## Volume 4, Issue 1 Jan-July 2024



## TIMES OF EEE

OFFICIAL NEWSLETTER DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING MAHARAJA AGRASEN INSTITUTE OF TECHNOLOGY, DELHI



To produce technically competent human resource for electrical and electronics industry with high moral and ethical values.

#### **Mission**

**Vision** 

M1: To impart quality education in the field to meet societal needs.

M2: To inculcate competency in hardware and software for industrial applications.

M3: To provide an environment for developing aptitude and skills towards research and innovation.

M4: To create a platform for preparing entrepreneurs having ethical values and global insight.

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#### **Editorial Team**

Chief-Editor: Dr. Monika Gupta Editor: Dr. Poonam Juneja

Student-Coordinator: Abhay Kumar Upadhyay

### MESSAGE FROM HOD



Department has always been at the related to energy conservation and forefront of innovation, research, and environmental preservation, it is our education in the field of electrical responsibility as electrical engineers to engineering. We take immense pride in find innovative nurturing young minds and providing contribute to a more sustainable them with a platform to explore and world. As we move forward, let us excel in this dynamic discipline. In the continue to embrace the spirit of years, our department has collaboration, innovation, past continued to make remarkable strides. lifelong learning. Our department Our students are achieving remarkable legacy is built upon the collective success, securing excellent placements, efforts of each member, and together, and pursuing higher studies at we will continue to reach new heights. prestigious foreign universities. Our I encourage all of you to make the faculty instrumental in not only imparting you during your time at our esteemed knowledge but also in conducting institution. Explore, experiment, and cutting-edge research that has the excel in your chosen field, for the potential to transform industries and knowledge you gain here will shape improve lives.

Electrical and Electronics Engineering As we confront global challenges solutions that and members have been most of the opportunities presented to your future and contribute to the betterment of society

### GGSIPU RESULT

#### 7th Semester 4th Year Result

#### 5th Semester 3rd Year Result

S.No.	Enrollment No.	Name	Percentage
1.	05214804920	Hanish Kumar Kandoi	93.273
2.	06514804920	Kinshuk Jha	92.455
3.	14214804920	Vrinda Gupta	92.091
4.	12514804920	Stuti Kapoor	91.455
5.	00314807821	Neeraj	90.818
6.	20314804920	Anjali Gupta	90.727
7.	50614804920	Tarun Kumar	90.273
8.	11114804920	Saksham Goyal	90.091
9.	00714804920	Aditya Kumar Yadav	89.727
10.	14314804920	Yash Jain	89.545

S.No	Enrollment No.	Name	Percentage
1.	14514804921	Oorjit S Kumar	88.333
2.	02814807822	Abhishek Kumar	87.250
3.	03814804921	Jasjot Singh Kalra	87.000
4.	09514804921	Akshat Kaushik	86.750
5.	00514807822	Manoj Kandpal	85.250
6.	11314804921	Sakshi Singh	85.167
7.	06714804921	Aakash	85.000
8.	09814804921	Kumar Gaurav	84.750
9.	01914807822	Bharti	84.333
10.	02214804921	Amandeep Singh	84.000

#### 3rd Semester 2nd Year Result

S.No.	Enrollment No.	Name	Percentage
1.	11614804922	Aditya Kumar Agarhari	89.818
2.	01214807823	Satyam	85.846
3.	11714804922	Sushant Prakash	83.727
4.	01914807823	Mayank Sharma	81.000
5.	09314804922	Saurabh Kumar Singh	80.909
6.	08714804922	Gaurav Kumar	80.545
7.	08614804922	Sambhav Jain	80.273
8.	06814804922	Saloni	80.182
9.	07114804922	Saurabh Kumar	80.000
10.	12114804922	K.N.VS.Sai Tejaswi	79.909

### FACULTY ACHIEVEMENTS

#### EEE Publication Details CAY (2023-24)

Research Papers in Journals/Conferences/Book-Chapter (January 2024-July 2024)

