



# LAKIREDDY BALI REDDY COLLEGE OF ENGINEERING

(Autonomous)

Approved by AICTE, New Delhi and Permanently Affiliated to JNTUK, Kakinada  
Accredited by NAAC with "A" Grade and NBA (CSE, IT, ECE, EEE & ME) under Tier - I



## DEPARTMENT OF MECHANICAL ENGINEERING LAKSHYA 2K24 REPORT



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Mylavaram-521 230, N.T.R Dist., A.P, India. Tel : 08659222933, 934, 223936 Fax : 222931, Email: [lbrce.lakshya2024@gmail.com](mailto:lbrce.lakshya2024@gmail.com)



Sri Lakireddy Bali Reddy  
FOUNDER CHAIRMAN



**EVENTS**

- SRUJANA**  
PAPER PRESENTATION
- PRAGNA**  
POSTER PRESENTATION
- MEDHA**  
QUIZ
- NIPUNA**  
PROJECT EXPO

# Lakshya-2k24

17<sup>th</sup> National Level  
Technical and Cultural Fest

An Invocation to True Warriors...

## 1<sup>ST</sup> MARCH 2024

Prizes 3 Lakh+

REGISTRATION FEE: ₹200/- PER EVENT

**STUDENT CO-ORDINATORS**

A. Kamal Phaneendra	ECE	9030729999
G. Ajay Reddy	CIVIL	9121502056
Md. Abdul Sharon	ASE	7396034756
Md. Sameer	AI & DS	6301562073
M. Shannukha	CSE	7794931674
Ch. Manohar	CSE (AI & ML)	6301310865
Sk. Sameer	EEE	9705130846
J. Mythri	IT	9866167038
T. Thoshan Durga Sai	MECH	9505228879
Ch. Durga Venkata Sai Kumar	MBA	8179415009

**FACULTY CO-ORDINATORS**

Mr. G. Venkata Rao	ECE	9484535698
Dr. C. Rajamallu	CIVIL	990339717
Mr. A. Pratyush	ASE	951890504
Mr. K. Venkatesh	AI & DS	8985652558
Mr. D. Anil Kumar	CSE	9966213323
Mr. L. Narendra	CSE (AI & ML)	9868907877
Mr. K. Nagalinga Chary	EEE	9177609202
Mr. K. Rajasekhar	IT	9849157240
Mr. K. Lakshmi Prasad	MECH	9885827526
Mr. K. Ravi Kiran Yasaswi	MBA	9441173919

**IMPORTANT DATES**

SUBMISSION OF ENTRIES: 18-02-2024

DATE OF INTIMATION: 24-02-2024

**REGISTER NOW**

[lbrce.lakshya2024@gmail.com](mailto:lbrce.lakshya2024@gmail.com)

[lakshya\\_lbrce](https://www.instagram.com/lakshya_lbrce)  
[lakshya\\_lbrce](https://www.facebook.com/lakshya_lbrce)

**CHIEF PATRONS**

Sri Lakireddy Jaya Prakash Reddy, Honorary Chairman  
Sri L.R.N.K. Prasad Reddy, Chairman  
Sri Lakireddy Vijay Kumar Reddy, Vice Chairman

