



Newsletter

Polyयांत्रिकी



Jan- Mar 2023



Apr- Jun 2022



July- Sep 2022



Oct- Dec 2022

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From the Desk of Professor In charge



Dr. Bhaskar Gupta

Professor In charge Academics

IIMT College of Polytechnic

The role of technological & smart textile design in preventing abduction

These textiles facilitate the work of intervention teams and developers of specific products. The objective was always to retrieve physiological information from people in a hostile environment in order to know their condition and analyze their operational capacity. The smart textile contain a sensor, an actuator and a control unit which can be in the form of optical fibers, phase change materials, shape memory materials, thermochromic dyes, etc. Their integration can be during the yarn-forming, fabricforming or finishing phase. Similarly, sensors and activators are able to be integrated into the textile structure during the weaving phase, for example. Whereas, synchronization of electronic control units with each other may take place during finishing.

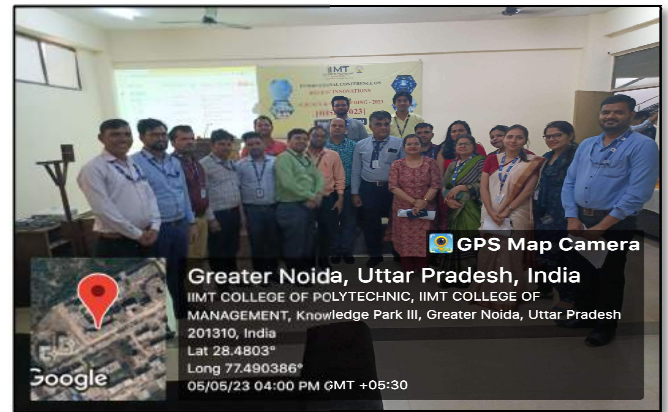
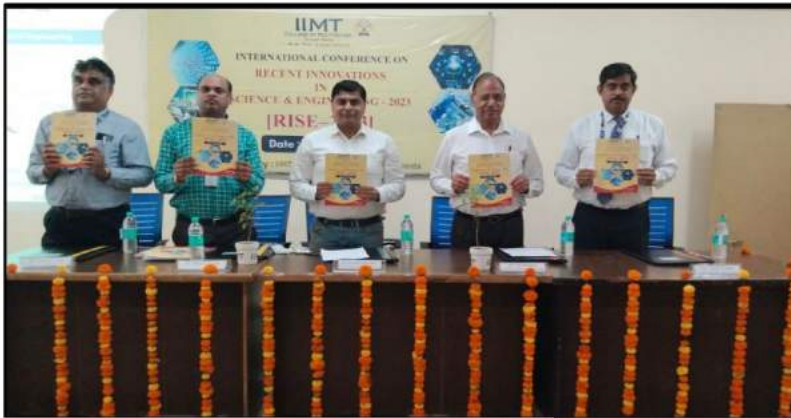
For a textile to become intelligent, it is necessary to make the fibers or the fabric conductive so that it will have the

properties of power supply, data transfer and detection. These characteristics can be present in a fabric through plasma treatment, fiber coating, printing, weaving of conductive yarns or integration of electronic components. In addition, we can use materials with specific functionalities other than conductivity to make textiles smart. Examples: antibacterial, influence of surface properties, water vapor transport, heat transfer or sensor functions.

This research work discusses the technological textile design in the service of child safety and it first presents a theoretical part which firstly deals with the definitions of design and innovation. Secondly, the role, impact and influence of design in innovation (the process, design thinking, user-centered design, research and development) and thirdly, the multidimensional aspect of innovation (temporal, relational, productive and cooperative) and finally, the different types of innovation. The resistance properties and characteristics of polyester are better than those of cotton, for this they make it the most suitable and practical fabric for a kidnapped child who lives in a painful situation full of stress and fear.

Child abduction affects all countries and all social classes. For this our "smart electronic sweater" may be inaccessible for poor families because of its cost which is a bit high since it incorporates innovative components and materials.

