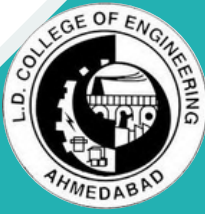


# L.D. COLLEGE OF ENGINEERING



TECHPULSE  
JULY-SEPTEMBER  
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

The Mathematics Challenge 2024, organized by the Science and Humanities Department of LD Engineering College, Ahmedabad, featured 26 teams from 16 colleges across Gujarat. Each team consisted of three students, competing in three rounds that assessed problem-solving and analytical skills.

Under the guidance of Principal Dr. Nilay Bhupatani and organized by Dr. Sanjay Patel and his team, the event received support from the Gujarat Mathematics Society. LD Engineering College's team—Mayank Mohata, Mihir Bhogayta, and Maharshi Vyas—won the competition, while VVP Rajkot's team—Parmar Bhumi, Akshada Shah, and Rathod Rithvi—finished as runners-up.

Both the teams received trophies, cash prizes, and five-year memberships from the Gujarat Mathematics Association, and all participants were awarded certificates.

## એલ.ડી.કોલેજ એન્જિનિયરિંગમાં ઇન્ટર કોલેજ કોમ્પિટિશન યોજાશે

એલ.ડી.કોલેજ ઓફ એન્જિનિયરિંગના સાયન્સ એન્ડ હુમનિટી ડિપાર્ટમેન્ટ અને ગુજરાત ગણિત મંડળની મદદથી ૨૧ સપ્ટેમ્બર 'મેથેમેટિક્સ ચેલેન્જ ૨૦૨૪' ઇન્ટર કોલેજ કોમ્પિટિશનનું આયોજન કરાશે. ઇન્ટર કોલેજ કોમ્પિટિશનમાં ગુજરાતની ૧૬ જેટલી કોલેજના સ્ટુડન્ટ મેથેમેટિક્સ ચેલેન્જમાં આપેલા પ્રોબ્લેમનું સોલ્યુશન કરશે. ચેલેન્જ વિજેતા બનેલા વિદ્યાર્થીઓને પ્રોત્સાહિત કરાશે.



Team LDCE Motorsports have designed and developed Go-kart racing vehicles for national level competition FKDC, which was held during 18th to 24th October 2024 Coimbatore. This vehicle was unveiled by the principal on 18th September 2024.



# DEPARTMENT ACTIVITIES

At Information Technology department an Expert Session on Cloud Computing for ME and MCA Semester III students was held on 26 September 2024 and 30 September 2024, in Room 2012 of the Annexe Building. Organized by Prof. Bakul Panchal, Dr. Shital Solanki, and student coordinator Bhavin Dabhi, the session featured Mr. Ahmed Abuamer, a DevOps Engineer at Ventum Global in Berlin. With over eight years of experience in Software Engineering focused on AI/ML, DevOps, and AWS Cloud, Mr. Abuamer has been with Ventum Global for three years. A total of 27 students attended.



At the Information Technology department, a two-day workshop titled "Unlocking the Secrets of Cybersecurity" was organized by Dr. Purvi Ramanuj and Dr. Kuntesh Jani under the Cyber Force Club on 12 September 2024 - 13 September 2024, at Room 4001, Annexe Building, L.D. College of Engineering. The workshop was open to students from all semesters, and 74 students participated, gaining valuable insights into cybersecurity.



The Environmental Engineering Department has organized an expert talk by Avani Joshi on "Sustainability" dated 01 August 2024 for UG students. Total 81 students attended the expert talk.



The Electronic & Communication department, along with the Institute of Electronics and Telecommunication Engineering (IETE), organized an orientation program at Bhaskaracharya Hall on 13 August 2024 and attracted over 200 students. The event aimed to welcome new students and familiarize them with the club's mission and activities.



# DEPARTMENT ACTIVITIES



Prof. Bina Patel and Prof. Vishwa Shah have organized an expert lecture by Mr. Jay Bhatt, Director, ISKCON Youth Forum (Ahmedabad) on "Universal Human Values" dated 06 September 2024 for newly admitted UG students of Environmental Engineering department.

A Renewable Energy Reinvest Seminar was held at Mahatma Mandir, Gandhinagar, on 18 September 2024. The event was attended by 127 students and 67 faculty members, focusing on advancements in renewable energy technologies, investment opportunities, and sustainable development strategies.



Royal Charter Day was celebrated on 09 September 2024, with the theme "India's Future: The Rise of Smart Townships." Jointly organized by The Institution of Engineers (India) Gujarat State Centre and L.D. College of Engineering, Ahmedabad, the event featured Shri N.K. Patel, President of ITPI and Chairman of Sun Builders, as the Chief Guest. Dr. Vatsal Patel, an Urban Planner and former president of GICEA, served as the Guest of Honor. Shri N.K. Patel delivered an engaging talk on the theme.

BIS Technical Sessions on the following topics such as  
(1) Standardization  
(2) Standards Formulation Process and Challenges  
(3) World of Standards  
was arranged for about 200 students from different departments of LDCE. The session was delivered by the Expert: Mr. Nitish Kumar Verma, Joint Director, BIS, on 09 August 2024 at Vishvakarma Hall, Civil Engineering Department. The entire program was coordinated by Prof. Ashwin G. Hansora.





