





# JANUARY TO JUNE 2021

# Automobile Engineering Department

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# **Major Events**

- SAE India Student Convention: this convention is organized by SAE LDCE club under the banner of SAE India on 10/02/2021 and coordinated by Prof. R J Jani and Prof. J.P. Vasani. In this convention 23 participants form various institutes have participated.
- Process Design to Prototype Development Workshop: This workshop is organized by SAE LDCE Club in collaboration with SSIP and ICC LDCE on 18/02/2021. Hardik Gohi, Aman Rupareliya and Khevna Vasani have delivered their expertise on process design, prototype development and different case studies. 30 participants have attended on offline mode and 230 participants have attended this on online mode.



• Farewell for SAELDCE and LDMS team was organized on 31/05/2021, 48 team members of club and LDMS team were present. The reason behind this Farewell was to appreciate their hard work to raise the name of SAE LDCE in the College level as well as in national level by taking huge number of events, webinars, seminars and competitions like quiz.



• "SAE LDCE Orientation - 2021" was organized on 21/06/2021. There are 56 participants were there. The agenda behind this program was to provide the knowledge to the students about "The Advantages and Skill Development by Joining SAE LDCE Club." Also, Extra-Curricular activities play a vital role to develop basic skills.

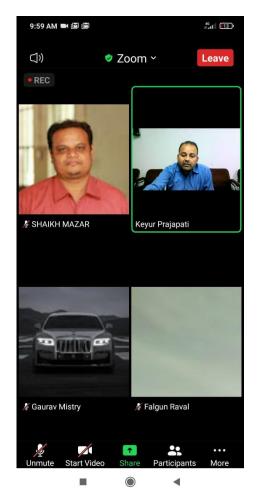


• "LDCE Motorsports Orientation - 2021" was organized on 27/06/2021 and 57 students have participated in this. The agenda behind this program was to provide the knowledge to the students about "The Advantages and Skill Development by Taking Part in LDCE Motorsports Club." Also, Practical knowledge play a vital role to develop Engineering skills.



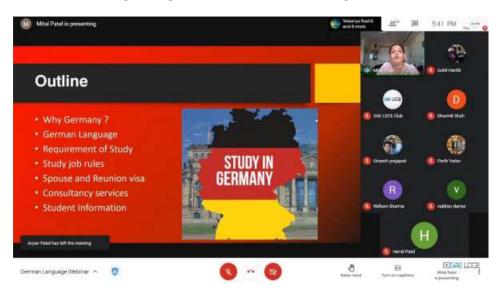
#### **Industry - Institute Interaction**

- Webinar on Clean Technology was organized by automobile Engineering department and SAE LDCE Club on 09/03/2021. Mr. KP Murthy, Fouder -Clean Technology India was expert for this webinar and 35 participants have taken advantage of this webinar
- Webinar on Industry 4.0 organized by automobile Engineering department and SAE LDCE Club on 26/03/2021. Mr. Ashutosh Parasnis, Founder Newbox Consulting was expert for this webinar and 50 participants have taken advantage of this webinar.
- Conducted virtual visit of SPRERI (Sardar Patel Renewable Energy Research Institute) open house on 13th March 2021. Around 45 students and 2 Faculty members were attending the same.



• Webinar on GERMAN LANGUAGE & CONSULTANCY PROGRAM was organized by automobile Engineering department and SAE LDCE Club on 17/04/2021. Ms. Mital

Patel for Mital Detsch Sprachule and Shrehasi Consultancy India was expert for this webinar and 71 participants have taken advantage of this webinar.



# **Faculty Activities**

- Prof. P. D. Patel has delivered expert lecture on "Tribological assessment of CI engine fuelled with biofuel" on 11/02/2021 during the FDP on "Alternate fuels" sponsored by AICTE-ATAL Academy, Organized by Automobile and Mechanical engineering department, ADIT.
- Prof. Jayendra vasani has Published Paper "Development and modification of wheel alignment setup for cos effective and used friendly solution" on 044/04/2021 in International Journal of Engineering and Technology.
- Prof. R J Jani has delivered expert lecture on "*Recent Trends in Alternative fuels*" at GUJCOST Sponsored STTP on "Advances & Latest Trends in Automobile Engineering" Organized by U V Patel College of Engineering, Ganpat University on 15/04/2021.

