ISSUE 5 | VOL. 2 | 2023-2024

TECH WIRED

A SEMESTER MAGAZINE

WHAT DREAMS ARE MADE OF

STANDING ON TOP OF THE WORLD AND TAKING IN THE AWE-INSPIRING PANORAMIC

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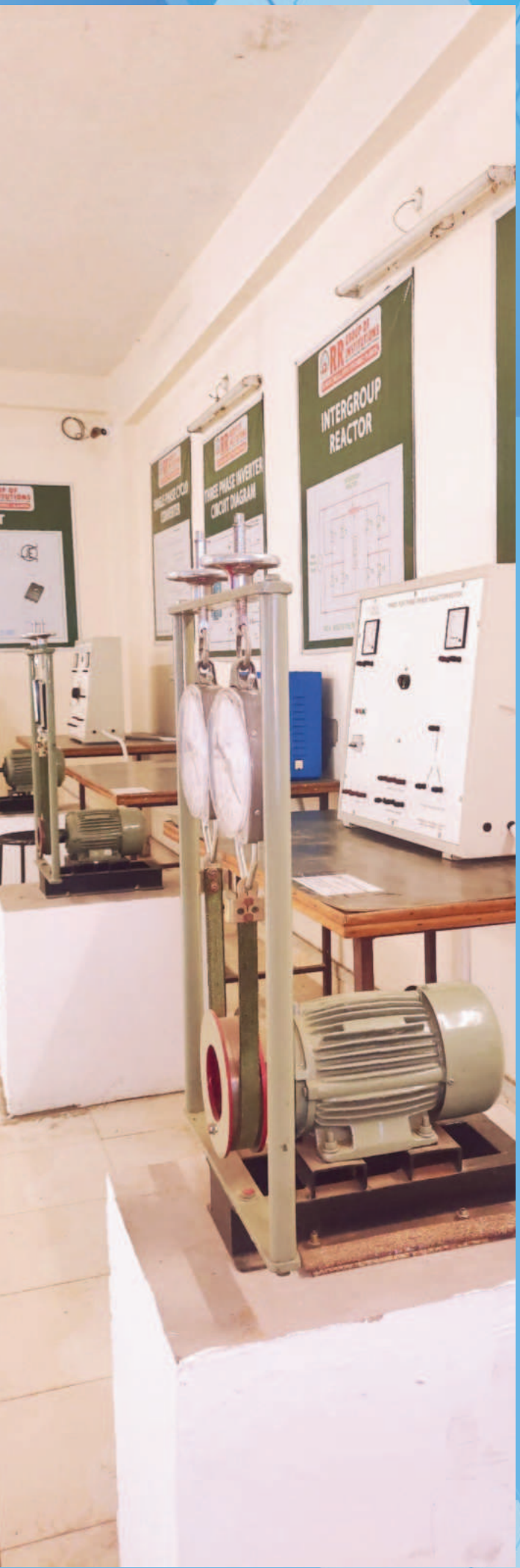

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FROM THE CHAIRMAN'S DESK

Shri Anil Kumar Agarwal
Chairman

Congratulations to the Electrical Engineering Department on the successful publication of the latest issue of our even semester Magazine. This edition is a true reflection of the department's dedication to excellence and cutting-edge research. I extend my heartfelt appreciation to our brilliant students and faculty members for their outstanding contributions to the field. Enjoy this inspiring read, and keep up the great work!

FROM THE DIRECTOR'S DESK

(Prof. (Dr.) Surya Prakash Tripathi)
Director

"The only way to do great work is to love what you do. *-Steve Jobs"*

It is a great pleasure for me that Department of Electrical Engineering is publishing its even semester magazine "TECH-WIRED" of session 2023-2024. Also glad pen few words exclusively meant for churning out latent writing skills on the different recent technical fields of research. This is a productive technical material and subsidiary skill developing tool for the students.

This even semester 2023-2024 issue of Magazine will be milestone of department of Electrical Engineering as the previous issue was. It will also give an opportunity to students to strengthen their knowledge, creativity and to work in a team. This magazine wills also full-fill the dreams of the great visionary, philosopher and role model of youngster's, which I am quoting:

It is the engineer who has to change the physical world around us to make it habitable for man.
-"Pandit Jawaharlal Nehru"

With my good wishes and great success for the future.

