



Polyयांत्रिकी



Jul- Sep 2023, Issue-XIIV, Volume- XVII

www.iimtindia.net

Inside this issue

- Management Corner
- Activities of the quarter
- Faculty Corner
- Student Corner
- General Corner





Polyयांत्रिकी



Jan- Mar 2023



Apr- Jun 2023



July- Sep 2022



Oct- Dec 2022

Scan & Read Previous Four Newsletters



**From the Desk of Professor In
charge****Dr. Bhaskar Gupta**Professor In charge Academics
IIMT College of Polytechnic**Detection and Classification of Breast Cancer
Image Using Various AI Techniques**

Worldwide, breast cancer affects one in eight women and is the second largest cause of mortality among women after cardiovascular disease. Cancer of the breast develops when breast tissue cells begin to behave abnormally and divide without control. Tumors develop when a mass of aberrant cells grows into the surrounding tissue. There are lobules, ducts, nips, and fatty tissue that make up the anatomy of a woman's breasts. Milk is produced in glands called lobules and transported to the nipple via ducts. Breast cancer typically begins as an epithelial tumor in the lobules or ducts and subsequently spreads to other regions of the breast or body. Even though most cancers start with a lone mutant cell, tumors eventually contain a wide variety of cell types and exhibit no consistent genotypic profile. Tumor malignancy is brought about by this variety, which is shown in the fact that some cancer cell populations can invade and metastasize.

Mammography is a screening method for breast cancer and other breast abnormalities that uses low-dose MRIs to scan a patient's breast. For digital mammography, the difficulty lies in developing an effective method for segmenting the breast region. It is common for clinicians to use breast ultrasound (US) images to detect breast cancer at its earliest stages. In addition, with an ever-increasing number of patients undergoing breast cancer screening, highly accurate detection at a cheap cost and in a short amount of time is imperative, calling for the adoption of automated end-to-end technology. US imaging has diagnosed breast cancer for decades, but in recent years, researchers have turned to deep learning algorithms to improve its accuracy. However, there is a lack of publicly available training datasets for deep learning algorithms that contain enough breast US images to improve performance. Multiple novel signaling pathways and molecular structures associated with breast cancer prognosis have been discovered in the stromal environment. Tumorigenesis and metastasis are governed by signaling pathway genetic changes unique to cancer cells.

Prognosis and breast cancer diagnosis using an SVMs-based classifier versus Bayesian classifiers and Artificial neural networks (ANNs). Diagnostics' primary function is to differentiate between cancerous and noncancerous breast tumors. The tumor must be removed if a patient has been diagnosed with breast cancer. A prognosis for the disease's projected progression must be established following this or another postoperative operation.

ॐ

Orientation Program

The Orientation/Inauguration [AAGHAZ] of the Academic Year 2023 – 2024 [Odd Semester] for the newly admitted diploma students was organized by Department of ASH, IIMT College of Polytechnic on 20th September 2023 at Krishna Hall, Old B.Tech Building. The program was officially inaugurated by lighting the lamp by the dignitaries followed by “Saraswati Vandana”, thereafter sharing the mission and core values of the College. **Mr. Atul Choudhary, Deputy Commissioner, IRS** was invited as the **Chief Guest** & **Mr. Amar Choudhary**, motivational speaker, was the **Guest of Honour** for the program. Honorable **Dr. JK Sharma, Executive Director, IIMT Group of Colleges**, Respected **Prof. Umesh Kumar, Director, IIMT College of Polytechnic**, Respected **Dr. Devendra Singh Pundhir, Deputy Director**, & **Dr. Bhaskar Gupta, Prof. I/C Academics** welcomed and felicitated the chief guests and the Guest of Honour with mementos & tulsi plant. The program then progressed through the dance and songs performed by the senior students of the college.