# DEPARTMENT ACTIVITIES



Forbes Marshall, under its CSR activity, generously donated two Industrial Control Valves to the Instrumentation and Control Engineering Department of LDCE. The department expresses its heartfelt gratitude to Mr. Kiran Vora and the entire Forbes Marshall team for their valuable contribution. On 19 September 2024, Mr. Siddharth Bhavsar, a former employee of Forbes Marshall, delivered an insightful session on "Control Valve and Its Industrial Applications".



An initiative from Electrical Engineering department with Prof. Mitul Patel conducted a lab session on 13 August 2024 at the Bosch Training Center as part of the IIC Mentor Mentee program aiming at providing valuable insights and practical knowledge to students from four different government engineering and polytechnic colleges.



On 06 August 2024, Taral Shah, a Senior Software Engineer at Apple Inc. and LDCE alumnus, led a seminar titled "My Tech Journey" at the Computer Engineering Department. The event aimed to inspire students with career advice and insights into technological advancements and real-world software engineering practices.

An expert lecture on "GDCR (General Development Control Regulations) and RERA" was held on 03 August 2024, at Vishveshwarya Hall for B.E. Civil Sem V, VII, and M.E. Civil (Structural and Geotechnical Engineering) students. The session aimed to inform attendees about the practical applications of GDCR guidelines, zoning regulations, sustainable urban design, and the RERA Act. Shri Jay Dhandukiya (Town Development Officer) and his team, including Mr. Minesh Tripathi and Mr. Darshan Sanghvi, delivered the talks. The session concluded with a Q&A from students and was coordinated by Major Dr. C.S. Sanghvi, Prof. Ashwin G. Hansora, and Prof. Poonam I. Modi.

# DEPARTMENT ACTIVITIES



An expert session on "Indian Philosophical System" was held on 12 July 2024, for Batch 2024 Civil and Mechanical Engineering students. Dr. Bhoomi Vamja from Bhavan's College delivered insights into the topic. The session, part of the Induction Program in line with NEP, was coordinated by Prof. Poonam I. Modi and Prof. Mahendra Patil.

The Rubber Technology Department arranged placements for BE Rubber Technology students with IRM Offshore & Marine Engineers Pvt Ltd on 12 August 2024, and Raychem RPG Pvt Ltd on 13 August 2024.

Dr. R. N. Desai organized an expert talk on "Advanced Rubber Equipments and Instruments" for UG Rubber Technology students on 5 August 2024, delivered by Mr. Atul Shah, Director of Pioneer Rubber Industries. Additionally, on 12 August 2024, the Rubber Technology Department hosted a session on employment opportunities in the rubber industry, led by Mr. Pankaj Bagora, Technical Head at Rubber King, which was attended by faculty members.

Awareness talk regarding WDC and ICC was organized for the newly admitted first year and D2D girl students of textile department on 10 September 2024. Prof. S.J. Parapuram, Prof. P.M. Mistry and Prof. K.J. Ponda coordinated the session.

First-year students of the Chemical Engineering Department visited Gandhi Ashram, Ahmedabad, as part of the Induction Program on 06 July 2024





# INDUSTRY INTERACTION

On 14th August 2024, the Information Technology Department organized an industry visit to eSparkBiz for 3rd-semester students, providing valuable insights into the software development industry. Additionally, Prof. Vidisha Thakkar and Prof. Nirjari Desai accompanied 65 first-year students on a visit to the Physical Research Laboratory, where they explored cutting-edge research facilities. Prof. Swati Patel also facilitated an online interaction with Mr. Jigar Shah, CEO of ENDEL Digital, for 15 students working on ongoing projects, supported by faculty members.



On 13th August 2024, eleven Environmental Engineering students and Prof. Huma Syed attended a workshop on "Biofuel and Bio-energy" organized by PDEU, Gandhinagar. Additionally, from 6th to 9th of September 2024, 65 UG students from the Environmental Engineering department participated in a four-day workshop on "Green Hydrogen" at GTU.



The Applied Mechanics Department organized two visits for ME Sem-III (Structure & Geo-tech) students: one to IIT-Gandhinagar on 9th August 2024, with 30 participants, coordinated by Prof. Dr. Manish V. Shah, Prof. Payal H. Andhariya, and Prof. Dr. Y.J. Chauhan, and another to the L&T Skill Centre on 3rd August 2024, also with 30 participants, coordinated by Prof. Dr. Y.J. Chauhan.





# INDUSTRY INTERACTION

From 1st to 15th of July 2024, Dr. D.V. Bihola, Prof. P.M. Mistry, Prof. H.J. Jaiswal, Dr. S.K. Parmar, and Prof. K.J. Ponda from the Textile Department underwent industrial training at Ankur Textiles (a division of Arvind Ltd.) in Ahmedabad. They also coordinated industrial visits for final-year students to Ankur Textiles, KomalTexfab, ATIRA, and Arvind Santej throughout July 2024.

Nine students from the Chemical Engineering Department participated in SEMICON India 2024, held on 11th to 13th September 2024 at India Exposition Centre & Mart, Greater Noida, Uttar Pradesh, India.