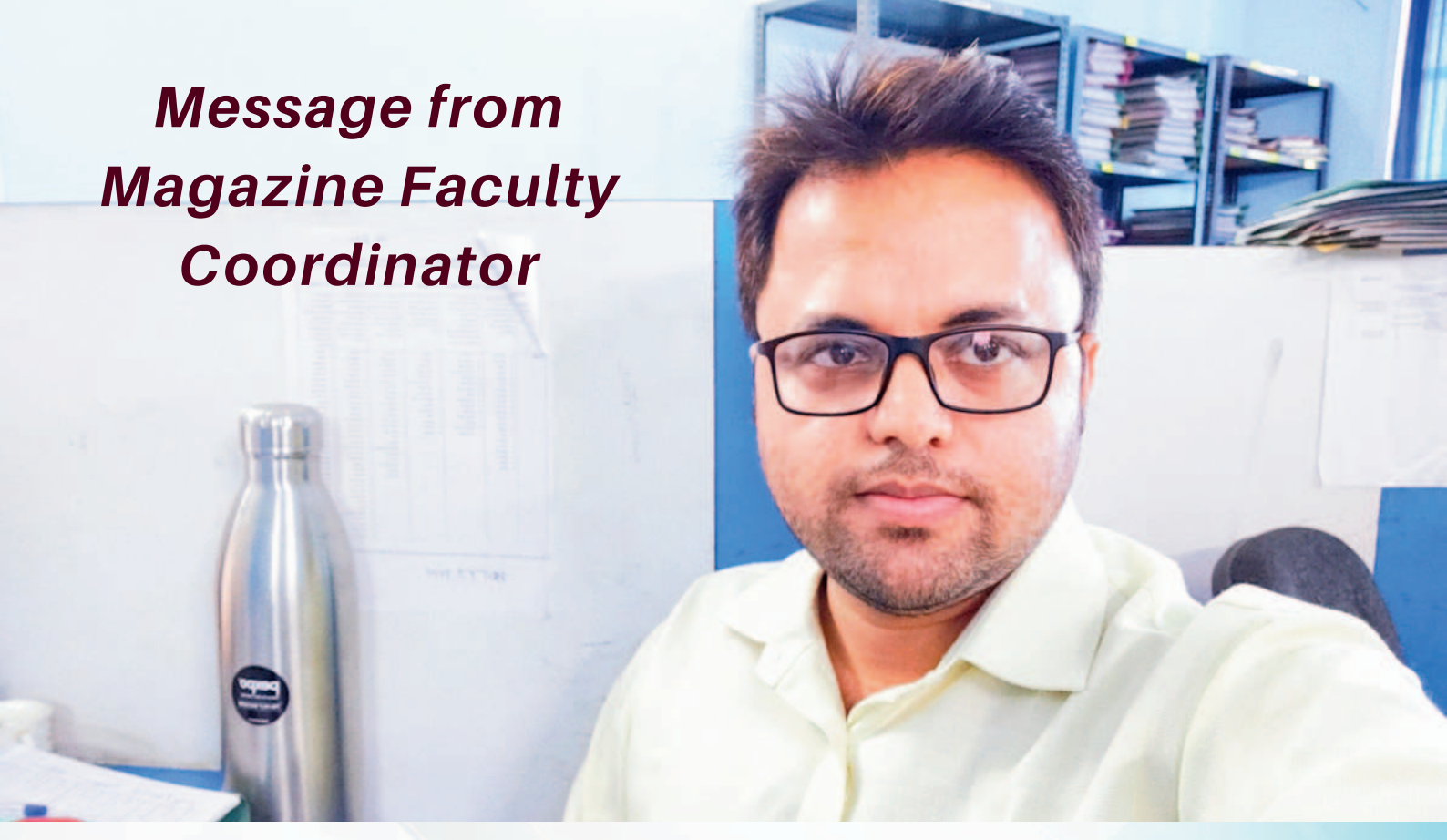
FROM THE HEAD OF DEPARTMENTS'S DESK

Mr. K.P.YADAV
Assistant Professor and Head
Dept. of Electrical Engineering

On behalf of our esteemed students and faculty, it is my utmost pleasure to extend a warm welcome to each and every one of you to the renowned Department of Electrical Engineering at RRIMT. We take immense pride in our exceptional faculty, comprising a team of highly skilled and devoted professionals, the majority of whom possess academic and industrial expertise along with degrees from prestigious universities across India. We strive to provide abundant opportunities for growth and development to both our faculty and students, offering in-house trainings, workshops, and external programs that enhance their expertise in respective fields.

I am elated to share that our department has recently embarked on a remarkable endeavor by launching the even-semester magazine "TECH-WIRED." This initiative is expected to ignite a sense of enthusiasm and inspiration among our students and staff, fostering a spirit of innovation and knowledge sharing in the days to come.

Message from Magazine Faculty Coordinator



-Mr. Mahtabul Haque
Assistant Professor
Dept. of Electrical Engineering

I congratulate the students of ELECTRIX Society who have taken the initiative and have contributed to this edition of the Electrical Engineering Department even-semester magazine 'TECH-WIRED' 2023-2024 . It's a great pleasure to present this issue of 'TECH-WIRED'. Magazine of this kind provide an opportunity to the electrical engineering students to express their latent talent, ideas and thoughts in the form of articles, poems, views about the life and experiences inside and outside the campus. It shows that technical minds are no less when it comes to creative writing and expressing their philosophical and technical minds. The clean green ecofriendly nature of the magazine has been a remarkable concept. It has been a wonderful experience to work with the editorial team and to see the creations taking shape. I thank you all for your contributions. Thanks to our Chairman sir, Director sir, HODs, Faculty members and staff for the contributions. I sincerely hope that you enjoy reading this magazine.