Respected ED Sir and Director Sir presented the tulsi plant to our chief guests



NIPAM 2.0

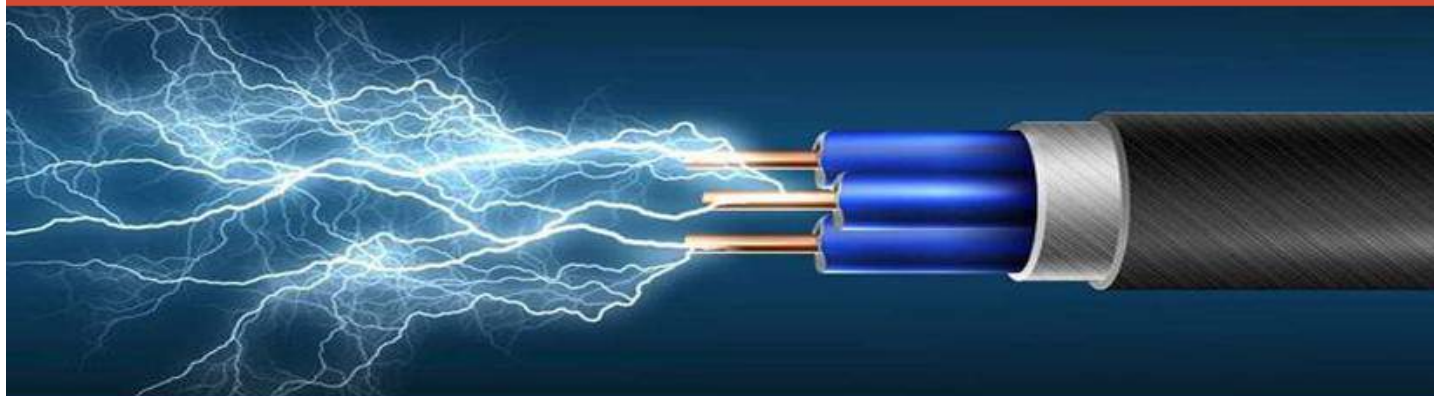
IIMT College of Polytechnic has conducted a event on NIPAM 2.0 on 7th July 2023. The event started with the lightning of the lamp followed by Saraswati Vandana. **Dr. Kumari Lipi** Advocate (Patent, Copyright, and Design Trademark Attorney) & **Dr. Madhuranjan Vatsa**, Founder Partner, STARTUP, NAAC, IPR Consultant were the chief guest of the event. The event was carried out in a single session where the speaker and the guest of honour **Dr. Kumari Lipi** presented her views about various Intellectual Property Rights.



15 Oct 1931
27 Jul 2015

“Failure will never overtake me if my definition of succeed is strong enough” - APJ Abdul Kalam

Department of Electrical Engineering



Ideathon-3.0

Department of Electrical Engineering organized Ideathon-3.0 on 10th of August 2023. The coordinator of this activity was Ms. Shikha Mishra. In Totality, 26 Students from various departments of Ist, IInd, and IIIrd year actively participated and presented their innovative ideas on topics like Electric vehicles, smart drones, smart education, water crisis & smart waste management. Ideathons are intensive brainstorming events where individuals from different backgrounds, skills and interests converge to diagnose predefined problems, identify the best opportunities and ideate the most viable solution.

Through various modes like brainstorming sessions, workshops, and expert guidance, participants would have the opportunity to explore, refine, and showcase their ideas. This Ideathon is designed to foster collaboration, interdisciplinary thinking, and the exchange of perspectives, creating a vibrant atmosphere for innovation to flourish through different patterns, abstractions, and propositions.

At the end of the event, the most promising and impactful ideas were recognized and appreciated.

At the heart of this Ideathon, lies the belief that innovation and collaboration are key to driving sustainable change. Together, we can shape the future of sustainable transportation and pave the way for a greener, cleaner, and more inclusive world.

Technical Quiz Competition

Department of Electrical Engineering has organized a Tech Quiz Competition on 19th Sept 2023. The coordinator of this activity was Mr. Brahm Pal Singh, (Lecturer), Department of EE. In whole total, 32 Students from the Electrical Department, 2nd and 3rd year participated in this activity with fervor and passion. The Objective of this “Tech Quiz Competition” was to evaluate the disciplinary knowledge of the participants in different types of competitive exams within academics as well as beyond academics.



INSTITUTION'S INNOVATION COUNCIL
(Ministry of Education Initiative)

IIMT
COLLEGE OF POLYTECHNIC
Greater Noida
— Aim For Excellence —

IDEATHON 3.0

An Idea presentation competition

THEMES :

- Smart Education
- Smart Vehicle
- Water Crisis
- Smart waste Management System
- Smart drones

Mode : Online (MS Teams) Time : 11 AM Onwards

RULES & REGULATION :

- Students studying in Engineering Colleges / Diploma Colleges / Management Colleges are allowed to participate in this competition.
- No. of Participants per Team can be 1 to 3.
- No Fee for idea submission.