	I				Π	
1	Neelam Kassarwani	Optimized Integral Sliding Mode Load Frequency Control of an Isolated Power System	International Conference on Renewable Power 2023, Springer Publisher		Scopus	January 2024
2	Ravi Sharma	Design & Development of a Solar-Based Wireless Electric Vehicle Charging System  Lecture Notes in Electrical Engineering, vol. 1086, Springer, Singapore.		Scopus	January 2024	
3	Neha Aggarwal	Predatory Loan Mobile Apps in India: A new form of cyber psychological manipulation	8th International Conference on Information System Design & Intelligent Applications 2024	Accepted	Scopus	January 2024
4	Neha Aggarwal	Design and Analysis of a Solar Energy Based Cogeneration System with Improved Efficiency for Household Applications	International Symposium on Smart Cities Challenges Technologies and Trends (SCCTT- 2023)	Accepted	Scopus	January 2024
5	Neelu Nagpal	Design & Development of a Solar-Based Wireless Electric Vehicle Charging System	Lecture Notes in Electrical Engineering, vol. 1086, Springer, Singapore.		Scopus	January 2024
6	Satvir Singh Deswal	RF and linearity parameters analysis of 20 nm gate-all-around gate- stacked junction-less accumulation mode MOSFET for low power circuit applications	Microsystem Technology, Springer		SCI	January 2024
7	Jitender Kumar	RF and linearity parameters analysis of 20 nm gate-all-around gate- stacked junction-less accumulation mode MOSFET for low power circuit applications	Microsystem Technology, Springer		SCI	January 2024
8	Satvir Singh Deswal	Design of Low Power Analog/RF Signal Processing Circuits Using 22 nm Silicon-on Insulator Schottky Barrier Nano-Wire MOSFET	International Journal of High Speed Electronics and Systems		SCI	January 2024
9	Jitender Kumar	Design of Low Power Analog/RF Signal Processing Circuits Using 22 nm Silicon-on Insulator Schottky Barrier Nano-Wire MOSFET	International Journal of High Speed Electronics and Systems		SCI	January 2024

7	Satvir Singh Deswal	Modeling and Simulation Characteristics of a Highly- Sensitive Stack-Engineered Junctionless Accumulation Nanowire FET for PH3 Gas Detector	ECS Journal of Solid State Science and Technology		Web of Science (SCIE)	February 2024
8	Neelu Nagpal	Frequency control enhancement of an islanded microgrid using disturbance- observer-based approach, International Journal of Electronics  International Journal of Electronics		SCI	February 2024	
9	Neha Aggarwal	Frequency control enhancement of an islanded microgrid using disturbance- observer-based approach, International Journal of Electronics	International Journal of Electronics, Taylor & Francis		SCI	February 2024
10	Supriya Sharma	Women and Child Security System	International Research Journal of Engineering and Technology (IRJET)		Google Scholar	March 2024
11	Neelu Nagpal	A Comprehensive Review on Artificial Intelligence and Blockchain Technologies for Electric Vehicle Charging Ecosystems	IGI Global			March 2024
12	Neelu Nagpal	Computational Material Science for Cheminformatics Feature Descriptive Language (CFDL) with Categorical Data	Sustainable Materials The Role of Artificial Intelligence, CRC and Machine Learning, CRC Press		Applied for Scopus Indexing	April 2024
13	Supriya Sharma	Smart Vending Machine	2nd International Conference on Emerging Applications of Artificial Intelligence, Machine learning and Cybersecurity	Accepted	Scopus	May 2024
14	Poonam Juneja	Design and Development of Air Quality Monitoring System	2nd International Conference on Emerging Applications of Artificial Intelligence, Machine learning and Cybersecurity	Accepted	Scopus	May 2024
15	Poonam Juneja	Solar Wireless Electric Vehicle Charging	2nd International Conference on Emerging Applications of Artificial Intelligence, Machine learning and Cybersecurity	Accepted	Scopus	May 2024