DEPARTMENT VISION

To emerge as centre of excellence in the field of electrical engineering to enhance the technical and professional skills of the students and make them competent enough to cater the multidisciplinary needs of the academia, industry and society with strong moral and ethical values.

DEPARTMENT MISSION

M1- To provide an environment for effective teaching-learning process with incorporation of multidisciplinary approach to develop competent electrical engineers.

M2- To strengthen the students technically & professionally using state of art technology which leads to successful employability, higher education and entrepreneurship.

M3- To foster an inspiring atmosphere which induces a passion for lifelong learning with incorporation of human values and ethics.

The Electrical Engineering Department at R.R. Institute of Modern Technology, Lucknow stands out with its exceptional offerings:

1. Highly qualified and motivated faculty members: Our department boasts a team of dedicated professors who are experts in their fields. Their vast knowledge and passion for teaching ensure that students receive a top-notch education and guidance.

At the Electrical Engineering Department of R.R. Institute of Modern Technology, we are committed to nurturing the next generation of electrical engineers by providing them with a holistic educational experience and empowering them to excel in their chosen field.

2. State-of-the-art laboratories and classrooms equipped with projectors: We provide students with modern facilities, including advanced laboratories and classrooms equipped with projectors. These spaces enhance the learning experience by promoting interactive and immersive teaching methods

3. Latest simulation tools available: Keeping up with technological advancements, our department offers access to cutting-edge simulation tools. Students can utilize these tools to simulate and analyze complex electrical systems, gaining practical experience and problem-solving skills.

4. Updated course curriculum: Our department regularly updates the course curriculum to align with industry trends and emerging technologies. This ensures that students receive a relevant and comprehensive education, preparing them for the challenges of the electrical engineering field.

5. Research-driven opportunities: We encourage research initiatives within our department. Students have the opportunity to engage in research projects, working alongside faculty members on innovative technologies and contributing to the advancement of knowledge in electrical engineering.

6. Regular workshops, guest lectures, and industrial visits: To enrich the learning experience, we organize workshops, invite guest lecturers from academia and industry, and arrange industrial visits. These activities expose students to real-world applications, provide networking opportunities, and broaden their horizons.

At the Electrical Engineering Department of R.R. Institute of Modern Technology, we are committed to nurturing the next generation of electrical engineers by providing them with a holistic educational experience and empowering them to excel in their chosen field.

DEPARTMENTAL ACTIVITIES

Workshop, Industrial visits, guest lectures, and industrial training offer invaluable benefits to electrical engineering students. Industrial visits expose students to real-world applications of theoretical concepts, enhancing their practical understanding. Guest lectures by industry experts provide insights into cutting-edge technologies and trends. Industrial training equips students with hands-on experience, boosting their employability and fostering industry-relevant skills. These experiences bridge the gap between academia and industry, preparing students for successful careers in electrical engineering.

UPPCL Substation VISIT

ELECTRIX Society of EED organized a One Day Industrial visit to the 33/11 KV UPPCL substation, Bakshi Ka Talab, Sitapur Road, Lucknow for B.Tech 3rd year students on 03rd April 2024 , to students learn about high-voltage power transmission and distribution. They study equipment such as transformers, circuit breakers, isolators, and switchgear. They gain knowledge of substation operations, system protection, control and monitoring, maintenance practices, safety protocols, and grid connectivity. Great Thanks to Mr. Lalit Singh sir and Mr. Mahtabul Haque sir for mentoring the students. The visit proved highly beneficial as it allowed students to bridge the gap between theory and practice, while also igniting their enthusiasm for the subject.

About UPPCL

Uttar Pradesh Power Corporation Limited (UPPCL) is the company responsible for electricity transmission and distribution within the Indian state of Uttar Pradesh. UPPCL procures power from state government owned power generators (Uttar Pradesh Rajya Vidyut Utpadan Nigam & Uttar Pradesh Jal Vidyut Nigam Limited), central government owned power generators (NTPC Limited & THDC Ltd) and independent power producers - IPP (mostly private power companies) through power purchase agreement for lowest per unit cost of electricity.