BE Semester 6 Chemical Engineering students visited Zydus Life Sciences Ltd. in Ankleshwar on 29th June 2024. Additionally, 20 students completed a one-week training on the "Manufacturing Process of Ceramic Tiles" at the Central Glass and Ceramic Research Institute in Naroda, Ahmedabad, from 9th to 13th September 2024.



Industrial visit at Zydus Life sciences Ltd., Ankleshwar training "Manufacturing process of ceramic tiles" at central glass and ceramic research institute, Naroda, Ahmedabad.

# INDUSTRY INTERACTION

The Plastic Technology Department organized several activities, including an industrial visit for 5th and 7th semester students to Naroto Industries and Ravi Plastics on 2nd August 2024, accompanied by Prof. Kintu Jain. They also arranged a visit to the L.D. Indology Museum for newly admitted students on 13th July 2024, led by Prof. Stuti Shah. Additionally, an expert lecture on "Thermoplastic Composites" was held on 30th August 2024, featuring Dr. Pradeep Bakshi as the speaker.



The Rubber Technology Department conducted several events, including a technical guidance session for BE VII students with Ceat Tyres on 12th July 2024, attended by 7 participants and coordinated by Prof. Rupande N. Desai. A technical talk was held on 9th August 2024, with Mitsufuku Compound Pvt Ltd for M.E. II students, involving 10 participants and coordinated by Prof. Bhakti Patel and Prof. Sunil Padhiyar. Another technical talk for BE VII students with Specialty Silica Pvt Ltd took place on 10th September, 2024, with 20 participants, coordinated by Prof. Sunil Padhiyar.



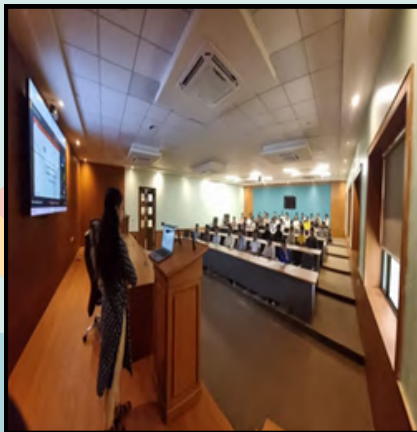
The Chemical Engineering Department organized an expert talk on "Energy Transmission Scenario" on 6th May 2024, by Dr. Alok Sharma, Director (R&D) at Indian Oil Corporation Ltd. Additionally, a joint lecture titled "Expanding Career Horizons: The Significance of Process Safety in Chemical Engineering" featured speakers Mr. Vidiyala Ravi from PI Industries, Mr. Umesh Dhake from CCPS, USA, and Ms. Anusha Vyas from GIDM.



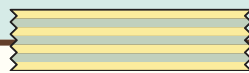
# INDUSTRY INTERACTION



Expert talk on Energy Transmission Scenario




Expert lecture on Expanding Career Horizon: The significance of Process Safety in Chemical Engineering



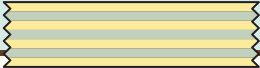
The Computer Department held a seminar titled "Stay Safe Online: Cyber Awareness for Future Engineers" on 7th August 2024, at Dr. Homi Bhabha Hall. Led by Liza Vanjani from AMLEGALS, the discussion covered digital identity protection, cyber laws, and the impact of AI and FinTech on cybersecurity, providing attendees with essential online safety tips.



# INDUSTRY INTERACTION



An expert lecture titled "Research trends in the field of Chemical Engineering" was organized on 30th September, 2024. The lecture was delivered by Dr. Nitin Padhiyar, Professor in Chemical Engineering from IIT-Gandhinagar.



On 5th August 2024, the Electrical Department hosted an expert talk on "Application of Controlled Switching for Transmission Lines," delivered by Dr. Urmil Parikh from Hitachi Energy. The event was attended by 30 Semester 7 students and coordinated by Dr. K.A. Bhatt.



## THESIS AND DISSERTATION

**22 Post-graduate** students from Mechanical Department, IC Department, and Automobile Department researched various subjects as a part of their thesis and dissertation under the guidance of different PhD holding professors.



The subjects included cryonic devices, deployable space telescope, linear aquation system for space applications, multispectral camera, polarization camera, electric vehicles, gearbox design for Hyundai i20 to convert it into an electric car, Integrated Dewar Cooler Assembly (IDCA), rhombic drive cooling engines, pressure swing adsorption process, and structural model of nano OCM payload.



# FACULTY ACHIEVEMENT

## Prof. A.G. Momin

He successfully defended his Ph.D. in July 2024 under the guidance of Dr. B.C. Khatri and Dr. M.D. Chaudhari in the Mechanical Department.

## Prof. Dr. Y.J. Chauhan

He successfully defended his Ph.D. in Civil Engineering titled "Dynamic Analyses of Offshore Triceratops Subjected to Hurricane-driven Metocean Conditions," under the supervision of Dr. B.J. Shah and Dr. Srinivasan Chandrasekaran.

## Prof. Dr. Poonam I. Modi

She successfully defended her Ph.D. on "Development of Sustainable Construction Unit using Sandstone Dust" from Gujarat Technological University under Dr. Rajul K. Gajjar.

## Prof. S.K. Parmar

He successfully defended his Ph.D. in Textile Technology.