**PATRONS**

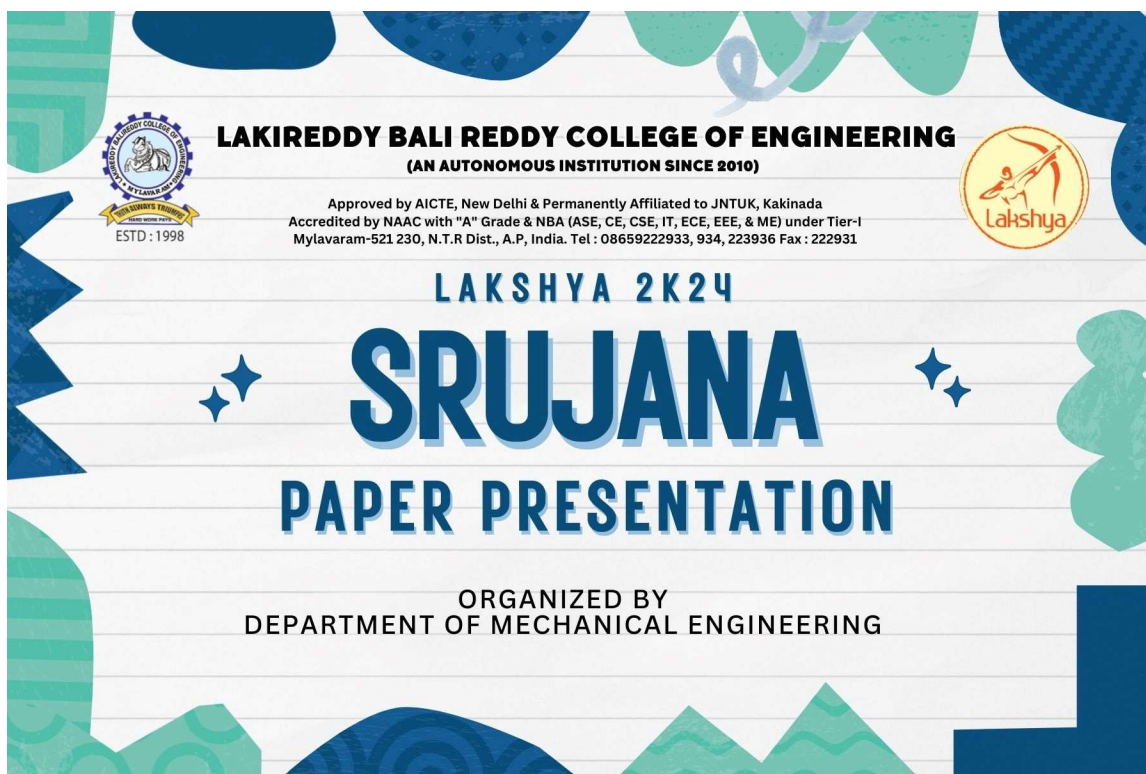
Sri. G. Srinivasa Reddy, President, LBRCT  
Dr. K. Appa Rao, Principal  
Dr. K. Harinadha Reddy, Vice Principal

**CONVENERS**

Dr. Y. Amar Babu, Professor & HOD - ECE  
Dr. J. Venkateswara Rao, Professor & HOD - CIVIL