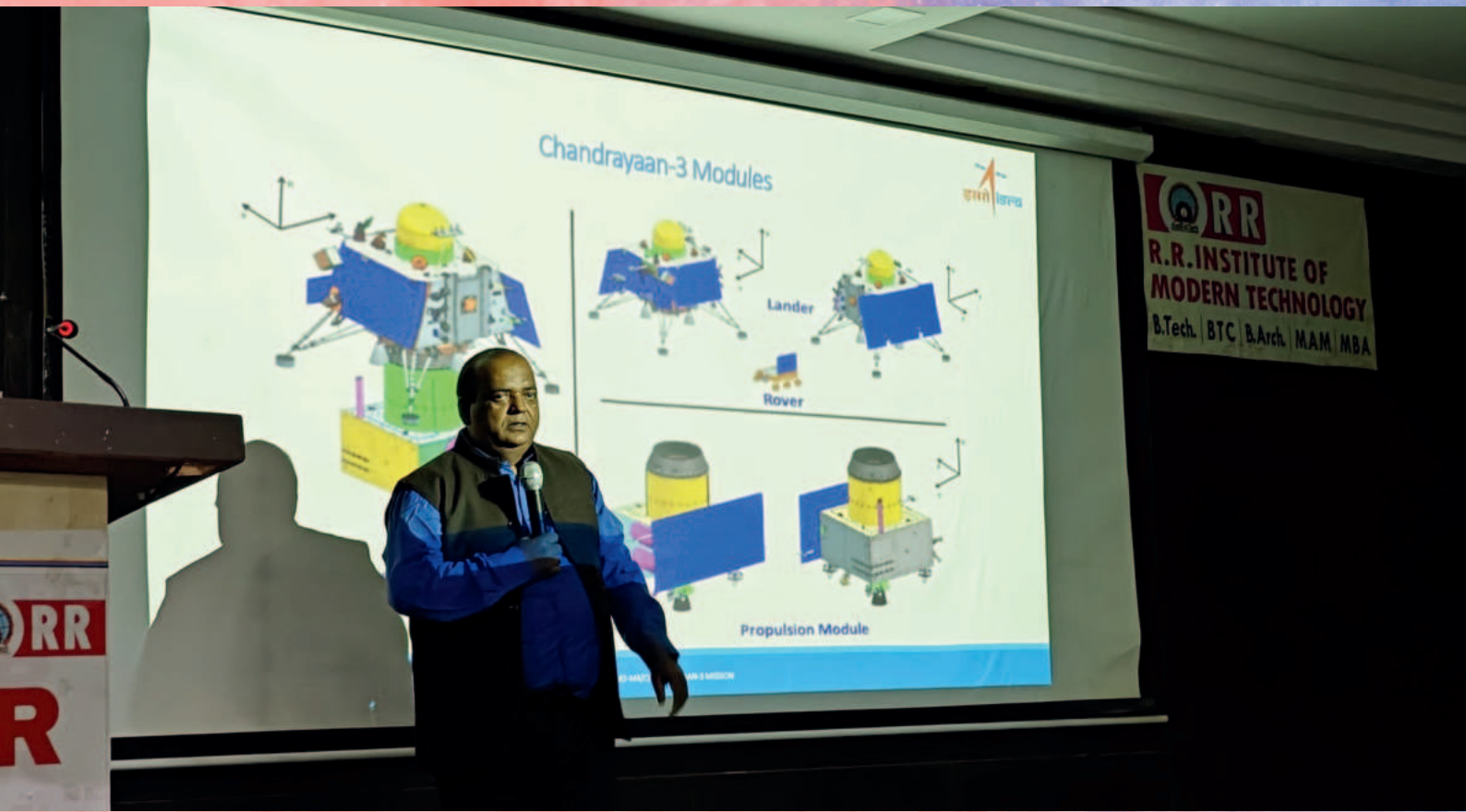

33/11 के.वी. विद्युत उपकेन्द्र

GUEST LECTURE ON "CHANDRAYAN 3 LANDING - A GREAT MOMENT OF INDIA"

ELECTRIX Society of EED of R.R Institute of Modern & Technology, BKT (Lucknow), organized a guest lecture on dated "15/04/2024" on the topic "*Chandrayan 3 landing - a great moment of India*" In this session *Dr. D. K. Mishra* Scientist'SF' and Operation Director/Spacecraft operation Manager in Department of Space, ISRO, ISTRAC, Kursi Road, Lucknow.

In this session he discussed all the information about chandraya - 3 mission (Requirement of Mission, Planning, Designing aspects, launching, landing of Chandrayan - 3 and challenges of the Mission).

The session was interactive and with real time data & images, videos and slides




Nominally Lander Payload are co
Lander Downlink Data Rate : 500
Lander SSR Capacity : 4 Gb
Payload
Thermo physical
Seismic


Prime Landing Site (4.0 X 2.4 kms)
CH-3 @
Latitude : 69.367621 deg S , Longitude : 32.348126 deg E
LS-2 Prime Landing site is between Between Manzinus U & Boguslawsky M craters
R.R.INSTITUTE OF
MODERN TECHNO
B.Tech. | BTC | B.Arch. | MA

WORKSHOP ON "INDUSTRY 4.0 "

ELECTRIX Society of EED has organized One day Workshop - “INDUSTRY 4.0” on 29/04/2024 . Technical Training programs works like bridge between student and fast growing industry. its come up with the challenge to meet the requirement of rapid growing industries by providing excellent training. This training is to fulfill the current industry in the field of IOT, Machine learning , A.I., Embedded Systems, etc. Students are hand on experience of Industrial Automation with proper hardware and software.