### STUDENT ACHIEVEMENTS

#### **Student's Publications**

C.24.1	Sanmay Prakash (11314804920) Sanskar Singh Sisodia (11414804920) Sarthak Gupta (11614804920)	Dr. C.K Shukla	Smart Metering System with GSM-Based Theft Detection	3rd International conference ICRP2024	Scopus	Under published	March 2024
C.24.2	Aditya Chaurasia (00614804920) Panshul Singh (09214804920	Dr. C.K Shukla	Smart grid enabled fault diagnosis of AC electric derives using machine learning	3rd International conference ICRP2024	Scopus	Under published	March 2024
C.24.3	Aditya Mohan Vashistha (00814804920)	Dr. Neelam Kassarwani, Dr. Neelu Nagpal	A Detailed Study for Power System Analysis in Transmission Substation(220 /66kv) using ETAP	3rd International conference ICRP2024	Scopus	Under published	March 2024
C.24.4	Nitesh Tiwari (09114804920) Rajnish Kumar (10214804920) Narender Singh Bisht (08714804920)	Dr. Neelu Nagpal, Dr. Neelam Kassarwani, Mr. Udayan Kumar Jha	Classification and Location of Cable Fault in Underground Cable	3rd International conference ICRP2024	Scopus	Under published	March 2024
C.24.5	Kriti Singhal (06814804920)	Dr. Neelu Nagpal, Prof. Rajveer Mittal	Brief Information of Biogas production Technologies	3rd International conference ICRP2024	Scopus	Under published	March 2024
C.24.6	Kumar Lakshay (07114804920)	Dr. Neelu Nagpal, Prof. Satvir Singh Deswal	Initial Design Procedure for Electric Two Wheeler Retrofitting Using Internal Combustion Drive Cycles	3rd International conference ICRP2024	Scopus	Under published	March 2024
C.24.7	Sarang (11514804920) Siddharth Jha (12114804920)	Ms. Monika Bhardwaj	Automatic Solar Panel Cleaning System for Dust and Dirt Removal	5th Electric Power and Renewable Energy Conference (EPREC-2024)	Springer	Under published	March 2024
C.24.8	Hrishank (06014804920) NarendraDeo (08814804920) Milan Sood (07914804920) Kinshuk Jha (06514804920)	Ms. Supriya Sharma	Smart Vending Machine	International Conference on Emerging Applications of Artificial Intelligence, Machine Learning and Cybersecurity ICAMC 2024	Springer	Under published	May 2024

#### **Student's Publications**

C.24.9	Bhupesh Vardhan Singh (00914807821) Kajal (0131407821) Rohan Kumar (02014807821)	Dr. Poonam Juneja	Solar Wireless Electric Vehicle charging	International Conference on Emerging Applications of Artificial Intelligence, Machine Learning and Cybersecurity ICAMC 2024	Springer	Accepted	May 2024
C.24.10	Gautam Goyal (05114804920) Dipansh Gupta (04714804920) Darun Mehta (04914804920)	Ms. Shashibala Agarwal	Real time Data Acquisition of Solar Panel Data using Arduino	International Conference on Emerging Applications of Artificial Intelligence, Machine Learning and Cybersecurity ICAMC 2024	Springer	Accepted	May 2024
C.24.11	Krishi Jain (06714804920) Keshav Goyal (06414804920) Kislaya Gupta (06614804920)	Dr. Poonam Juneja	Design and development of Air quality monitoring system	International Conference on Emerging Applications of Artificial Intelligence, Machine Learning and Cybersecurity ICAMC 2024	Springer	Accepted	May 2024
B. Mar.24.1	Kumar Lakshay (07114804920)	Dr. Neelu Nagpal,	A Comprehensive Review on Artificial Intelligence and Blockchain Technologies for Electric Vehicle Charging Ecosystems	A Comprehensive Review on Artificial Intelligence	IGI Global	Accepted	March 2024
J. Mar.24.1	Harsh Anand (05414804920) Hanish Kandoi (06014804920) Kanishk Aswal (06314804920)	Ms. Supriya Sharma	Women and Child Security System	International Research Journal of Engineering and Technology (IRJET)	Google Scholar	Accepted	March 2024