# SRUJANA-PAPER PRESENTATION

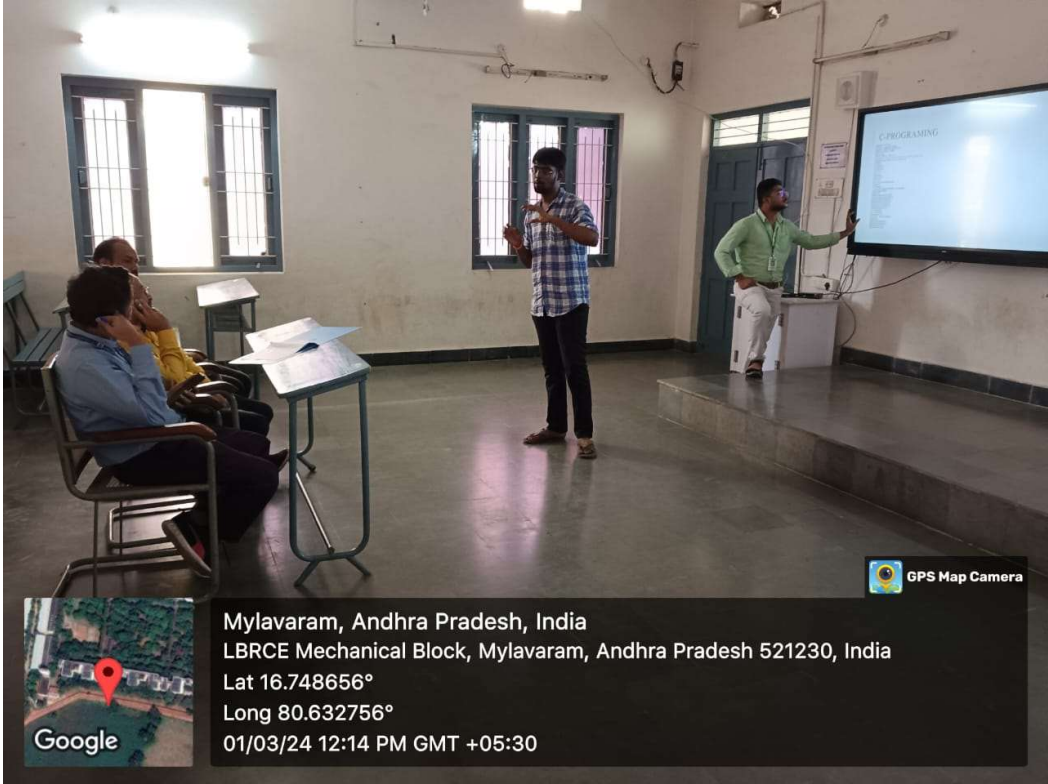
## CONTENT



S.No	Topic	Author/Authors' name	Name of the college
1.	"EMPOWERING SUSTAINABILITY: HARNESSING PIEZOELECTRIC ENERGY"	1. KANUMURI.GIRIDHAR GOPAL 2. P.P.N.S KARTHIK	R.K College of engineering
2.	FUEL INJECTOR TECHNOLOGY: ENHANCING ENGINE EFFICIENCY AND PERFORMANCE	1. B. REVANTH KUMAR	LBRCE
3.	INVESTIGATION ON MECHANICAL AND WEAR CHARACTERISTICS OF FUSED DEPOSITION MODELING MATERIALS	1. TANURI VENKATA DEEPAK 2. VOONA PRASANNA SAI	LBRCE
4.	EFFECT OF ZRO2 AND NIO NANOPARTICLES ON THE PERFORMANCE, EMISSION AND COMBUSTION CHARACTERISTICS OF DIESEL ENGINE FUELED WITH MILK SCUM OIL	1. MOHAN CHALAMALA 2. CHATRAGADDA ROHITH BALU	LBRCE
5.	RIVER CLEANER BOAT: AN INNOVATIVE SOLUTION FOR WATERWAY POLLUTION MITIGATION	1. PONNA LIKHITH KUMAR 2. SIMHADRI JAIPAL	LBRCE