With the zest to have industry academic alliance and to bridge the gap between academics and industry it is necessary to introduce such demanded topics for students as a looking beyond syllabus programs. 2nd year students have attended the workshop. .


R.R.INSTITU
MODERN TEC
B.Tech. | B.C | B.Arch
R R G I

UPNEDA VISIT

ELECTRIX Society of EED organized One day visit to the UPNEDA , Lucknow (Solar Power Plant) on 19th July 2024 , to learn about solar energy basics, installation and maintenance, electrical systems, grid integration, energy storage, monitoring, environmental considerations, safety, and regulations. The students were able to interact with the engineers of UPNEDA as well as learn the technicalities involved in Power Generation and Transmission Great Thanks to Mr. Lalit Singh sir and Mr. Dharmendra Yadav sir for mentoring the students. The visit turned out to be very fruitful as the students were able to link the theoretical knowledge with practical. Also, the visit boosted the enthusiasm of the students towards the subject.

About UPNEDA

In April 1983 Uttar Pradesh Government created Non- Conventional Energy Development Agency(NEDA) under the department of additional energy sources as an autonomous institution. The institute has been renamed as "Uttar Pradesh New and Renewable Energy Development Agency (UPNEDA)". Efforts are being made to develop the capacity in renewable energy sources such as solar energy, small-scale hydro electricity and biomass-based electricity production in the state. Various capacity solar power plants are being installed for electricity generation from solar energy.


सूर्यमित्र
प्रशिक्षण कार्यक्रम

"PLANTING A TREE IN THE NAME OF MOTHER UNDER THE TREE PLANTATION CAMPAIGN"

On dated July 20, 2024 Electrical Engineering Department actively engaged under the joint aegis of Government of Uttar Pradesh , Dr. A.P.J. Adbul Kalam Technical University and Social Welfare Department "पेड़ लगाओ पेड़ बचाओ जन अभियान - 2024 "एक पेड़ माँ के नाम" was organized in our R.R. Institute of Modern Technology . The H.O.D. " Mr. K. P. Yadav" is distributed different types of plants (like - Guava, Lemon, Sahjan, pomegranate, hibiscus flower, Night Jasmine, Indian blackberry etc. to student for planting on their home or suitable place for plant. This event underscored the department's commitment to sustainability and community engagement, fostering a greener future while promoting a sense of environmental responsibility among its members.


GPS Map Camera
Lucknow, Uttar Pradesh, India
647 B/C, Gokul Colony, Jankipuram Garden, Sector D, Jankipuram, Lucknow, Uttar Pradesh 226021, India
Lat 26.92593°
Long 80.959863°
20/07/24 05:12 PM GMT +05:30
Google