Last Date of Idea Submission : 9th August, 2023
Idea Shortlisted on : 10th August, 2023
Final Presentation Date : 11th August, 2023

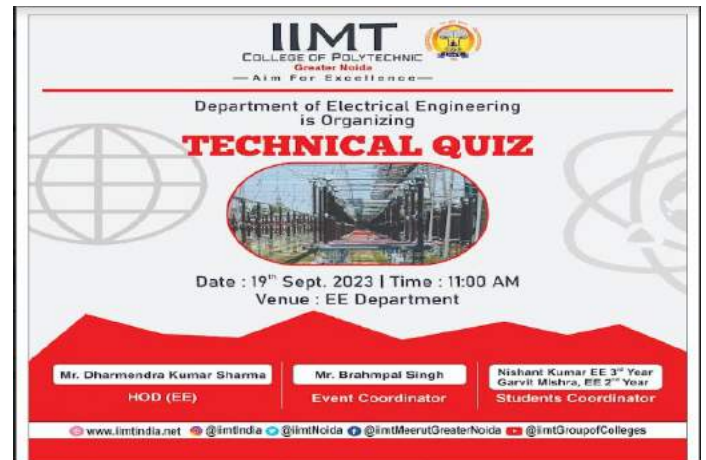
SCAN FOR REGISTRATION

FACULTY COORDINATOR
Ms. Shikha Mishra (Lecturer)

MEMBERS
Mr. Vikas Kumar Gauram (Deputy HOD-EE)
Mr. Nitinraj Kumar (Lecturer)
Mr. Vishnu Singh (Practitioner)

Contact: 73022 54554

www.iimtindia.net @iimtindia @iimtindia @iimtindia @iimtindia @iimtindia



IIMT
COLLEGE OF POLYTECHNIC
Greater Noida
— Aim For Excellence —

Department of Electrical Engineering is Organizing

TECHNICAL QUIZ

Date : 19th Sept. 2023 | Time : 11:00 AM
Venue : EE Department

Mr. Dharmendra Kumar Sharma
HOD (EE)

Mr. Brahm Pal Singh
Event Coordinator

Nishant Kumar EE 3rd Year
Garvit Mishra, EE 2nd Year
Students Coordinator

www.iimtindia.net @iimtindia @iimtindia @iimtindia @iimtindia



Certificate presented to Gaurav (EE-3 year) by respected Director Sir, Deputy Director Sir & HOD



Students were sitting in a classroom

Department of Civil Engineering

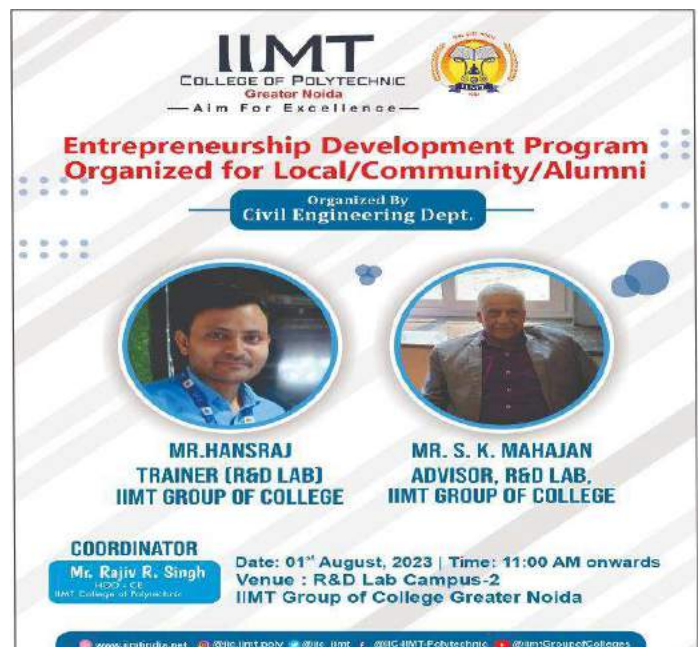


Entrepreneurship Development Program

The Entrepreneurship development program was organized for local/community/alumni on 1st August 2023 at R&D IIMT Group of College, Greater Noida. The facilitators for the valedictory sessions were **Prof. Umesh Kumar**, Director of IIMT College of Polytechnic, Greater Noida, and **Mr.S.K. Mahajan**, R&D Advisor, IIMT Group of Colleges, Greater Noida.

The Faculty Coordinator who was involved in the organization of this development program was **Mr. Rajiv R. Singh**, HOD, Department of Civil Engineering and the resource persons who made this program successful and affluent were **Mr. Hansraj** (Trainer) and **Mr. Vikas Kumar Gautam**, Dy. HOD, IIMT College of Polytechnic.

The main focus of this program was to encourage and train young people not only to establish themselves after Polytechnic and 10th from college and school but also to contribute to society especially through “Make in India”.