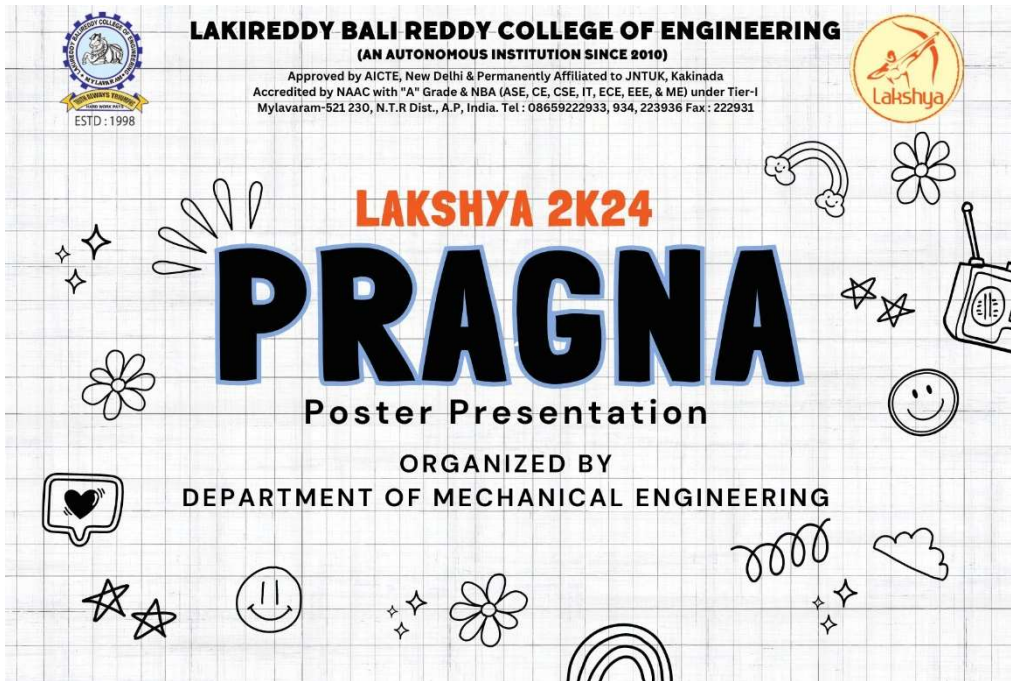
6.	INVESTIGATION OF MECHANICAL PARAMETERS USING DIFFERENT TYPES OF SANDWICH PANELS WITH DIFFERENT ORIENTATIONS AND ANALYSIS USING HYPERMESH AND LSDYNA.	1. PAJJURU KARTHIK BABU 2. ANGULURI NAVEEN KUMAR	LBRCE
7.	EXPERIMENTAL INVESTIGATION ON MECHANICAL PROPERTIES OF BORON CARBIDE PARTICLE REINFORCED ALUMINIUM 7075 METAL MATRIX COMPOSITES	1. MADDELA SRINIVASA RAO 2. KALASANI NAVEEN KUMAR	LBRCE
8.	DESIGN AND FABRICATION OF REGENERATIVE BRAKING USING FRICTIONLESS BRAKING SYSTEM	1. MADEM VENKATESH 2. METLAPALLI JAGADEESH VARAPRASAD	LBRCE
9.	FABRICATION OF SUCTION BASED GLASS AND FLOOR CLEANING ROBOT	1. NARA SAI TEJA REDDY 2. GURVINDAPALLI SUNIL	LBRCE
10.	VIBRATION ANALYSIS OF 3D PRINTED LATTICE CORE BEAM	1. MUGADA VARA PRASAD 2. MADDIREDDY RAJASEKHAR REDDY	LBRCE
11.	IC ENGINES	1. BHUKYA SIVA NAYAK 2. GANNAVARAPUMURALI KRISHNA	LBRCE
12.	DESIGN AND FABRICATION OF A SMART STAIR CLIMBING WHEELCHAIR	1. BUDDARAPU BHARGAV 2. D. KRISHNA CHAITANYA	LBRCE
13.	EXPLICIT DYNAMIC CRASH ANALYSIS OF A CAR MODEL BY DIFFERENT MATERIALS USING ANSYS	1. DOKKU SIRI VENKATA NAGAGOPI 2. SEELAM JAGADHISH REDDY	LBRCE
14.	CHARACTERIZATION OF AL 7075 WITH BLAST FURNACE SLAG AND ALUMINIUM OXIDE	1. KETHAM GOPI KRISHNA 2. T. MOHAN RANGA SRINIVAS	LBRCE
15.	ENHANCE THE HEAT HOLDING CAPACITY OF PHASE CHANGE MATERIAL OF ZINC NITRATE HEXAHYDRATE BY ADDING FLYASH.	1. LANKA SIVA SHANKAR VARAPRASAD 2. DODDA VENKATESH	LBRCE
16.	DESIGN AND FABRICATION OF MECHANICAL POST PROCESSING TOOL FOR ADDITIVE MANUFACTURING	1. YARAGANI CHARAN DEEP 2. PULLURI JAGADEESH	LBRCE
17.	DESIGN AND FABRICATION OF AGRICULTURE SYSTEM	1. NANDIKANUMAVIJAYKALYAN 2. PADISALA PRABHAS	LBRCE
18.	COLD FUSION: "HARNESSING THE ENERGY OF CRYOGENIC PROPULSION"	1. K. V. S YESHWANTH KUMAR 2. O. L. K. M. K PAVAN KUMAR REDDY	LBRCE
19.	DESIGN AND FABRICATION OF HYBRID VERTICAL AXIS WIND TURBINE	1. BHUKYA SIVA NAYAK 2. GANNAVARAPU MURALI KRISHNA	LBRCE
20.	PADDY DRIER AND A NEW HARVESTING MACHINE	1. KOMARAGIRI RAMANJANEYULU 3. SHAIK GALISHEED MUNNA	LBRCE