### **Student Achievements**

- Team of Automobile and Biomedical students Hardik, Chintan, Aman, yukta, Khevna and Aishwariya mentored by Prof. J.P.Vasani for project "Smart Saline Bottle" won 1st prize in i2i category and was awarded by GTU innovation council on 14th February 2021.
- Dhaval Patel, Student of final year automobile, secured 1st position in Auto Quiz-SAE India Student Convection 2021.



• Under the leader ship and guidance of L.D.College of engineering, GTU Motorsports team secured 3rd position in engineering design concept event and overall 5th rank in Formula Bharat -2021 Virtual national event held on February 2021.



#### **Research & Development**

- A patent on "Gyrolign", was published with Patent Application No 202121009400, by Hardik Gohil, Chintan Patel , Aman Rupareliya , Patel Dhaval, Jha Saumitra, Prof. R J Jani and and Prof. Jayendra Vasani on 05/03/2021
- Prof. J.P.Vasani, along with students and faculty of Mechanical Engineering Department has filed and Published patent on "Floating Trash Collecting Device", in Indian Patent Journal with application number: 202121021196 in May 2021
- Prof. J.P.Vasani, along with students and faculty of Mechanical Engineering Department has filed and Published patent on "Grinding attachment For Vertical

Drilling Machine", in Indian Patent Journal with application number:202121023735 in May 2021

## **Community Engagement**

- Spreading Muskaan The kites and sweet distribution was held at the Tara Foundation on 13/01/2021, tem of SAE LDCE club went to this NGO where they celebrated this small distribution event with small kids.
- SAE LDCE CULB has celebrated world Environment day planting sapling on 05/05/2021, 15 students have planted sapling at their place and took an oath to take care of plants.



Professional Development Workshops/ seminars/ STTP/ conferences etc. Participated by faculty

Sr. No ·	Title	Name of staff	Place	Duration
1	Fundamentals of Combustion	Prof. D J Parmar	Automobile	SWAYAM- NPTEL-IIT MADRAS

2	Outcome-based Education & Accreditation	Prof. R J Jani	Automobile	Govt of Gujarat
3	Outcome-based Education & Accreditation	Prof. S N Patel	Automobile	Govt of Gujarat
4	Outcome-based Education & Accreditation	Prof. J P Vasani	Automobile	Govt of Gujarat

# **M.E Dissertation**

Autom	obile Engineering Depar	tment- ME IC Engine And Automobile	
Sr.No	Name of Student	Title	Name of Guide
1	BADHEKA VAIBHAV BHASKARBHAI	Experimental investigation on methyl esters of mahua and papaya seed oil fuel blends in diesel engine	Prof . G. N. Suthariya
2	CHAUDHARI SURESHBHAI PREMABHAI	Clean combustion control in a compression ignition engine	Prof. Vivek Trivedi
3	LUKHI PIYUSH RAVINDRABHAI	Experimental investigation of performance and emission for the Edible and Non edible Hybrid biodiesel blends with Diesel.	Prof. Vimal Sonara
4	MAKWANA PRAGNESHKUMAR DASHRATHBHAI	Alternate material for pillion hand holds of motorcycle.	Prof. M.D. Chaudhary
5	PAIJA HARSHKUMAR ASHVINBHAI	Designing and developing a steering system for formula car, which optimising the tyre life by overcoming drawbacks of the toe angle.	Prof. Jayendra Vasani
6	PANDOR NIRAJ RAJESHKUMAR	Material optimization of connecting rod of Internal combustion engine using Numerical techniques	Prof. Dhaval Patel
7	PATEL JIGARKUMAR NARESHBHAI	Numerical Simulation of Internal combustion engine to understand effects of combustion on vortex generation and heat transfer	Prof. H.P. Patel
8	PATEL SHANIKUMAR ARVINDBHAI	Experimental investigation on performance combustion and emission characteristics of a diesel engine fueled with punnai oil	Prof .P. C. Sheth
9	PRAJAPATI JHEEL SHAILESHBHAI	Experimental Investigations of Performance and Emission Characteristics of Diesel Engine fueled with Sardine Oil	Prof. A.G.Momin

10	RACHHADIYA JASMINKUNAR KANTIBHAI	Experimental investigation on fuel economy of CVT driven 2- Wheeler with deteriorating condition of centrifugal clutch	Prof. D. U. Panchal
11	SAGAR CHANDRESH RAJSIBHAI	Analysis and investigation of composite material leaf spring	Prof. M. M. Makwana
12	SUTARIYA KATHAN CHANDRAKANT	"Experiment investigation on exhaust emissions in a diesel engine using animal fat oil based ester fuels with nanoparticles as an additive."	Prof. Mazar Shaikh