Google
20/07/24 03:34 PM GMT +05:30






GPS Map Camera

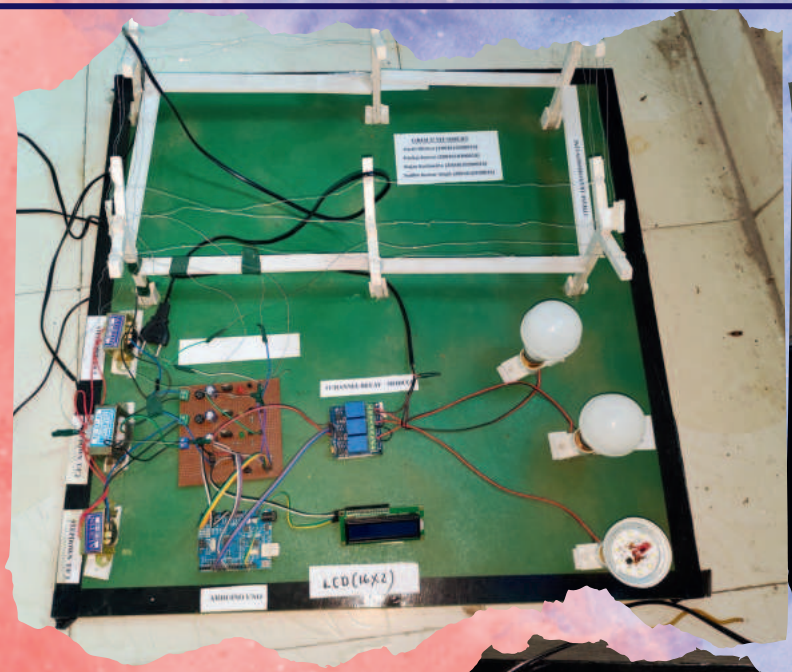
PRAGYAN

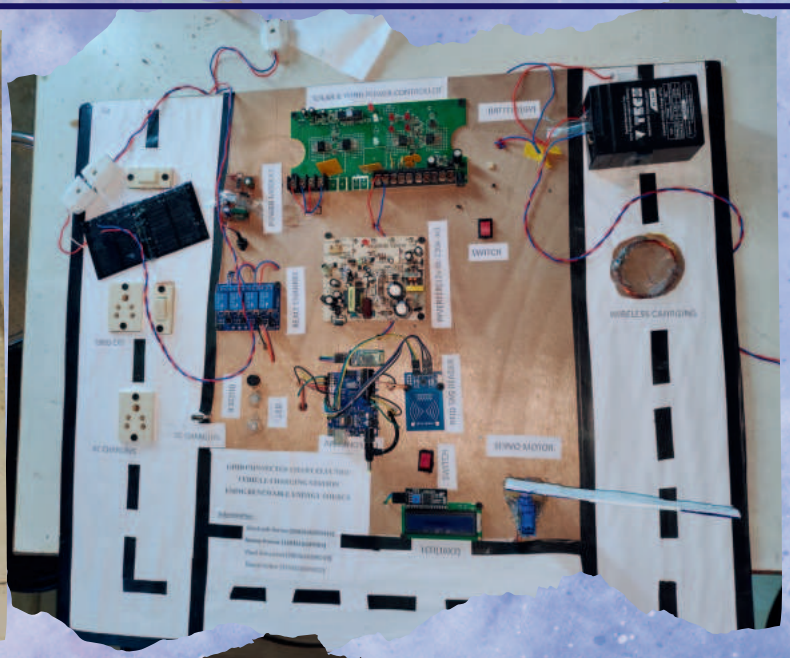
A ANNUAL FEST

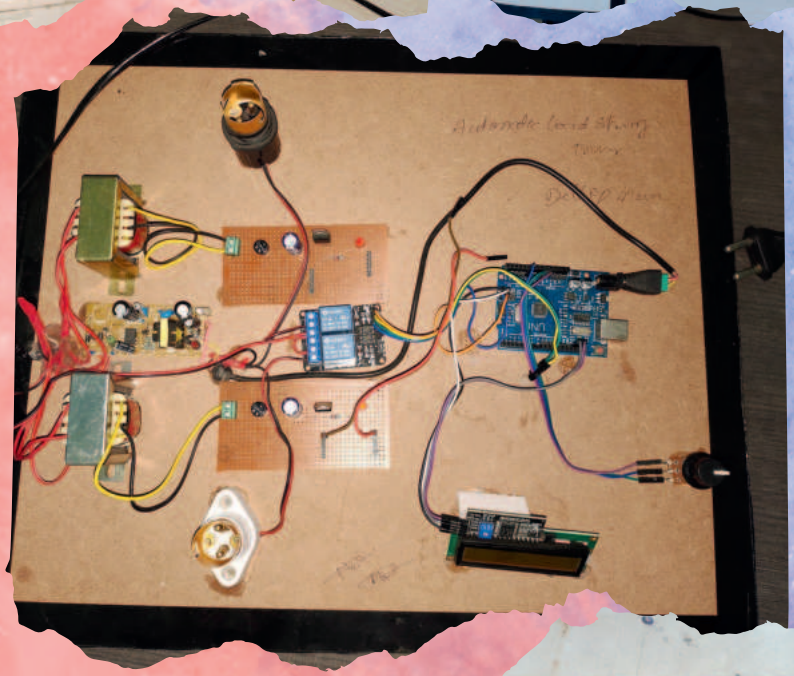

RR GROUP OF INSTITUTIONS
Pragyan

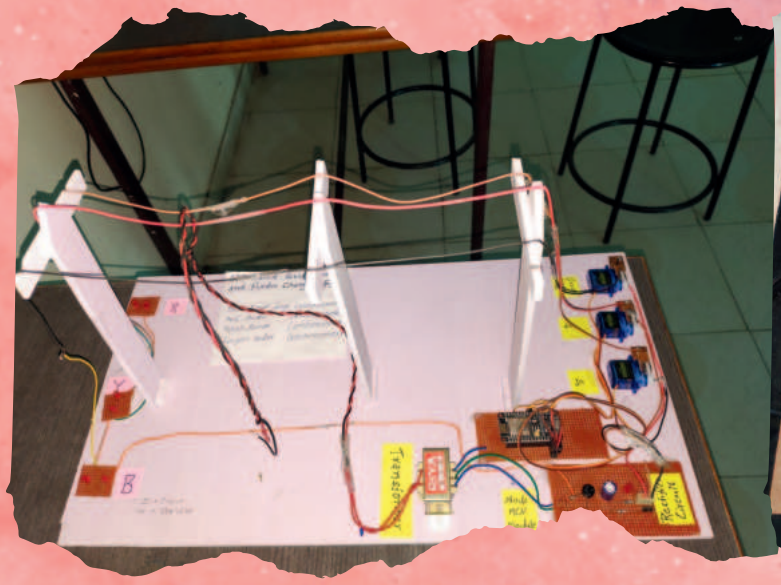

LAB-5

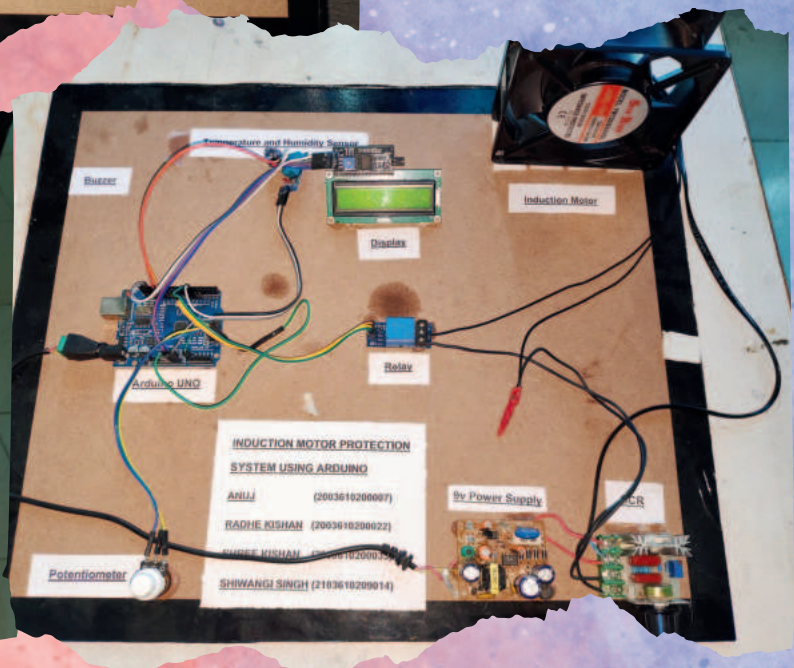
BEST PROJECTS











MILITARY DRONE (UAV) BHAIRAV

RESEARCH BASED PROJECT

Charging Ahead- Addressing Key Barriers to Electric Vehicle Market Penetration in India

by Nitya Yadav, Pratibha, Ramendra Tripathi, Neha in under guidance of Mr.Vivek Kushawaha sir

BARRIERS TO ELECTRIC VEHICLE MARKET PENETRATION IN INDIA

A. Infrastructure Limitations

The lack of adequate charging infrastructure in India has been identified as a primary barrier to electric vehicle (EV) market penetration. This deficiency contributes to range anxiety among potential EV buyers, particularly in urban areas and along highways.

B. Policy Gaps

Inconsistencies and ambiguities in regulations hinder the development of a conducive environment for EV manufacturers and consumers in India. Clear, consistent, and well-implemented policies are essential to address this barrier.

C. High Upfront Costs

The higher initial investment required for purchasing an EV deters many potential buyers in India, despite long-term cost savings. This price disparity poses a significant barrier in a price-sensitive market.

D. Consumer Perceptions

Limited awareness and misconceptions regarding EVs contribute to consumer reluctance. Addressing these concerns through education and awareness campaigns is crucial to changing consumer perceptions.

E. Technological Constraints

Challenges such as limited range and long charging times continue to impact consumer confidence in EVs in India. Further research and development efforts are needed to overcome these barriers.

Addressing these key barriers is essential to accelerating the adoption of electric vehicles in India and realizing the associated benefits . By implementing targeted strategies, India can pave the way for a greener and more sustainable transportation future.

STRATEGIES TO OVERCOME BARRIERS

A. Infrastructure Development

Investment in expanding charging infrastructure is paramount to overcoming the barrier of inadequate charging facilities. This includes the establishment of fast-charging stations in urban centers and along major highways to alleviate range anxiety and facilitate long-distance travel for electric vehicle (EV) users. Additionally, the integration of renewable energy sources, such as solar and wind, can enhance the sustainability and reliability of charging infrastructure.

B. Policy Support

Clear and consistent policy frameworks are essential to address regulatory ambiguities and incentivize EV adoption. Governments can provide financial incentives, tax rebates, and subsidies for EV manufacturers and consumers[3]. Moreover, streamlined permitting processes and standardized regulations for charging infrastructure deployment can expedite expansion efforts and encourage private investment in the EV ecosystem.