## Prof. Gnanu Bhatt

He received a patent from the Patent Office, Government of India, for "Method for Detecting Density of Open Cellular Hydrophilic Porous Material Without Porosity," co-authored with D.R.Patel, S.R.Chauhan, and D.B. Soni.

## Prof. Dr. Y.J. Chauhan

He reviewed two research articles for Ocean Engineering (Q1) and 3 for International Journals of Steel Structures (Q2).

## Dr. Chirag S. Thaker

He delivered a session on innovative approaches to disease treatment at a national seminar sponsored by GSBTM and DST on 6th September 2024, at Parul University.

## Prof. Stuti Shah

She presented an expert lecture on "Plastics Recycling and Waste Management" during an online short-term course organized by CIPET CSTS Aurangabad on 13th September 2024.

## Prof. Gnanu Bhatt

He guided Mualik Chauhan and his team in the Internal Hackathon for SIH 2024, with their team selected for the next round.

## Dr. Manish Thakker

He was honored by GTU on Teacher's Day for his contributions as a jury member in the Tech Guru Award 2024.

## Prof. Swati Saraswat

She received a Certificate of Appreciation from the Indian Society of Heating, Refrigerating and Air Conditioning Engineers (ISHRAE) on 10th August 2024, for her role as Faculty Advisor to the ISHRAE Student Chapter for the 2023-24 society year.

## Prof. M.K. Vyas Prof. K.A. Patel

They coordinated expert sessions on "Preaching Bhagavad Gita," delivered by Mr. Aakash Patel on 9th September 2024.

## Industrial Training in Various Sectors

- **MRB Forge & Fittings LLP**

Prof. G. N. Sutaria, Dr. A. G. Momin, and Dr. M. D. Chaudhari completed industrial training from 15th July 2024 to 29th July 2024 at MRB Forge & Fittings LLP, Kadi, Mehsana.

- **Metro Rail Project sites**

Prof. C. D. Patel and Prof. B. R. Patel completed industrial training at Metro Rail Project sites under Ranjit Buildcon Ltd. in Ahmedabad from 8th July 2024 to 20th July 2024.

- **SCC Infrastructure Pvt. Ltd.**

Prof. Poonam I. Modi completed industrial training at SCC Infrastructure Pvt. Ltd. in Ahmedabad from 24th June 2024 to 6th July 2024.

- **Akshar Chem (India) Limited**

Dr. T. S. Rajaraman, Dr. R. R. Patel, Prof. P. B. Patel, and Prof. N. J. Amnegaonkar completed two weeks of industrial training at Akshar Chem (India) Limited in Mehsana.

- **NCC Limited**

Prof. Yogesh J. Chauhan completed two weeks of industrial training at NCC Limited in Ahmedabad from 24th June 2024 to 6th July 2024.

- **MaRS Planning Engineering Services Pvt. Ltd.**

Prof. Yogesh J. Chauhan completed two weeks of industrial training at MaRS Planning Engineering Services Pvt. Ltd. in Ahmedabad from 15th July 2024 to 28th July 2024.

- **Kalthia Engineering and Construction Limited**

Payal H. Andharia completed industrial training at Kalthia Engineering and Construction Limited in GIFT City, Gandhinagar from 15th July 2024 to 27th July 2024.

- **Silver Touch**

Dr. Purvi Ramanuj, Dr. Kuntesh Jani, and Prof. Swati Jignesh Patel completed two weeks of industrial training on "Information Technologies and Project Management" at Silver Touch, Saffron Tower, Ahmedabad from 24th June 2024 to 5th July 2024.

- **Tatvasoft House**

Dr. Kuntesh Jani and Prof. Swati Jignesh Patel completed two weeks of industrial training at Tatvasoft House, Rajpath Club Road, Ahmedabad from 15th July 2024 to 27th July 2024.

Prof. (Dr.) Shital Solanki, Dr. Mital Panchal, and Prof. Alka Patel completed two weeks of industrial training at Tatvasoft House, Rajpath Club Road, Ahmedabad from 1st July 2024 to 12th July 2024.

- **Meghmani Organics Ltd**

Prof. P. S. Patel, Prof. S. H. Bhatt, Dr. Anjali Bishnoi, Dr. P. B. Shukla, Dr. H. N. Pandya and Dr. R. P. Bhatt completed two weeks of industrial training at Meghmani Organics Ltd., Vatva, Ahmedabad.





## Industrial Training in Various Sectors

- **Milacron India Pvt. Ltd.**

Prof. Kintu Jain, Prof. Hetal Shah, and Prof. Stuti Shah completed two weeks of industrial training at Milacron India Pvt. Ltd.

- **KLOCKNER DESMA Machinery Pvt. Ltd**

Prof. Anal D. Bhatt and Prof. Sunil Padhiyar attended two weeks of industrial training in Injection Mold and Machinery Design at KLOCKNER DESMA Machinery Pvt. Ltd. from 1st July 2024 to 15th July 2024.

Prof. Bhakti Patel and Prof. Gnanu Bhatt attended two weeks of industrial training in Injection Mod and Machinery Design at KLOCKNER DESMA Machinery Pvt. Ltd. from 15th July 2024 to 30th July 2024.

## Webinar Participations

- **Design parameters of molded rubber**

Prof. Gnanu Bhatt participated in a one-day webinar on "Design parameters of molded rubber products, closure and relative dimensions, static and dynamic load deflection, shrinkage, and blooming" held on 7th July 2024, online via Microsoft Teams from 3:00 to 5:00 PM.