Students discussion with the trainer (Mr. Hansraj)



Industrial Visit

An industrial visit was organized by Civil Engineering Department on 19th September 2023 at "Civitech Developers Pvt Ltd). The coordinators of this visit were Mr. Mainuddin Khan, Mr. Dharmendra Kumar, Mr. Manish Kumar, Mr. Tanmay Gupta, Mr. Tej Prakash, and Ms. Bahnisikha Das. In totality, 51 Students from the Civil Department, 2nd and 3rd year visited this site.

The main reason for selecting this site was to check the theoretical knowledge of the students as how they would utilize it in practical life situations. The main objective of an industrial visit was also to provide students an insight regarding the internal working of industries. As a part of the curriculum, it is understood that only theoretical knowledge is not enough for making a good professional career. With an aim to go beyond academics, industrial visit provides student a practical perspective on the world of work.



Students were standing with faculties at the site
(Civitech Developers Pvt Ltd)



Department of Mechanical Engineering



Workshop on E - Yantra

A workshop was organized by Mechanical Engineering on 16th and 17th June 2023 on “Self Balancing Robot Design” held at ITS Engineering College, Greater Noida, Uttar Pradesh. A workshop was organized under the supervision of ERTS Lab Department of Computer Science and Engineering Indian Institute of Technology Bombay. In whole total 05 faculties participated in this competition.

The main objective of this workshop was to celebrate the spirit of exploration and scientific discovery, which sets the stage of exhilarating themes that revolve around space exploration. The E – Yantra course for the ELSI (E – Yantra Lab Setup Initiative) is focused on the fundamentals of Embedded Systems and Robotics.



Faculties in I.T.S. College for E-Yantra workshop



LAURELS & ACCOLADES OF INDIA 2023



CHANDRAYAAN-3

In the vast cosmic theater that is our universe; few feats capture the imagination and ambition of humanity like a mission to the moon. India, a nation that has steadily elevated its space exploration capabilities, has once again etched its name into the annals of space history with Chandrayaan-3, an extraordinary journey to the lunar surface.

Chandrayaan-3 is a testament to India's unwavering dedication to scientific exploration and space innovation. It represents the culmination of years of hard work, determination, and resilience. With its soft landing on the moon's south pole, Chandrayaan-3 has carved a path forward, inviting humanity to continue its quest for lunar glory and reach for the stars.



Source: www.siasat.com

ADITYA L1

India's Aditya L1 mission, launched on September 2, 2023, marks a historic leap as the nation's inaugural dedicated space-based solar observatory. This remarkable spacecraft is presently navigating Earth-bound maneuvers to build up the velocity required for its celestial voyage to the L1 Lagrange point, positioned 1.5 million kilometers away. In December 2023, Aditya L1 will reach its final destination, embarking on an audacious quest to decode the enigmatic Sun and its profound influence on our planet. Armed with seven cutting-edge scientific instruments, the Aditya L1 mission will delve deeper into the Sun's corona, chromosphere, and photosphere than ever before.



Source: news.abplive.com

FACULTY CORNER



Diploma in Civil Engineering and Building a Career

**Mr. Rajiv
Ranjan Singh**

**HOD, Department of
Civil Engineering**

Civil engineering is a dynamic and essential field that plays a pivotal role in shaping the infrastructure of our modern world. From designing and constructing buildings, bridges, roads, and other critical infrastructure, civil engineers contribute significantly to the development and progress of society. Pursuing a diploma in civil engineering offers a pathway to acquiring the foundational knowledge and practical skills required to embark on a fulfilling and impactful career in this field.

The Importance of a Diploma in Civil Engineering

A diploma in civil engineering serves as a stepping stone for individuals aspiring to enter the world of civil engineering. The program typically provides a comprehensive understanding of core principles, theories, and practices within the discipline. Diploma in civil engineering offers several key benefits:

Strong Foundation: The diploma curriculum covers fundamental concepts of civil engineering, including structural analysis, geotechnical engineering, transportation engineering, and more. This foundational knowledge is crucial for tackling more advanced engineering challenges later in one's career.

Hands-on Experience: Many diploma programs emphasize practical learning through laboratory sessions, workshops, and field visits. These experiences enable students to apply theoretical knowledge to real-world scenarios, fostering a deeper understanding of engineering principles.

Versatility: A diploma in civil engineering equips graduates with a broad skill set, allowing them to explore various sub-disciplines within civil engineering. This versatility opens doors to diverse career paths and specialization options.

Industry Relevance: The curriculum is often designed in collaboration with industry experts to ensure that graduates are well-prepared to meet industry demands. This alignment with real-world practices enhances employability.