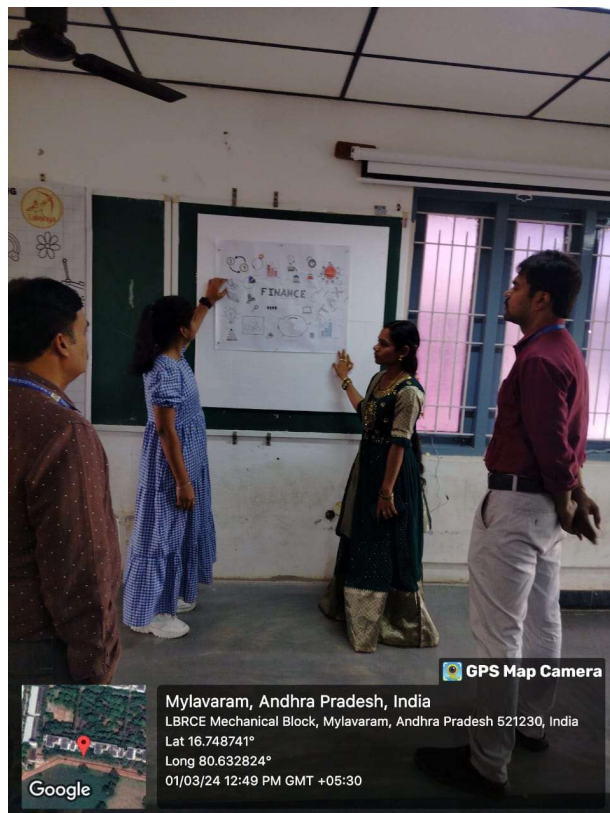




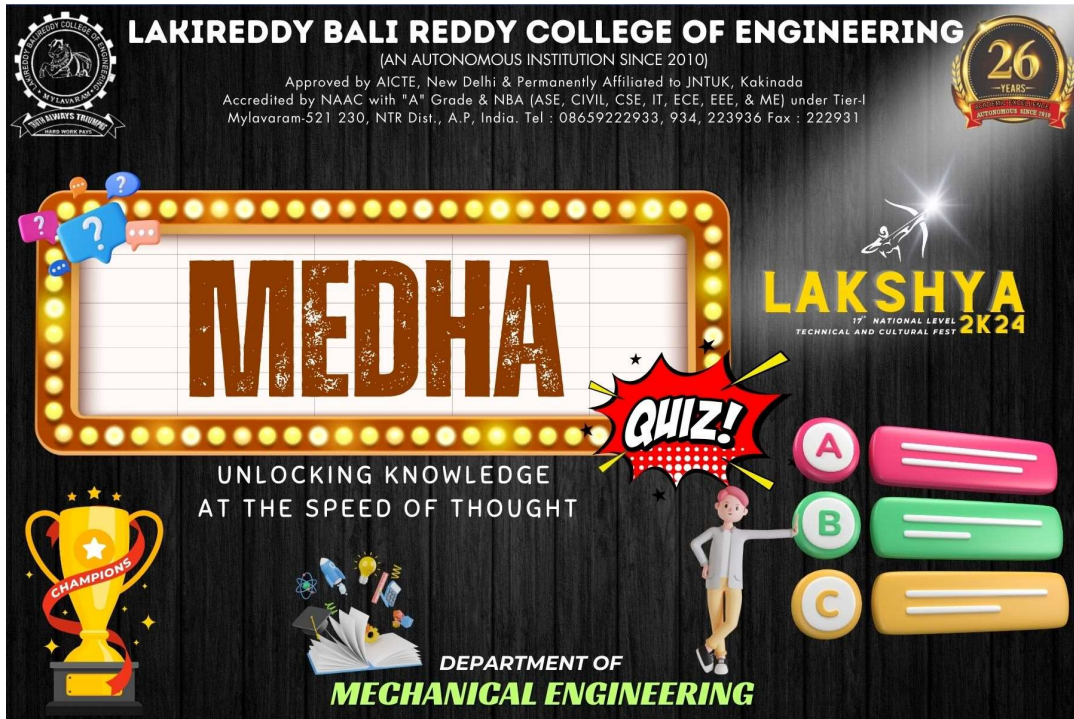
# PRAGNA-POSTER PRESENTATION

## TOPIC – ABLATIVE MATERIALS





# MEDHA-QUIZ



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**26 YEARS**  
OF TECHNICAL AND CULTURAL FEST

