

### **Train the Trainer Programs**

### Electric and Hybrid Vehicles

Prof. R. J. Choube

Participated in the Train the Trainer Program on Electric and Hybrid Vehicles from 16th to 20th December 2024 at IACE, Gandhinagar.

### NEP 2020

Prof. R. J. Choube

Participated in the Train the Trainer Program on NEP 2020 from 14th to 18th October 2024 at CTE, Gandhinagar and NITTTR, Chandigarh.

### **Nurturing Future Leadership Programs**

- Dr. P. H. Rana and Dr. S. A. Amin Attended a 5-day Nurturing Future Leadership Program at IIM Shillong.
- Dr. S. M. Dutta

Attended a 5-day Nurturing Future Leadership Program at IIM Raipur.

Prof. Huma Sved and Prof. Y.M. Gaiera

Attended a 5-day Nurturing Future Leadership Program at IIM Kashipur from 21st to 25th October 2024.

Dr. Manish Thakker

Attended a 5-day Nurturing Future Leadership Program at IIM Shillong from 25th to 29th November 2024.

• Dr. Dipesh Makwana

Attended a 5-day Nurturing Future Leadership Program at IIM Udaipur from 18th to 22nd November 2024.

# PROFESSIONAL DEVELOPMENT

### **Seminars and Conferences**

### Advanced Version of SolidWorks

Prof. H. P. Patel, Prof. G. N. Sutaria, and Dr. A. G. Momin

Participated in a seminar on the Advanced version of SolidWorks on SolidWorks Innovation Day at Hotel Novotel, Ahmedabad, on 15th October 2024.

### • Kahat Cartoon - Engineering Seminar

Dr. A. G. Momin

Organized a Kahat Cartoon – Engineering seminar with Shri Birenbhai Kothari on 18th October 2024 at Aryabhatt Hall, LDCE.

### Grand Engineering Expo 2024

Dr. A. G. Momin and Prof. S.B. Shah

Attended on 23rd December 2024 at GMDC Ground, Ahmedabad.

### Medical Textiles

Dr. D.V. Bihola, Prof. H.J. Jaiswal, and Dr. S.K. Parmar

Participated in a One-Day Capsule Course on Medical Textiles on 14th November 2024 at Manak Bhawan, BIS, New Delhi.

### • Strategic Leadership Conclave

Dr. J.R. Iyer

Participated in the Strategic Leadership Conclave organized by GTU on 21st October 2024 for Principals on NEP and Innovation for Technical Institutes.

### **Webinars**

### Introduction to LaTeX

Dr. Nisha V. Bora

Conducted an online webinar on "Introduction to LATEX" on 17th November 2024 at Government Engineering College, Dahod.

### Blockchain Technology

Prof. R.Y. Modan

Attended a Blockchain Webinar on 31st December 2024 organized by KCG.

### Fundamentals of Rubber Additives

Prof. Aanal D. Bhatt and Prof. Bhakti Patel

Attended a Webinar on the Fundamentals of Additives and Compounding Ingredients of Rubber on 7th October 2024.

### Outcome-Based Education & AI in Teaching

Prof. Sunil Padhiyar

Participated in a National Level Online FDP on Outcome-Based Education and the Application of Generative AI in Teaching and Research from 17th to 24th October 2024 organized by St. Mary's College, Thrissur, Kerala.

# PROFESSIONAL DEVELOPMENT

### **Workshops and Hands-on Training**

### COMSOL Multiphysics Software

Dr. T. S. Rajaraman, Prof. P. B. Patel, and Prof. Nikita J. Ambegaonkar Attended a COMSOL Day workshop on COMSOL Multiphysics Software at Renaissance Hotel, Ahmedabad.

### • Impact of Inverter-Based Resources on Power Systems

Prof. K.P. Badgujar

Participated in a workshop on the Impact of Inverter-Based Resources on Power Systems from 4th to 5th November 2024 at IIT Bombay.

### Effective Implementation of NEP 2020

Prof. N.V. Sinha

Participated in a 5-Day STTP on the Effective Implementation of NEP 2020 from 14th to 18th October 2024 at VSK, Gandhinagar.

### • Electrical and Hybrid Vehicles

Prof. M.R. Vasavada

Participated in a 5-Day STTP on Electrical Vehicle & Hybrid Vehicle from 16th to 20th December 2024 at i-ACE Training Centre, Gandhinagar.

### • Design Thinking

Prof. S.M. Patel

Participated in a 5-Day STTP on Design Thinking from 7th to 11th October 2024 at GTU, Ahmedabad.

### Hands-on Workshop for Differential Scanning Calorimetry

Dr. R.N. Desai, Prof. Aanal D. Bhatt, Prof. Bhakti Patel, Prof. Sunil Padhiyar,

Prof. Gnanu G. Bhatt, and Prof. R.Y. Modan

Participated in a Hands-on Workshop for Differential Scanning Calorimetry on 24th October 2024.