#### Student's participation in State and National Events

S.No.	Team Name	Event Name	Location	Dates	Position	Remarks
1	Bhupesh Vardhan Singh (00914807821) Kajal (01314807821)	ANVESHANA Science and Engineering Fair 2024	Delhi-NCR	06 & 07 Feb 2024	Fourth (Consolation Prize)	National
2	Vishwajeet (00714807821) Tanmay (02814807821)	ANVESHANA Science and Engineering Fair 2024	Delhi-NCR	06 & 07 Feb 2024	First (Best 100 Curious Question Prize)	International
3	Bhupesh Vardhan Singh (00914807821) Bhawna Bisht (50714804920) Deepak Saini (00214807821) Ashwani Kumar (02514807821) Guddu Prasad (02714807821) Vaibhav Jha (13814804920) Shrutika Garg (36214804920) Aditya Gupta (20614804920)	5G & Beyond Conference	Bharti school of Telecommunication Technology and Management IIT Delhi	07-Mar-24	Certificate of Participation	State
4	Parth Sharma (09514804920)	E-Yantra Robotics Competition (eYRC)	IIT Bombay	22 & 23 Mar-24	5th Position	National
5	Sarang (11514804920) Siddharth Jha (12114804920)	5th International Conference on Electric Power and Renewable Energy (EPREC 2024)	NIT Jamshedpur	24-26 May-24	Best Paper Award	National

### **EVENTS**

#### **Event Details: Electrotech**

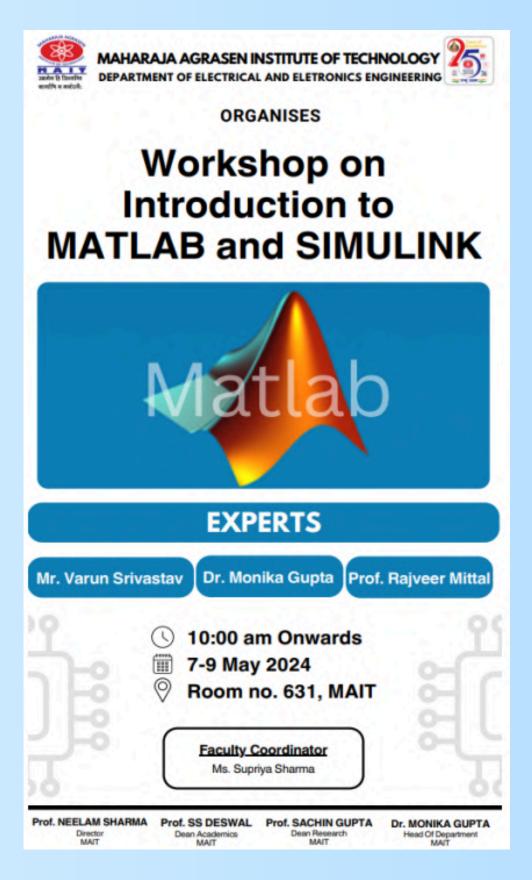
S.No.	Event Title	Description	Photos
1	CIRCUIT- SAFARI	CircuitSafari was structured as a series of challenges designed to test the participants' understanding of electrical concepts, their ability to think critically, and their aptitude for teamwork. The teams navigated through a maze of clues, each leading them closer to the ultimate prize. From decoding circuit diagrams to unraveling cryptic puzzles, every challenge presented a unique opportunity for the teams to showcase their ingenuity and creativity.	
2.	TECHNOMI ND 2.0	In the Event 20 eager participants including participants from outside college also, everyone ready to showcase their skills and knowledge across three exhilarating rounds. The event commenced with an engaging quiz round, challenging contestants' comprehension of electrical engineering concepts and general knowledge. Following this, participants delved into a crossword puzzle challenge, testing their problem-solving prowess with technical terms and industry trivia. The climax of the event was a spirited debate round, where participants engaged in thoughtful discussions on pertinent topics in the field. a seamless and enjoyable experience for all involved.	