- **Useful properties of thermoset rubbers**

Prof. Gnanu Bhatt participated in a one-day webinar on "Useful properties of thermoset rubbers for compounding and technical application" held on 21st September 2024, online via Microsoft Teams from 7:00 to 9:15 PM.

- **Materials for energy and environmental applications**

Prof. R. Y. Modan participated in a one-day webinar on "Materials for energy and environmental applications" held on 21st September 2024, online via Wiley.

- **Modeling and simulation of property-structure-manufacturing relationships**

Prof. R. Y. Modan participated in a one-day webinar on "Modeling and simulation of property-structure-manufacturing relationships" held on 28th September 2024, online via Wiley.



## Conferences, Seminars, and Symposiums

- **ANSYS Innovation Conference**

Dr. A. V. Patel, Prof. H. P. Patel, Prof. P. C. Sheth, Dr. B. K. Patel, Dr. Darshit Shah, Prof. G. N. Sutaria and Dr. A. G. Momin attended on 30th August 2024 at Novotel Hotel, Ahmedabad.

- **Evolution Driving the Future through Electric Vehicle Technology Seminar**

Dr. Nisha Bora attended a seminar on "Evolution Driving the Future through Electric Vehicle Technology" on 30th August 2024 at Ahmedabad Management Association.

- **4th Global Renewable Energy Investors' Meet and Expo**

All Mechanical Department staff members attended the 4th Global Renewable Energy Investors's Meet and Expo (RE-INVEST) on 17th September 2024 at Mahatma Mandir, Gandhinagar.

- **Symposium on Jute Fibers**

Dr. Komal Dave, Dr. Nisha Bora, Prof. H. P. Patel, Prof. G. N. Sutaria, Dr. A. G. Momin, Dr. D. V. Bihola, Prof. P. M. Mistry, Prof. H. J. Jaiswal, and Prof. K. J. Ponda attended the National Symposium on Jute Fibres: Sustainable Solutions through Technological Advancements organized by the National Jute Board and ATIRA on 18th September 2024 at AMA, Ahmedabad

- **ASME Engineering Education Seminar**

Dr. V. B. Patel, Dr. Komal Dave, Dr. Nisha Bora, Dr. P. R. Rathod, Dr. S. S. Pathan, Prof. H. P. Patel, Prof. G. N. Sutaria, and Prof. M. D. Chaudhari attended the ASME Engineering Education Seminar on "Empowering Next Generation Engineers" on 23rd September 2024 at Gujarat Technological University.

- **The circular economy action plan for Gujarat State**

Prof. Anal D. Bhatt participated in a one-day stakeholder workshop on the circular economy action plan for Gujarat State, organized by GPCB in collaboration with GCPC, held on 22nd August 2024 at Narayani Heights, GIDC Bhat, Gandhinagar.

- **Mentor in an expert session**

Prof. Bhakti Patel attended and participated as a mentor in an expert session by Psychologist Dr. Prashant Bhimani, held on 6th September 2024 at Aryabhata Hall, L. D. College of Engineering.





# PAPER PUBLICATION



## Q3 Scopus Indexed

- Experimental Investigation of Emission and Performance Characteristics on Diesel Engine Fueled with Flaxseed Biofuel  
**Prof. Gaurav Sutaria , Prof. Monika Vyas , Prof. Manish Parmar**

## Q4 Scopus Indexed

- Statistical Process Control – A Method for Continuous Quality Improvement  
**Prof. Gaurav N. Sutaria, Prof. Vivek Trivedi, Prof. Vaishali K. Patel**
- Promoting Sustainable Development in MSMEs through the ZED Scheme by the Government of India  
**Prof. Vivek Trivedi, Prof. Gaurav N. Sutaria, Prof. Vaishali K. Patel**
- Photodegradation of Low Density Polyethylene using CaO Nanoparticles as a Catalyst  
**Prof. Sunil Padhiyar**

## Non-Indexed Journals

- Exploring the Synergy: AI and ML in Very Large Scale Integration Design and Manufacturing (BEEI)  
**Sima K. Gonsai**
- Time History Analysis of Hybrid-Outrigger System in Tall Buildings (IJSRD)  
**Prof. D. H. Raval**
- Performance Assessment of PLA-SVM (AIP Publishing)  
**Prof. (Dr.) Shital Solanki , Dr. R.T. Prajapati:**
- Deep Learning Based Automated System for Banana Plant Disease Detection and Classification (International Journal of Next-Generation Computing)  
**Prof. Manoj Patel , Prof. Pradip Patel**
- Unraveling High Chemoselectivity in Oxidative Dehydration of Glycerol into Acrylic Acid (ACS Catalysis)  
**Dr. D. D. Mandaliya**
- Enhancing Data Security in Banking: The Power of Hybrid Algorithm-Based Solutions (Journal of Electrical Systems)  
**Prof. Rakesh Bhavsar**
- Reliability Enhancement of Electrical Distribution Systems Considering Active Distributed Generations (Book Chapters)  
**Dr. K.B. Kela**

## Conference Presentations/Seminars

- Presented on Lignin As a Sustainable Material for Rubber: Enhancing Performance and Reducing Environmental Impact at the IRI seminar.  
**Prof. Sunil Padhiyar**

# STUDENT ACHIEVEMENTS

The Teams from Mechanical Department including Jay Suthar, Halpati Meet, Damor Anjali and Meet Kalpeshkumar Patel (7th semester), Vinay Santoshbhai Gadariya, Bhavya Chirag Panchiwala, and Divy Chetan Shah have been **selected from Level I (Ideation) to Level II (Proof of Concept) in India's biggest Robotics Competition, ROBOFEST-GUJARAT 4.0** and the team has been **recommended for a cash prize of Rs. 50,000/-** under the mentorship of Prof. M K Vyas and Prof. Mitul Makwana respectively.