2nd INTERNATIONAL CONFERENCE ON RECENT INNOVATIONS IN SCIENCE AND ENGINEERING—[RISE 2023]

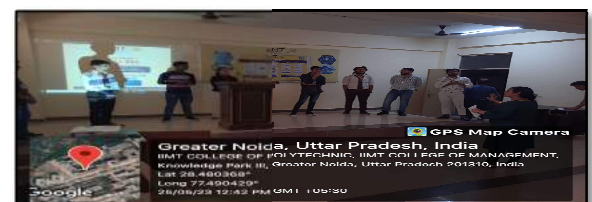


The conference was a grand success under the guidance and instructions of Honourable Managing Director, DR. Mayank Agarwal, Director General, Prof. (Dr.) M.K. Soni, Executive Director, Dr. J.K. Sharma, and Prof. Umesh Kumar, Director, IIMT College of Polytechnic, Greater Noida. The Presiders invited for the event were Dr. Bhaskar Gupta, Prof. In charge (Academics), & Dr. Suresh Prasad, Prof. In Charge (R&D), Dr. Chitra Gupta, Lecturer, Department of ASH & Ms. Kriti Mishra, Lecturer, Department of EE, IIMT College of Polytechnic, were involved as the Event Coordinators. The conference started with a welcome note addressed by Prof. Umesh Kumar, IIMT College of Polytechnic, Greater Noida. He welcomes and addressed all the dignitaries and delegates presented at the conference about the good will of IIMT College of Polytechnic that it is the best and excellent college of Polytechnic in Delhi/NCR where not only the faculties are of prominent rank but also the quality of education delivered to the students are also fits to its standard.

Dr. Naved Jafar Ansari from Gautam Buddh University and Dr. Sachin Kumar from AKGE College were invited as the speakers of the session. At the time of closing ceremony all the dignitaries and delegates presented to attend the session, expressed their views and opinions about how the conference was proper planned and how the things had been executed in a systematic manner. The session was concluded with the vote of thanks by Dr. Bhaskar

SPELL – BEE ACTIVITY

A minor activity, Spell Bee has been organized by the Applied Science & Humanities (ASH) department on 25th May 2023. The faculty coordinator who was involved in the organization of this activity was Dr. Chitra Gupta. A Spell Bee is an activity in which participants are asked to spell a comprehensive selection of words, generally with a varying degree of difficulty.

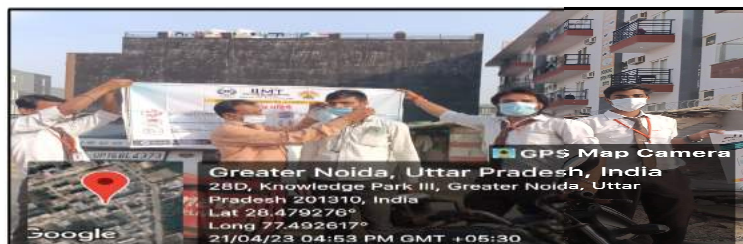


Department of Electrical Engineering



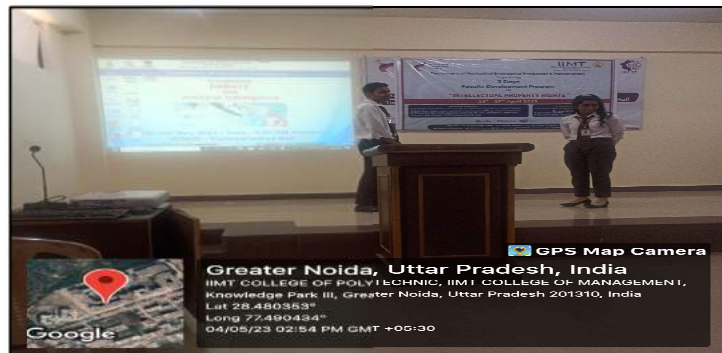
COVID AWARENESS PROGRAM

Department of Electrical Engineering organized **COVID Awareness Program** on 21st April 2023. COVID has caused a global pandemic that has drastically changed the lives of people around the world. In light of this, awareness program had been initiated to inform people about the pandemic and its possible consequences. COVID awareness programs aim to educate people about the virus, its symptoms, and prevention strategies, in order to limit the spread of the disease. COVID awareness programs play a crucial role in spreading information about the pandemic, and preventing its spread.



DEBATE ON ARTIFICIAL INTELLIGENCE

A debate on “Artificial Intelligence” has been organized by the Department of Electrical Engineering on 4th May 2023. The activity coordinator was Ms. Kriti Mishra. In total, 31 students participated in this activity, where they presented their views on Pros and Cons of the Artificial Intelligence. The development and deployment of AI can lead to job displacement, privacy violations, and the potential for unintended consequences.