#### **Event Details: Career Crafters**

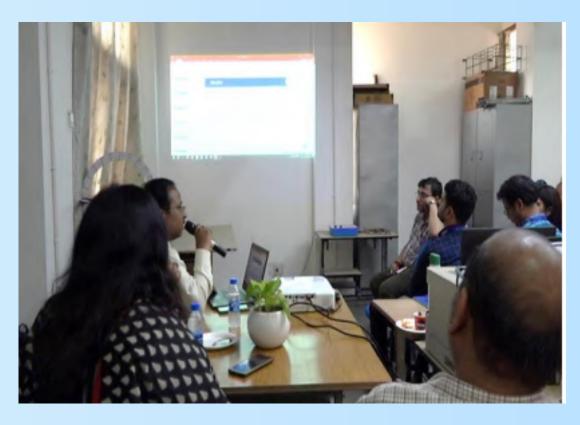
S.No.	Event Title	Description	Photos
1.	Group Discussions Skill Event	CarrerCrafters extends a heartfelt gratitude to all participants of the Group Discussion Skill Test held on February 20, 2024, in Room No. 610. The event was a resounding success, fostering an environment of insightful dialogue and collaborative learning. Special appreciation goes to our esteemed Head of Department, Dr. Monika Gupta, whose presence and the symbolic gesture of presenting a sapling significantly underscored our commitment to growth and sustainability. Engaging in a thought-provoking discussion on the implications of artificial intelligence, marked by the theme "Boon or Bane," participants demonstrated remarkable critical thinking and communication skills.	ALATAMA GANOHI SLOCK
2.	Expert Lecture on Industry 4.0	On March 21, 2024, an expert lecture on "Drivers, Enablers, Compelling Forces, and Challenges for Industry 4.0" was organized at MAIT, with Mr. Lalitesh, CEO of Vision Robotics, as the guest speaker. The lecture aimed to enlighten students about the significant aspects of Industry 4.0 and its impact on various industries. During the lecture, Mr. Lalitesh delved into various enablers facilitating the implementation of Industry 4.0, such as the Internet of Things (IoT), Artificial Intelligence (AI), and Cyber-Physical Systems (CPS). He elaborated on how these technologies synergize to optimize production processes, enhance efficiency, and drive innovation across industries.	

# Workshop on MATLAB and SIMULINK

The workshop on MATLAB and SIMULINK was organized by the Electrical & Electronics Engineering department, MAIT from the 7-9th May 2024. The event aimed to provide faculty and staff members with a comprehensive understanding and practical knowledge of MATLAB and SIMULINK, an essential tool for engineering education and research. The keynote speakers - Mr. Varun Srivastav, Dr. Monika Gupta and Prof Rajveer Mittal shared their valuable insights about the software application in engineering. Ms. Supriya Sharma, as faculty coordinator, ensured the seamless execution of the workshop. The primary objective of the workshop was to equip the faculty and staff with the skills needed to integrate MATLAB SIMULINK into their teaching and research activities. The program sought to enhance the participants' ability to use these tools for solving complex engineering problems, thereby improving the quality of education and research outputs.







# 3rd International Conference on Renewable Power (ICRP-2024)





The Department of Electrical and Electronics Engineering at Maharaja Agrasen Institute of Technology (MAIT) proudly hosted the momentous 3rd International Conference on Renewable Power (ICRP-2024) on March 28-29, 2024. This exceptional event brought together distinguished personalities, esteemed scholars, and experts from across the globe, fostering a platform for profound discussions and insights into the realm of renewable energy.