1

**Nrup Patel** (BE 1st semester IC Department) participated in the **U19 Football Inter-District Tournament** organized by the School Games Federation of India (SGFI).

2

Two teams from Mechanical Department for SIH - one with **vision towards optimal routing** by Divy Shah and team, and the other **Emergency Eagle for rescue operation** with Kushi Singh and team have **cleared round 1** of SIH under the mentorship of Prof M K Vyas.

3

**Krish Brahmbhatt**, (3rd semester IC Department) and his team stood in 3rd position in the Debate competition 'Ignite 2k24 Debate Dynamo' event.  
**Krish Brahmbhatt**, (3rd semester IC Department) won 1st prize in the Triveni National Spell Bee, a spelling competition among students from colleges across Gujarat.

4

**Om Makwana**(3rd semester IC Department) was honored with a **Gold medal** in the **chess competition** at **GTU-SPIRIT-2024**. The zonal event took place at SAL Institute on 3rd August,2024, and the interzonal event at Neotech Institute, Vadodara, on 12th August, 2024.

5

Our final year students' team- Bhatti Mahammasamir, Maharshi Patel, Heta Rajyaguru, and Hiteshree Pindoria, mentored by Prof. M.R. Vasavda, is **shortlisted for Ideation proposal** (in Maze Solving Robot category) from Level I to Level II (Proof of Concept) in **ROBOFEST GUJARAT 4.0** program, and **received prize money** of Rs. 50,000/-.

# STUDENT ACHIEVEMENTS



Computer Engineering Department's student Shaishav Surti, was nominated for India's Top AI/GEN AI Leaders and Achievers by DISAi Magazine. DISAi Magazine is the first GenAI magazine in the world.

- Jesrani Sohankumar Shashikumar secured rank in Institute Top 10 (2nd rank in 2nd semester)
- An Alumni- Mr. Rajnish Tripathi created a world record for the most Michelin-starred restaurants visited in 24 hours in Hongkong, China on 2nd and 3rd August, 2024
- L.D. College of Engineering students team won the GTU Interzonal Volleyball competition for Girls. Ms. Kavita Gohil, Final year student of Textile Technology Department was part of this team that won the competition. She is now selected for the Nationals.

Final year students of the Textile Technology Department who participated and won in the BIS Standard Writing Competition received their prize in July, 2024.

Jayraj Godhani, a final-year student of the Chemical Engineering Department, has been selected as a GET (Graduate Engineer Trainee) at Torrent Power Ltd.

Deep Patel, a final-year student of the Chemical Engineering Department, has been selected as a GET (Graduate Engineer Trainee) at Siemens Energy.

Abhishek Parmar and his team, guided by Prof. Pratik Patel and Prof. Nikita Ambegaonkar under SSIP, received a ₹50,000 grant for their project on extracting and isolating saponin from soapnut.



Visheersha Parmar, a 5th semester BE Computer student, has secured **Second Rank in the Interzonal Chess Tournament for Girls** held at Neotech, Vadodara. This commendable achievement has

earned her a place among the **top 6 players** selected to represent GTU at the **AIU National Level Games in Chess (Girls)**.



# STUDENT ACHIEVEMENTS

Dhavalkumar N. Patel and his team **received a grant** of ₹1,80,000 for their project "Development of an Efficient Catalyst for the Production of 5-HMF, they were guided by Dr. P. H. Rana, Dr. S. A. Amin, and Dr. R. R. Patel, under SSIP.

Prayag Rajput (Electrical) **won the National Powerlifting Championship 2023** in under 62 Weigh category sub JR. 175 kg Deadlift, 125 kg Squat, 85 kg Bench Press.

L. D. College of Engineering Students team **won the GTU Zonal Volleyball Competition for Boys**. Mr. Rushit Sakariya, Final year student of Textile Technology Department was part of this team that won the competition.

Kushang Haria (CE) became the **lead** member of Google Developer Student Club (GDSC).

Mr. Henil Gandhi and Mr. Hardik Rathod (CE) gave the **Demo of Kali linux offensive tools** to 5th semester students.

Parth Savani and Aman Shaikh, UG 2023 batch, Rubber Technology have got **admission in IIT Delhi**.

Dhyan Patel, student of Rubber Technology B.E. 7th semester **visited and attended the Rubber Tech China 2024 Exhibition at Shanghai China** on 19th, 20th and 21st September, 2024.

Maulik Chauhan and Dhruv Patel, Students of M.E II attended a **Technical Seminar organized by AIRIA, Western region, Gujarat Chapter** at Fairfield by Marriott, Ahmedabad on 9th August, 2024.