I encourage aspiring engineers to embrace the opportunities this field offers and to continuously seek ways to innovate and contribute to the betterment of society through their work. Civil engineering is not just about building structures; it's about shaping the future.

STUDENT CORNER



SOLAR ENERGY

Anshul Sharma

**Mechanical Engineering
(Maintenance), III Year**

Solar energy incurred in form of sunlight. Without sun light it is not possible to exist life on earth. We can store solar energy in a lot of ways. Using solar power plants is one of the most efficient ways to do this. The design of these power plants is such that it helps to produce electricity on a larger level. Other appliances which work on solar energy are solar cookers, solar heaters and solar cells. The solar cookers are said to be the most innovative methods of cooking nowadays. It is a great alternative to conventional fuels like gas, kerosene and wood.

A major advantage of solar energy is that it is a renewable source. Thus, it will be available to use as long as the Sun is present. Further, using solar energy can assist in reducing our electricity bills. When we use this energy, we will become less dependent on non-renewable sources of energy like petroleum and coal. Using this energy will not result in pollution and thus, it won't harm the environment. As a result, air pollution will significantly decrease. Both the government and individuals must try to promote and incorporate this energy in our daily lives.

This way, it can become the future of our world. It will make the world a greener and cleaner place as well. So, we must all try to switch to solar energy to make the world a better place.

GENERAL CORNER

Spot the Difference: Can you spot 7 differences



Source: www.jagranjosh.com

Answers of previous newsletter questions (Apr-Jun'2023)

- | | |
|--------|--------|
| 1. (A) | 2. (D) |
| 3. (A) | 4. (D) |
| 5. (B) | |

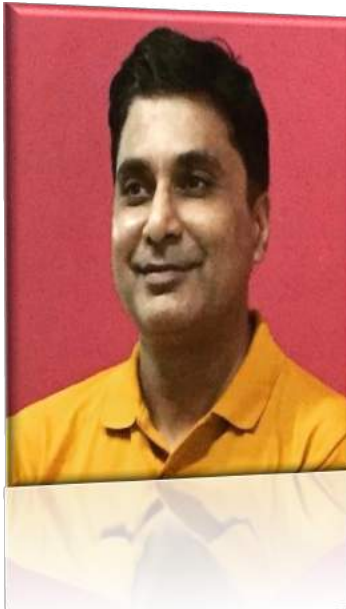


15 Oct 1931
27 Jul 2015

"If you want to shine like a sun, first burn like a sun." - APJ Abdul Kalam

Reviewer Page

*We express sincere thankstothereviewersofthis newsletter
forgivinghis/herprecious, valuableandencouragedand voluble suggestions.*



This newsletter is a fantastic source of information, presenting a wide range of campus news and events. Its sleek design and user-friendly layout make it a pleasure to read. However, including more student spotlights and interactive features could further elevate the newsletter's appeal. Overall, an excellent communication tool for students and staff.

Dr. Navaid Zafar Rizvi

Assistant Professor (Electronics)

Faculty of Engineering & Technology

Jamia Millia Islamia

I am extremely glad to see such Innovative Newsletter. Newsletter is drafted with good information and attractive QR Code version. This newsletter offers a comprehensive roundup of college happenings, keeping the community well-informed. Its professional layout and concise content make it easy to stay updated. Adding more multimedia elements and alumni success stories could enhance reader engagement. Overall, a valuable resource for fostering a sense of belonging within the college."

Dr. H C Thakur

Assistant Professor (ME),

School of Engineering. GBU. Greater Noida



15 Oct 1931
27 Jul 2015

**"Dream, Dream, Dream. Dreams transform into thoughts and
thoughts result in action."- APJ Abdul Kalam**



FROM THE



**EDITOR'S
DESK**

Dear Readers,

This thanks of note goes to all the contributors like Prof in Charge Academics, Prof In Charge R&D, HoD's - Electrical, Mechanical, Civil, Event Coordinators, Faculty and students those who have contributed their articles to make this Newsletter complete. At the last but not least



CHIEF EDITOR

Prof. Umesh Kumar
Director, IIMT College of
Polytechnic

FACULTY COORDINATOR

Mrs. Nishu Sharma
Lecturer, Mechanical
Engineering



Dr. Chitra Gupta
Lecturer, Department
of ASH



Mr. Manish Kumar
Lecturer, Civil
Engineering



Mr .Manoj Yadav
Lecturer, Electrical
Engineering



STUDENTS COORDINATOR

**Manish Updhayaya - ME
(M) 3 Yr**

**Manoj Kumar -
ME (P) 3Yr**

**Nishant Kumar -
EE 3 Yr**

**Prashant Singh - CE3
Yr**