We were honored to welcome the esteemed guest of honor, Professor Praveen Chandra, whose presence added immense value to the occasion. ICRP-2024 served as a beacon for leading academicians, scientists, researchers, scholars, and industry professionals to converge and exchange their experiences, insights, and groundbreaking research findings pertaining to renewable energy sources, engineering, and technology. This premier interdisciplinary forum provided a fertile ground for presenting the latest research results, ideas, developments, and applications in science and technology, resonating with the ethos of Industry 4.0.

## Workshop on Problem solving approach based on Psychological Assessment Tool



On the 12th of March 2024, the esteemed Defense Research and Development Organization (DRDO) orchestrated a meticulously planned workshop aimed at students from the Electrical and Electronics, as well as Electronics and Communication departments. Titled "Problemsolving Approach based on Psychological Assessment Tool," the workshop sought to introduce innovative methodologies and psychological assessment techniques, with a specific focus on enhancing problem-solving skills. Keynote speakers Dr. Nity Sharma and Dr. Sandhya Verma, both distinguished scientists from DRDO, enriched the workshop with their expertise. The event's coordination was seamlessly handled by the Heads of Departments (HODs) and faculty coordinators Dr. Anubha Goel and Ms. Poonam Juneja ensuring a well-organized and enriching experience for all participants.

In summary, the workshop not only provided a structured and immersive platform for students but also equipped them with invaluable skills and diverse perspectives. Empowered with these newfound abilities, participants are well-prepared to confidently tackle real-world challenges in their academic and professional journeys. The workshop stands as a testament to the commitment of DRDO in fostering a culture of continuous learning and innovative problemsolving within the academic community.

## INDUSTRIAL VISIT TO THERMAL POWER PLANT





On 30/01/2024, we embraced the fabulous opportunity to tour the Panipat Thermal Power Plant, accompanied by 26 motivated students from the EEE 6th semester. This visit unfolded into an enlightening excursion into the sector of power generation, granting us hands-on exposure to the astonishing intricacies of industrial engineering. A heartfelt round of applause to all the organizers Mr Jitender Lather, Mr Sheeresh Garg and Ms Ayushi under leadership of Dr Monika Gupta (HOD EEE) for masterminding such a profoundly informative and educational journey

## INDUSTRIAL VISIT TO MOTHER DAIRY PLANT





A One Day Industrial visit has been organised by EEE Department @ Mother Dairy Plant, Vinod Nagar, Delhi on 15th February 2024. Approx. 20 students along with faculties Ms. Shashibala Agarwal and Ms. Ayushi Aggarwal visited the mother dairy plant, aimed to provide participants with practical insights into the company's operations, technology, and processes. The visit was successfully conducted under the supervision of Dr. Monika Gupta (HOD, EEE)

## INDUSTRIAL VISIT TO VISION ROBOTICS INDIA PVT. LTD.



Career Crafters, a society of Maharaja Agrasen Institute of Technology (MAIT), organized an insightful industrial visit to Vision Robotics on March 14, 2024. Vision Robotics is renowned for its production of personalized industrial robots. The visit aimed to provide students with practical exposure to robotics manufacturing processes and technologies.

Following the session, students were given a guided tour of the manufacturing unit. They witnessed firsthand the intricate processes involved in the fabrication of industrial robots. From precision engineering to quality control measures, every stage of production was meticulously showcased, providing students with a comprehensive understanding of the manufacturing workflow.

The industrial visit to Vision Robotics proved to be a resounding success. It provided students with a unique opportunity to bridge the gap between theoretical knowledge and real-world application in the field of robotics. The insights gained and experiences garnered during the visit will undoubtedly serve as a cornerstone in the academic and professional journey of the attendees.



#### Our beloved faculty of EEE Department

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