Godhani Jayraj Nileshbhai, Shabhya Prince, Pansuriya Dhrupan, Pethani Harshil, Vekariya Dixit **participated in "Trash to Treasure Ideation Hackathon, 2023"** in the Crop residues category in the National Level Hackathon, By GPCB.

Foram Singh and Vaidehi Savaliya, students of Chemical Department **represented GTU at State NSS Day** in the Event of Garba.

Jay Shah and Ratnam Shah of Electrical Engineering **won the first prize award** of Rs. 1 Lakh at **Dewang Mehta IT award 2023**.

Maulik Chauhan and his team participated in **Smart India Hackathon 2024** and **won the Internal Hackathon** under the guidance of Prof. Gnanu G. Bhatt.

# STUDENT ACHIEVEMENTS



Synapse HackOut 2024: A team comprising Pankaj Kurmi, Subham Bera, Aman Galoliya, and Ansh Thakkar, excelled at the Synapse HackOut 2024 held at DAIICT from 9th to 11th August, 2024. Competing against over 1,700 participants, they secured **1st prize** for their outstanding project.



Ananya Pandey (Plastic Technology) participated in “IGNITE” Fest organized by PMI Gujarat Chapter Student Club on 12th August, 2024 and was awarded **2nd Position** in Debate Dynamo.

## એલ.ડી. એન્જિનિયરિંગમાં સ્ટુડન્ટ્સની ઈનર ટેલેન્ટને બહાર લાવવા પ્રેરણાદાયી કામગીરી 'ઈનોવેટર ક્લબ' સ્ટુડન્ટ્સના ઓવરઓલ ઈમ્પ્રુવમેન્ટ માટે સતત સાત વર્ષથી કાર્યરત

એલ.ડી. એન્જિનિયરિંગના સ્ટુડન્ટ્સ વિવિધ પ્રકારની એક્ટિવિટી કરી શકે અને પોતાને ગમતાં વિષયનું નોલેજ મેળવી શકે તે માટે 'ઈનોવેટર ક્લબ' ચલાવી રહ્યા છે.

આ અંગે શ્રુપના પ્રેસિડેન્ટ મૌલિક સાથેલાએ કહ્યું કે, 'દરેક કોલેજમાં વિવિધ પ્રકારનાં ક્લબ સ્ટુડન્ટ્સ દ્વારા ચલાવવામાં આવે છે. અમારી ઈનોવેટર ક્લબ એલ.ડી. એન્જિનિયરિંગના ભૂતપૂર્વ વિદ્યાર્થી શેશન રાવલ દ્વારા ૨૦૧૭માં શરૂ કરવામાં આવ્યું હતું. આ ક્લબ અંતર્ગત અમે વિદ્યાર્થીઓને દરેક પ્રકારનું પ્રેક્ટિકલ નોલેજ અને વિવિધ એક્ટિવિટી થકી તેમને ફિલ્ડનો એક્સપિરિયન્સ આપવાનો પ્રયત્ન કરીએ છીએ. અમારા ગ્રુપમાં ૧૦ ડિપાર્ટમેન્ટના ૫૦થી વધારે વિદ્યાર્થીઓ જોડાયેલા છે, જેમને દરેક ડિપાર્ટમેન્ટનું નોલેજ આપવાનું કાર્ય કરીએ છીએ. અમારી કોલેજના સ્ટુડન્ટ્સ માત્ર એક ફિલ્ડ પૂરતા મર્યાદિત ન રહે તેમજ પોતાને ગમતી પ્રવૃત્તિઓ કરી શકે તે માટે અમે સતત



ટ્રેન્ડ, ટેકનોલોજી અને માર્કેટના નોલેજ માટે સતત પ્રવૃત્તિ અમે વીકલી કરન્ટ બાબતો પર ચર્ચા કરી માહિતી આપ-લે કરીએ છીએ. પુસ્તક અને કોલેજની બહારના નવા ઈનોવેશન, ટેકનોલોજી, પદ્ધતિઓ, મશીનરી અને પ્રોગ્રામ્સ અને તેની બનાવટને સમજવાનો પ્રયત્ન કરીએ છીએ, જે અમને અપડેટ રહેવામાં મદદ કરે છે.

કાર્યરત રહીએ છીએ. અમે દર વર્ષે આયોજન કરીએ છીએ. અત્યાર જુદી જુદી ઈવેન્ટ અને વર્કશોપનું સુધીમાં અમે ઈન-ઓ-સ્પાર્ક, બેટલ

ઓફ બ્રેઈન્સ અને કારિયર લોચપેડ જેવી ઈવેન્ટ સંકળતાપૂર્વક પૂર્ણ કરી છે. અમે દરેક ઈવેન્ટ માટે કન્ટેન અને ડોક્લુમેન્ટેશન, ડિઝાઈનિંગ, મેનેજમેન્ટ, માર્કેટિંગ, વેબ, સ્પોન્સર અને સોશિયલ મીડિયા જેવી ટીમમાં ડિવાઈડ થઈને વર્ક કરીએ છીએ. જેનાથી દરેક વિદ્યાર્થીઓને એક્સપોઝર મળે છે અને વિવિધ ફિલ્ડનો એક્સપિરીયન્સ મળે છે.'