### Technical Training on Laboratory Equipment

Prof. Kintu Jain, Prof. Stuti Shah, and Prof. Hetal Shah

Participated in a One-Day Technical Training for Tapped Density Meter and Cloud & Pour Point Apparatus on 26th November 2024.

### **Industrial Visits**

### • Sabarmati Bullet Train Station Visit

Prof. Mitul M. Makwana, Prof. R.O. Paliwal, Prof. H. P. Patel, Prof. G. N. Sutaria, and Prof. K.A. Patel

Visited the Sabarmati Bullet Train station during Vikas Saptah on 14th October 2024.

### • PLEXPO India - International Plastic & Packaging Exhibition

Prof. Hetal Shah

Visited PLEXPO India-International Plastic & Packaging Exhibition from 6th to 9th December 2024 at Helipad Ground, Gandhinagar.

# PAPER PUBLICATION

### **Scopus Indexed Papers**

- Dr. Vimal R Patel "Stoichiometric thermodynamic equilibrium models for downdraft gasifiers: a review" Journal: Paliva (Fuels), 1<sup>ST</sup> October 2024
- Dr. Vimal R Patel, Dr. Mazar Shaikh "Development of novel thermal storage integrated pasteurizer for solar milk pasteurization system" Journal: Applied Thermal Engineering, ELSEVIER, December 2024
- $\bullet$  Dr. P. H. Rana "Microwave-assisted pyrolysis of low-density polyethylene (LDPE) to value-added products over HY, HZSM-5 and H $\beta$  catalyst" Journal: Materials Today Communication Journal, December 2024
- Prof. Rakesh Bhavsar, Dr. Madhavi Dave, Dr. Pooja Shah, Dr. Hetal A. Joshiyara, Chintan Patel "Enhancing Data Security in Banking: The Power of Hybrid Algorithm-Based Solutions" Journal: Journal of Electrical Systems, 20(10s), 1093-1102.
- Prof. Ketan Lad "Optical sensor based continuous blood glucose estimation using lightweight distributed architecture" Journal: SN Computer Science, October 2024
- Prof. S.M. Patel, Prof. M.I. Siddiqui, Prof. D.R. Patel "UPQC-S, A Frontline Deployable Power Line Solution for Holistic Power" Journal: Journal of Engineering and Technology for Industrial Applications (JETIA)

### **Non-Scopus Papers**

• "A Novel Approach to the Design and Development of a C-Core Sandwich Type Radial Field Switched Reluctance Motor with On-Shaft Implementation in EV Application"

Dr. J.K. Chavda

### **Paper Presentations**

- Prof. Anjum Mirza "Performance Evaluation of Multimodal Transportation". Presented at: IMRC IIMA, IIM Ahmedabad, December 2024
- Dr. Apexa B Dharankar "Bridging Cultures: A Comparative study of Dhruv Bhatt's Tattvamasi in translation" Presented at: Two-Day International Conference on "Exploring the Literary Space as a Bridge Across Disciplines," organized by the Department of English, Government College, Una, Himachal Pradesh, 15th-16th November 2024
- Prof. Huma S. Syed "Feasibility of Electrolytic Treatment for Hardness Reduction from Cooling Tower Blowdown Water" . Presented at: International Conference on Environmental Science & Technology (ICEST), SVNIT, Surat, India, 19<sup>th</sup> to 21th December 2024
- Prof. Dimpi Shah "Estimation of Air Pollutants Emitted from Municipal Solid Waste Management Strategies through Modeling Approach: A Case study of Ahmedabad City" .Presented at: International Conference on Environmental Science & Technology (ICEST), SVNIT, Surat, India, 19th to 21th December 2024
- Prof. Amruta Kuhikar "Desorption of Pesticide Industry Pollutants from Activated Carbon by Electro-oxidation Process" .Presented at: International Conference on Environmental Science & Technology (ICEST), SVNIT, Surat, India, 19th to 21th December 2024
- Prof. Vishwa Vraj Shah "Optimization study of cotton stalk derived biochar for removal of COD from simulated textile effluent using RSM" .Presented at: International Conference on Environmental Science & Technology (ICEST), SVNIT, Surat, India, 19th to 21th December 2024

# SPORTS ACHIEVEMENTS



Mohil Shah (2017 pass-out) donated books to the Electrical Engineering Department Library at L.D. College Engineering, of contributing to the enrichment of the department's resources.

Dr. Hetal Pandya claimed the title of Winner in the Women's Doubles category at GECTGOA Invitational Badminton Tournament, organized by the GEC Bhuj Local Unit.

Ghyanmayeeba Jadeja (5th EC) received a certificate in the toppers category at the DMIT awards for Semester 1. Additionally, she made significant contributions during the Teacher's Day celebration by distributing plant seeds to the teachers of the college.