**MEDHA**

**QUIZ!**

UNLOCKING KNOWLEDGE  
AT THE SPEED OF THOUGHT

**LAKSHYA**  
17<sup>th</sup> NATIONAL LEVEL 2K24  
TECHNICAL AND CULTURAL FEST

**CHAMPIONS**

DEPARTMENT OF  
**MECHANICAL ENGINEERING**

The banner features a central marquee with the word 'MEDHA' in large, bold, brown letters. To the right, a red starburst contains the word 'QUIZ!' in white. Below the marquee, the text 'UNLOCKING KNOWLEDGE AT THE SPEED OF THOUGHT' is written in white. To the right of this text are three colored buttons labeled 'A', 'B', and 'C'. The 'A' button is pink, 'B' is green, and 'C' is yellow. To the left of the buttons is a cartoon character of a girl in a white shirt and yellow pants. In the bottom left corner, there is a yellow trophy with a red ribbon and the word 'CHAMPIONS' written on it. The background is dark with a grid pattern and various icons like question marks and a lightbulb.









# NIPUNA-PROJECT EXPO

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**26**  
YEARS  
OF  
EXCELLENCE IN TECHNICAL EDUCATION

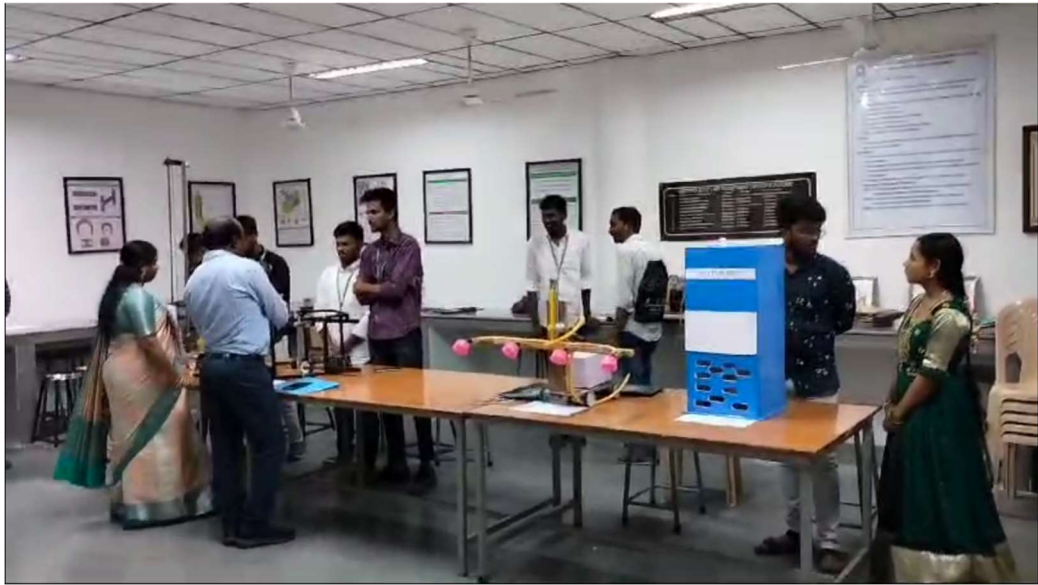
**LAKSHYA**  
17<sup>th</sup> NATIONAL LEVEL  
TECHNICAL AND CULTURAL FEET 2024