GUESTLECTURE ON CREATING ENTREPRENEURIAL VENTURE

Guest Lecture on 'Creating Entrepreneurial Venture' was organized by the Electrical Department on 9th June 2023. The speaker of the lecture was **Prof. Arvind Tiwari**, Principal, and Diploma in Engineering (Motherhood University (Roorkee) and the **Faculty Coordinators** were Mr. Dharmendra Kumar Sharma, (HOD) EE & Mr. Manojkumar, (Lecturer) EE. Total no. of attendees in this lecture were 50. The main aim of this lecture was to manifest that economic and financial success is considered appropriate and useful to achieve other non-financial goals (as recognition, family life, community involvement etc.), but still several researches show that it is difficult to build a sufficiently clear picture of the relationship between companies' performance and goals in relation with the entrepreneurs' expectation.

The investigations on the company's life-specific goals or, more exactly, what are the goals of early-stage firms, i.e. the so-called new ventures were also exhibited by the speaker.



INSTITUTION'S INNOVATION COUNCIL
(Ministry of Education, India)

IIMT
COLLEGE OF POLYTECHNIC
Greater Noida
— Aim For Excellence —

IIC-ED CELL IIMT College of Polytechnic

Expert Talk on

Creating Entrepreneurial Venture

Speaker
Prof. Arvind Tiwari
Principal - Diploma in Engineering
(Faculty of Engg. & Technology) &
Incubation Incharge
Motherhood University, Roorkee

Date: Friday, June 09, 2023
Time: 12:30 PM Onwards
Mode : Online

FACULTY COORDINATORS
Mr. Dharmendra Kumar Sharma
Sr. Lecturer
IIMT College of Polytechnic
Mr. Manoj Kumar
Lecturer
IIMT College of Polytechnic

STUDENT COORDINATOR
Rohit Sharma (EE-3rd Year)
Vivek (EE-2nd Year)

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WORKSHOP ON PYTHON

A one day workshop on "PYTHON" was organized by the department of Electrical Engineering on 27th April, 2023, Vishveshwarya hall, IIMT College of polytechnic. The resourcepersons of the session were: 1.Mr. Yashwardhan Sharma, corporate trainer, CetpaInfoTechPvt. Ltd., Noida 2. Mr. Chandra Prakash, business development executive, CetpaInfoTechPvt. Ltd., Noida. The Faculty Coordinator involved in the conduction of the workshop was Ms. Sakshi Rana. The basic motive of this workshop was to make the students to understand the fundamentals of programming concepts and the skills and techniques needed for python. The session was full of knowledge and the awareness about training and internship opportunities available in the domain of python were provided to the students. The speaker of the session also discussed about the impact of Python in our day- to-day life.

The sessions held in the workshop were highly interactive and the participating faculty and students of the institute were greatly benefitted by the knowledge shared by the speaker.



INSTITUTION'S INNOVATION COUNCIL
(Ministry of Education, India)

IIMT
COLLEGE OF POLYTECHNIC
Greater Noida
— Aim For Excellence —

Department of Electrical Engineering
is Organizing
Workshop On
"PYTHON"

Mr. Yashwardhan Sharma
Corporate Trainer,
CETPA InfoTech Pvt. Ltd.

PATRONS
Prof. Umesh Kumar Director, IIMT College of Polytechnic
Dr. Bhaskar Gupta President, IIC, IIMT College of Polytechnic

CO-ORDINATOR
Ms. Sakshi Rana
Lecturer, EE
IIMT College of Polytechnic

STUDENT CO-ORDINATOR
Prabhudev Prasthary
Rohit Sharma

Date: 27th April, 2023
Time: 11:30 AM onwards
Venue : Vishveshwarya Hall

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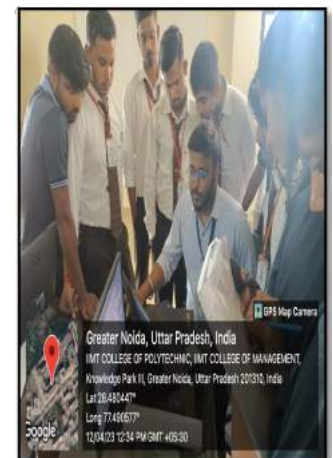
Department of Civil Engineering



WORKSHOP ON AUTOCAD & STAAD PRO

Department of Civil Engineering organized a workshop on 'AutoCAD & Staad Pro' on 12 April 2023 at Visvesvaraya Hall of IIMT College of Polytechnic, Greater Noida. The speaker of the workshop was Mr. Rupesh Kumar Jha, Managing Director, Educaed Designs Pvt. Ltd. The event coordinator was Mr. Manish Kumar.

The Aim of the workshop was to give the basic knowledge of designing software to the students. This workshop was focused on making the students expert in designing so that they can avail the best career opportunities in the particular field. Total 42 students were presented in the session from 2nd year and 3rd year (Branch – CE).