C. Consumer Awareness Campaigns

Education initiatives targeting consumers are crucial to dispel myths and misconceptions surrounding EVs. Public awareness campaigns highlighting the benefits of EVs, such as reduced emissions, lower operating costs, and enhanced driving experience, can help overcome skepticism and increase acceptance. Additionally, providing transparent information about EV performance, range capabilities, charging infrastructure availability, and total cost of ownership can empower consumers to make informed purchasing decisions.

D. Technological Innovation

Continued research and development in battery technology and vehicle design are essential to address technological constraints and improve the attractiveness and viability of EVs. Innovations aimed at increasing energy density, reducing charging times, and extending battery lifespan can enhance EV performance and address consumer concerns. Furthermore, advancements in smart grid technologies and vehicle-to-grid (V2G) integration can optimize energy management and promote grid stability, fostering the widespread adoption of EVs as grid assets.

E. Collaborative Partnerships

Collaboration among government agencies, private sector entities, academic institutions, and non-profit organizations is crucial to drive collective action and accelerate progress. Public-private partnerships can leverage resources, expertise, and networks to overcome barriers and implement holistic solutions. By fostering collaboration and knowledge-sharing, stakeholders can address challenges more effectively and maximize the impact of interventions aimed at promoting EV adoption.

PLACEMENT

S.No.	Roll No.	Student's Name	Company Name
1	2003610200001	ABDURRAHMAN ANSARI	JBM
2	2003610200002	ABHISHEK KUMAR	Dixon
3	2003610200003	ADITYA KUMAR	JBM
			Dixon
4	2003610200005	AMAN KUMAR SINGH	DIXON
5	2003610200007	ANUJ	JBM
			Dixon
6	2003610200009	ASHISH KUMAR	Dixon
			JBM
7	2003610200010	AVINASH PRAJAPATI	JBM
			Dixon
8	2003610200011	DILEEP MAURYA	SRI RAM FINANCE
9	2003610200012	DURGESH KUMAR YADAV	PERFECT POWER Private Limited
			Dixon
10	2003610200014	MEER HASAN ANSARI	Numax
			Dixon
11	2003610200016	NIHAL SINGH	Dixon
12	2003610200019	PARTH MISHRA	JBM
13	2003610200021	PRATIBHA	Sony India Private Limited
14	2003610200022	RADHE KISHAN	JBM
			Dixon
15	2003610200023	RAJ KAMAL	JBM
16	2003610200024	RAJAN KUSHWAHA	Numax
			JBM
			DIXON

S.No.	Roll No.	Student's Name	Company Name
17	2003610200025	RAJNEESH KUMAR RAO	JBM
			Dixon
18	2003610200028	SAMEER AHMAD KHAN	Numax
19	2003610200029	SANGAM YADAV	Digital Navik Pvt Ltd.
			DIXON
20	2003610200030	SAURABH SINGH	JBM
21	2003610200031	SHASHANK VERMA	Numax
			Dixon
22	2003610200032	SHIVAM RAJPUT	JBM
			Dixon
23	2003610200033	SHREE KISHAN	JBM
			Dixon
24	2003610200034	SUBHAN AHMAD	JBM
			Dixon
25	2003610200035	SUDHIR KUMAR SINGH	JBM
			Numax
26	2003610200039	VIPUL SRIVASTAV	Digital Navik Pvt Ltd.
			DIXON
27	2003610200040	VIVEK KUMAR	Numax
			Dixon
28	2003610200041	YADVENDRA SINGH YADAV	SRI RAM FINANCE
			JBM
			Dixon
29	2103610209004	ANOOP KUMAR	SRI RAM FINANCE
			Dixon
30	2103610209009	DEEPAK YADAV	PERFECT POWER Private Limited
31	2103610209014	KM SHIWANGI SINGH	Dixon

ODD SEMESTER TOPPERS

1st YEAR

Ashutosh Singh - 87.11%
2303610200014

2nd YEAR

Attruba Fatima - 85.8%
2203610200012

3rd YEAR

SURAJ CHAURASIYA-
70.60%
2103610200036

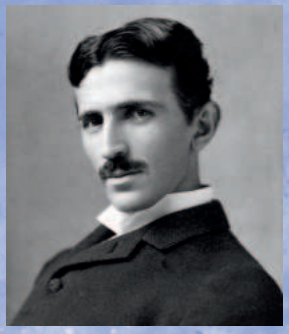
4th YEAR

KM SHIWANGI SINGH -
84.00%
2103610209014

LAST DAY OF BATCH 2020-2024

NIKOL TESLA

Electrical science has revealed to us the true nature of light, has provided us with innumerable appliances and instruments of precision, and has thereby vastly added to the exactness of our knowledge.



ELON MUSK

The fuel cell is just a fundamentally inferior way of delivering electrical energy to an electric motor than batteries.

GILBERT NEWTON LEWIS

To inquire into the origin of life is like seeking the origin of electrical machinery or the origin of music. Every increase in complexity of arrangement, of form, of substance, leads to new and often incalculable properties.

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