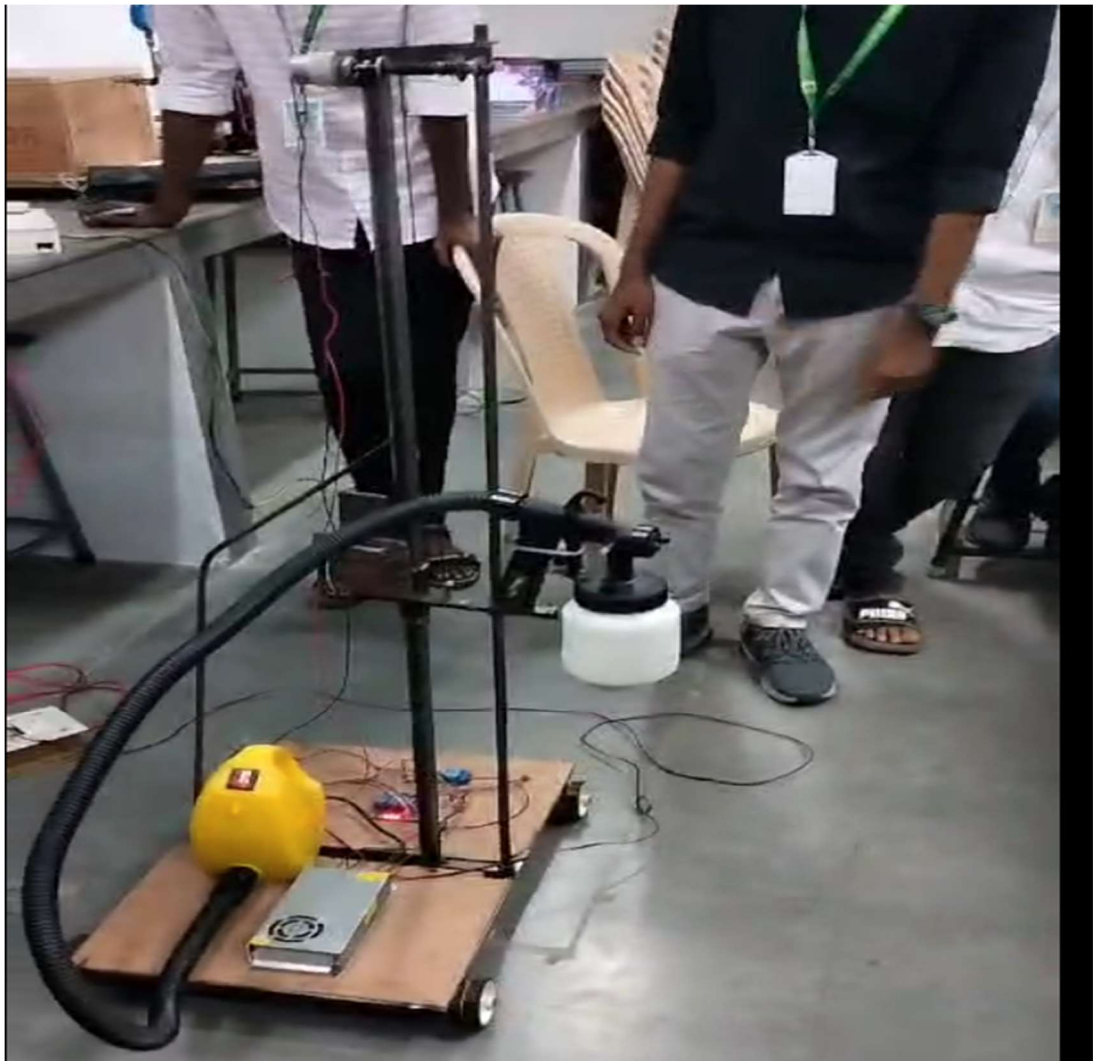
# NIPUNA

PROJECT EXPO  
IDEA - RESEARCH - DEVELOP - PRESENT

DEPARTMENT OF  
**MECHANICAL ENGINEERING**







# YANTHORA-SPECIAL EVENT



# WINNERS



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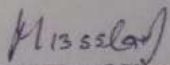
Department of Mechanical Engineering

## LAKSHYA-2K24

### 17<sup>th</sup> National Level Technical & Cultural Fest

#### List of Prize winners (1<sup>st</sup> & 2<sup>nd</sup>)

Name of the Event		Name of the Student	College Name	Poster Title
SRUJANA - Paper Presentations	1 <sup>st</sup> Prize	B Revanth Kumar A Harika	LBRCE LBRCE	
	2 <sup>nd</sup> Prize	K K S Durga Prasad- J Sasidhar	RVR & JC LBRCE	
PRAGNA - Poster Presentations	1 <sup>st</sup> Prize	U Tejaswini- T Mahesh Babu	LBRCE LBRCE	
	2 <sup>nd</sup> Prize	M Vamsi M Chandu	RVR & JC RVR & JC	
NIPUNA - Project Expo	1 <sup>st</sup> Prize	S Durga Rao- A Yaswanth Reddy	LBRCE LBRCE	
	2 <sup>nd</sup> Prize	K Upendra	LBRCE	
MEDHA - Quiz	1 <sup>st</sup> Prize	R Rama Krishna V Ajith Babu	LBRCE LBRCE	
	2 <sup>nd</sup> Prize	B Ganesh K S S Manikanta	LBRCE LBRCE	

  
Signature of HoD