URJA CLUB KABADDI

A Kabaddi event was organized by the department of Civil Engineering under the guidance of URJA SPORTS CLUB on 4th May 2023. The coordinator of the event was Mr. Mainuddin Khan. Total no. Of teams participated in this activity were 13. The Kabaddi event consisted of both Girls and Boys team.

The judges selected for the event were Mr. Amit Kumar and Mr. Pramod Sajwan. The winner was awarded with the cash prize of Rs 5,100 and the runner up with 2,100.

The Rishab Team from Asian Academy got 1st prize in boys category and Manisha Siroha team from Asian Education got 1st prize in Girls category.

The event was a grand success as all the students as well as the audience enjoyed a lot while playing this game and also they played it with the spirit of true sportsmanship.



Department of Mechanical Engineering



Guest Lecture

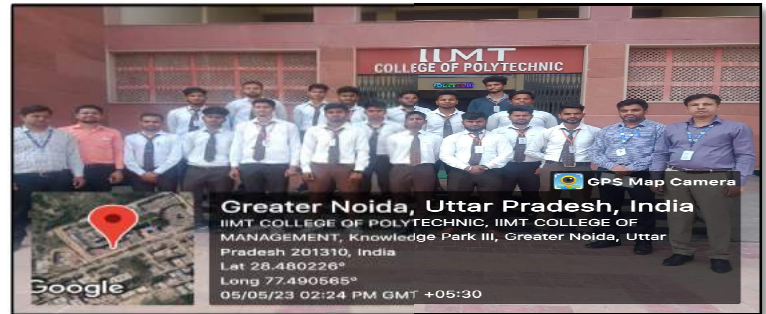
A Guest Lecture was organized by Mechanical Engineering Department on 16th May, 2023 on “CAREER OPTIONS AFTER DIPLOMA”. The Guest of Honor was Mr. Nitish Prakash Surya, Engineers Academy Pvt. Ltd. The main objective of arranging this Guest lecture is to make the young students studying in colleges and universities apprised and get acquainted with various jobs and openings available for them and the requirements, responsibilities and the nature of work involved in that particular area.



GUEST LECTURE

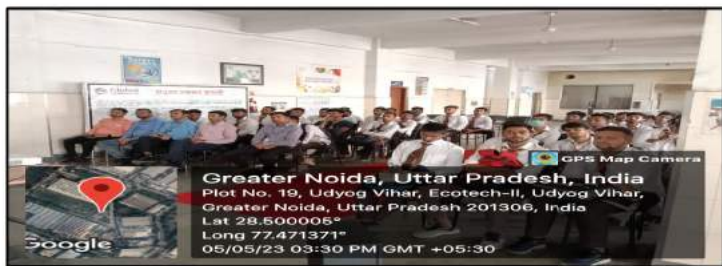
A Guest Lecture was organized by Department of Mechanical Engineering (Maintenance) on 11th April, 2023 on **SCOPE OF DESIGN IN AUTOMOBILE/MECHANICAL INDUSTRIES**. The Speaker invited for delivering the lecture was Mr. Naresh Bhagat from CEO – Lelogix Design Solutions Pvt. Ltd. and Solutions Pvt. Ltd. In totality 70 students participated in this lecture.





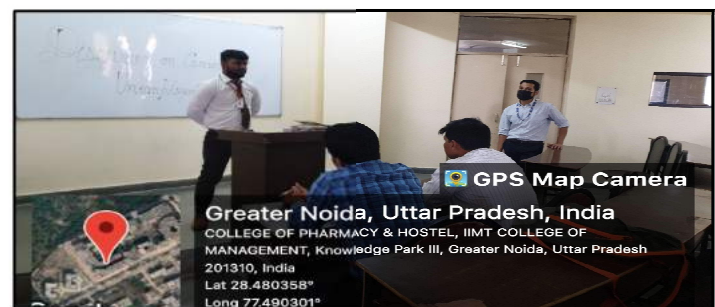
Industrial Visit

Industrial visit at "Global Autotech Pvt. Ltd. 3D", Udyog Vihar, Ecotech-II Greater Noida Uttar Pradesh, was held on 05th May 2023. Initially there was an oral presentation on the domestic and global opportunities for the diploma students & various other aspects of the Mechanical industry in India & abroad. There were eminent personalities like Mrs. Shraddha Shukla, who graced the occasion with their presence.



DISCUSSION ON CAUSES OF UNEMPLOYMENT

An event was organized by Mechanical Engineering Department on 7th April, 2023 on "DISCUSSION ON CAUSES OF UNEMPLOYMENT". The objective of the event was to encourage students to participate and share their perspectives on the issue of unemployment. The event aimed to create an interactive platform for students and faculties to discuss and analyze the various causes of unemployment, and explore potential solutions and strategies to mitigate the problem.