The Innovator Club at L.D. Engineering has been active for seven consecutive years,

promoting talent development in various technical and creative fields. With over 70 participants from 10 departments, the club provides continuous training, workshops, and real-life projects to foster holistic development and leadership skills. Successful events such as Innospark, Battle of Brains, and Career Launchpad have been organized to enhance student engagement and innovation.



A Blood Donation Camp was organized at Raj Bhawan, Gandhinagar, where 03 NCC cadets volunteered to donate blood on 15th July 2024.

During the Independence Day Celebration at L. D. College of Engineering, 30 cadets participated in a **Tiranga Rally**, performed a parade, and showcased the Assam Regiment's regimental song on 15th August 2024.

60 cadets visited the Ahmedabad Red Cross Shatabdi Bhavan on 16th August 2024, exploring the blood donation facilities and interacting with Thalassemia patients.

The Leo Club of Ahmedabad Host celebrated **National Grandparents Day** with the residents of Jeevan Sandhya Old Age Home on 8th September 2024, bringing joy to elderly residents. Prof. Swati Patel and students from the Leo Club participated.

53 cadets participated in a Cleaning Drive at L. D. College of Engineering on 1st October 2024, promoting cleanliness in celebration of Gandhi Jayanti.

30 cadets organized an NCC Orientation session at L. D. College of Engineering, Ahmedabad, motivating and informing students about joining NCC, explaining eligibility criteria and the recruitment process on 30th July 2024.

11 cadets participated in an Essay Writing Competition held at Government Polytechnic, Ahmedabad, on 9th August 2024.

A Blood Donation Camp was held at L. D. College of Engineering on 12th September 2024, with 35 cadets volunteering in collaboration with the Indian Red Cross Society.

16 meritorious cadets of the 2nd and 3rd years of L. D. College of Engineering were awarded ranks during a Rank Ceremony at the 1 GUJ CTC NCC Unit on 10th September 2024.

23 cadets attended a Seminar at the Ahmedabad Management Association on 1st October 2024 to celebrate International Day of older persons.

A Pre-Recruitment Training for students interested in joining NCC was conducted by 30 cadets at L. D. College of Engineering from 31st July 2024 to 9th August 2024 to help prepare them for the recruitment process.

The first phase of NCC Recruitment was organized by 25 cadets at L. D. College of Engineering on 16th and 17th August 2024, where students were assessed based on physical fitness, general knowledge, and interviews. The second phase of NCC Recruitment was conducted at L. D. College of Engineering by 25 cadets on 3rd September 2024, continuing the assessment of students interested in joining NCC.

41 cadets volunteered in a Blood Donation Camp held at Ahmedabad Red Cross Shatabdi Bhavan on 5th September 2024.

10 cadets attended the **Vibrant Gujarat Navratri Mahotsav** 2024 inauguration at Shahibagh, Ahmedabad, on 3rd October 2024, which was inaugurated by the Home Minister of India, Shree Amit Shah.



Dental and Eye Check up was held on 3rd August 2024, at LDCE where NSS volunteers managed the visit of a team of senior doctors equipped with the latest medical tools for students and faculty checkup.

## SPORTS ACHIEVEMENTS

Jadav Vidhi, a 1st-semester EC student, participated in the GTU Spirit-2024 Ahmedabad Zonal Sports Competition, where her team secured the runner-up position in August 2024.

Siddhi Vyas, a student from the Environmental Engineering Department, won the wrestling competition at the GTU Interzonal Wrestling Tournament held in Vapi and was selected for the nationals.

Jadav Vidhi, a 1st-semester EC student, participated in the GTU Spirit-2024 Ahmedabad Zonal Sports Competition, where her team secured the runner-up position in August 2024.

Dr. Komal G. Dave facilitated a visit to the COE Welding at LDCE for students and faculty members from BE Robotics and Automation of GEC Gandhinagar for hands-on practice on 3rd September 2024.

Dr. Nisha Bora participated in the All India Civil Service Table Tennis Tournament held at Gandhinagar Gymkhana on 6th August 2024.

Dalvadi Gaurav served as the Photography Head during a LEO Club event and also donated blood during the Teacher's Day Celebration.



# SPORTS ACHIEVEMENTS



LD College of Engineering (LDCE) made an impressive mark at the GTU Interzonal Kabaddi Tournament held on the 16th and 17th of August, 2024, in Rajkot. The LDCE girls' team emerged as the champions, while the boys' team secured the runner-up position. Four girls from the college have been selected for the AIU Nationals, including Lata Patel (Environmental Engineering, Semester 7), Palak Patel (Environmental Engineering, Semester 7), Avani Chaudhari (Electronics & Communication, Semester 5), and Gurneetkaur Chahal (Electrical Engineering, Semester 5).



Hrishikesh Singh, a BE VI Rubber Technology student, won the Gold Medal at the State Level Wrestling Championship and was selected for the national level on 5th September 2024



Sakshi Manojkumar Gelotar, an Environmental Engineering student, served as Cabinet Minister for Tourism, Forests, and Environment during the Youth Parliament in Ahmedabad.



Krishi Patel, a 5th-semester EC student, became the runner-up and earned a silver medal at the GTU Interzonal Wrestling Championship held on 4th September 2024

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