Jay Champaneri (5th EC) participated in and was selected for the All India Inter University Yogasan (Men & Women) Championship 2024-25, held at KIIT, Bhuvaneshwar, Odisha, from 24th December to 28th December 2024.

### Disha Solanki (7th EC):

- Shared valuable insights during the "Generations Together" event organized by HelpAge India and LEO Club Ahmedabad Host LDCE on 1st October 2024 at AMA.
- Participated in a health checkup camp for sanitation workers organized by LEO Club Ahmedabad Host LDCE and Lions Club of Ahmedabad Host Main in collaboration with Bharat Vikas Parishad, Ghatlodiya Area at the Municipal Corporation, Ranip.
- Was invited as an anchor for an event organized by PHA INTERNATIONAL, an NGO working for specially-abled persons, where IPS Safin Hasan was the Chief Guest. She also conducted a workshop on teamwork, leadership, and personality enhancement for the team members of LEO Club.
- Led a team in collecting donations and distributing items to the needy during the Garage Sale held on 20th October 2024 at Samarpan Party Plot.
- Participated in the Quality Walkathon organized by BIS on the theme "Viksit Bharat @ 2047" at Riverfront, Ahmedabad.
- Was selected as a member of the organizing committee for the BRICS Educational Expedition, a
  first-time event in India, where she engaged in youth development sessions hosted by Russian
  counterparts.
- Is part of the Ekal Yuva Team of Ahmedabad, working for the education of tribal children. She
  participated in a service activity at the Labour Colony of Adani Shantigram, where she taught
  core values of Hindu culture to the children and interacted with the laborers to understand their
  lifestyle and struggles.

# WOMEN DEVELOPMENT CELL

In line with AICTE rules and regulations, the ICC cell of LDCE conducted an awareness campaign to eliminate gender-based violence during November and December 2024. As part of this initiative, permanent flex banners, posters, and committee orders were prominently displayed across the institute. These were strategically placed at key locations, including the 16 departmental buildings, canteen, central library, reading room, ladies' rooms, student notice boards, college gate, girls' hostel, and other prominent areas on campus.

"AWARENESS CAMPAIGN FOR ELIMINATING GENDER BASED VIOLENCE"

BANNER OF "PREVENTION OF SEXUAL HARASSMENT"

Dr. R.N. Desai and Prof. Bhakti Patel organized an expert session on Breast Cancer Awareness in collaboration with Neuberg Diagnostics, specifically for female faculty members and female students at L.D. College of Engineering on 15th October 2024 at Aryabhatt Hall. Dr. Exkavala Chandarana and Dr. Kunjal Patel delivered the session.



Dr. R.N. Desai and Prof. Anal D. Bhatt arranged an expert session on Intimate Hygiene for female faculty members and female students of L.D. College of Engineering on 22nd October 2024 at the Annexe Building. Mrs. Neela Patni was the session speaker.

# **NCC & NSS**

### **Cleaning Drive**

On 1st October 2024, 15 cadets from the NCC LDCE and NSS LDCE participated in a Swachata hi Sewa Cleaning Drive at the 1 GUJ CTC NCC Unit LDCE & NSS LDCE. The cadets volunteered to clean their environment by cleaning the NCC and NSS units at LDCE.

### Vibrant Gujarat

On 3rd October 2024, 7 cadets from NCC LDCE attended the Vibrant Gujarat Event at Shahibaug, Ahmedabad, where the Honourable Home Minister Shri Amit Shah was the chief guest. The cadets had the opportunity to meet and engage in the event.

### **NCC Day**

On 24th November 2024, 25 cadets from the 1 GUJ CTC NCC Unit LDCE celebrated NCC Day by participating in a marathon held at Riverfront, Ahmedabad.

### **Armed Forces Flag Day**

On 7th December 2024, 124 cadets from the 1 GUJ CTC NCC celebrated Armed Forces Flag Day with great enthusiasm.

### International Day of Older Persons

On 1st October 2024, 10 cadets from the NCC LDCE visited an Old Age Home at the Ahmedabad Management Association. The cadets spent quality time with the senior citizens and contributed to their well-being.

### Pre-Republic Day NSS Parade Camp

From 12th to 21st November 2024, Sakshi Gelotar, an NSS Volunteer, participated in the West Zone Pre-Republic Day NSS Parade Camp 2024 at North Maharashtra University (KBCNMU), Jalgaon.

### **Blood Donation**

On 30th November 2024, 10 cadets from L.D. College of Engineering participated in a Blood Donation Program organized on the occasion of the 80th birthday of the founder of Divya Bhaskar.

### Blood Donation, Shatabdi Bhavan

On 28th December 2024, 2 cadets from the SW cadet division participated in a Blood Donation Drive organized by the Red Cross Society, Shatabdi Bhavan, contributing to the noble cause of blood donation.





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