FACULTY CORNER


Inventory Model with Price dependent Demand

Mr. PRAMESH ADHANA

**Senior Lecturer ,Department
of ASH**

An inventory model with price-dependent demand considers the relationship between the price of a product and the corresponding demand for that product. In this model, the demand for the product is not fixed but varies with the selling price. As the price changes, the demand also changes accordingly.

The price-dependent demand can be represented by a demand function, which expresses the quantity of the product demanded at a specific price. Typically, demand is inversely related to price, meaning that as the price increases, the demand decreases, and vice versa. The demand function can take various mathematical forms, such as linear, exponential, or logarithmic, depending on the characteristics of the product and the market.

The objective of this inventory model is to determine the optimal pricing and order quantity to maximize the overall profit.

This involves finding a balance between the price, demand, inventory holding costs, and ordering costs. Key components of the inventory model with price-dependent demand:

Demand Function: The demand function represents how the demand for the product changes with the selling price. For example, it could be represented as $D(p) = f(p)$, where $D(p)$ is the quantity demanded at price p , and $f(p)$ is the demand function.

Holding Costs: These are the costs associated with holding inventory over time, such as warehousing costs, storage costs, and capital tied up in inventory.

Ordering Costs: These are the costs incurred each time an order is placed for replenishing the inventory, including shipping, handling, and administrative costs.

Selling Price: The price at which the product is sold to customers, which influences the demand.

Lead Time: The time it takes for the ordered inventory to arrive after placing an order.

Economic Order Quantity (EOQ): The order quantity that minimizes the total inventory costs, assuming a constant demand rate. In the price-dependent demand scenario, the EOQ might vary with the selling price.



Student Corner



Civil Engineering

Vinita Kumari

Civil Engineering, II Year

You probably remember the pictures of Harappa and Mohenjo-Daro from your school textbooks. The roads in their cities crossed at 90-degree angles, and the cities were planned. City planning almost 3000 years ago in modern-day magnificent buildings was designed and developed by civil engineers. Aside from being very lucrative, this branch of engineering has remained in demand for a long period of time. Choosing Civil Engineering as a career is a vast amount of knowledge that can be accessed. The construction and civil engineering sectors are the largest employment generator irrespective of any country globally.

Civil engineering is a profession that focuses on designing, building and maintaining infrastructure and projects that benefit communities or the environment. This branch of engineering focuses on designing and constructing infrastructure such as architecture, construction, environment and water resources.

The Polytechnic Civil Engineering degree is a robust foundation for students who desire to start a civil engineering career. So, basic civil engineering concepts are part of the curriculum for a diploma in civil engineering. Moreover, in addition, students will obtain in-depth theoretical and practical dimensions of construction management and civil engineering, so that the course sets the groundwork for civil engineering. Hence, the course is about planning, surveying, designing, estimation, construction, costing etc.

General Corner

1. Recently which country successfully test-fired the supersonic cruise missile BrahMos?

- [A] India
- [B] Nepal
- [C] Pakistan
- [D] Bangladesh

2. When was the “National VayoshriYojana” launched?

- [A] 1 April 2016
- [B] 1 July 2016
- [C] 1 July 2017
- [D] 1st April 2017

3. Where has Nirav Modi, who cheated Punjab National Bank, been arrested?

- [A] London
- [B] Hungary
- [C] Spain
- [D] Portugal

4. The International Day for the Eradication of Poverty is observed on which of the following days?

- [A] 10 January
- [B] 12 March
- [C] 15 April
- [D] 17 October

5. 'Dogri' language is spoken in which Indian Territory?

- [A] Pondicherry
- [B] Jammu and Kashmir Province
- [C] Nagaland
- [D] Andaman and Nicobar Islands



Reviewer Page

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



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."

Mrs. Abhilasha Negi

Senior Analyst

Accenture, USA

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.

Mrs. Niharika Namdev

Assistant Professor,

IIMT College of Engineering, Greater Noida





Editorial

Board Members

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 thanking to Director Sir for his guidance, vision and time.

CHIEF EDITOR**Prof. Umesh Kumar**
**Director, IIMT College of
Polytechnic**
**FACULTY COORDINATOR**
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Dr. Chitra Gupta
Lecturer, Department
of ASH

Mr. Manish Kumar
Lecturer, Civil Department

Mr. Manoj Yadav
Lecturer, Electrical Dept.
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