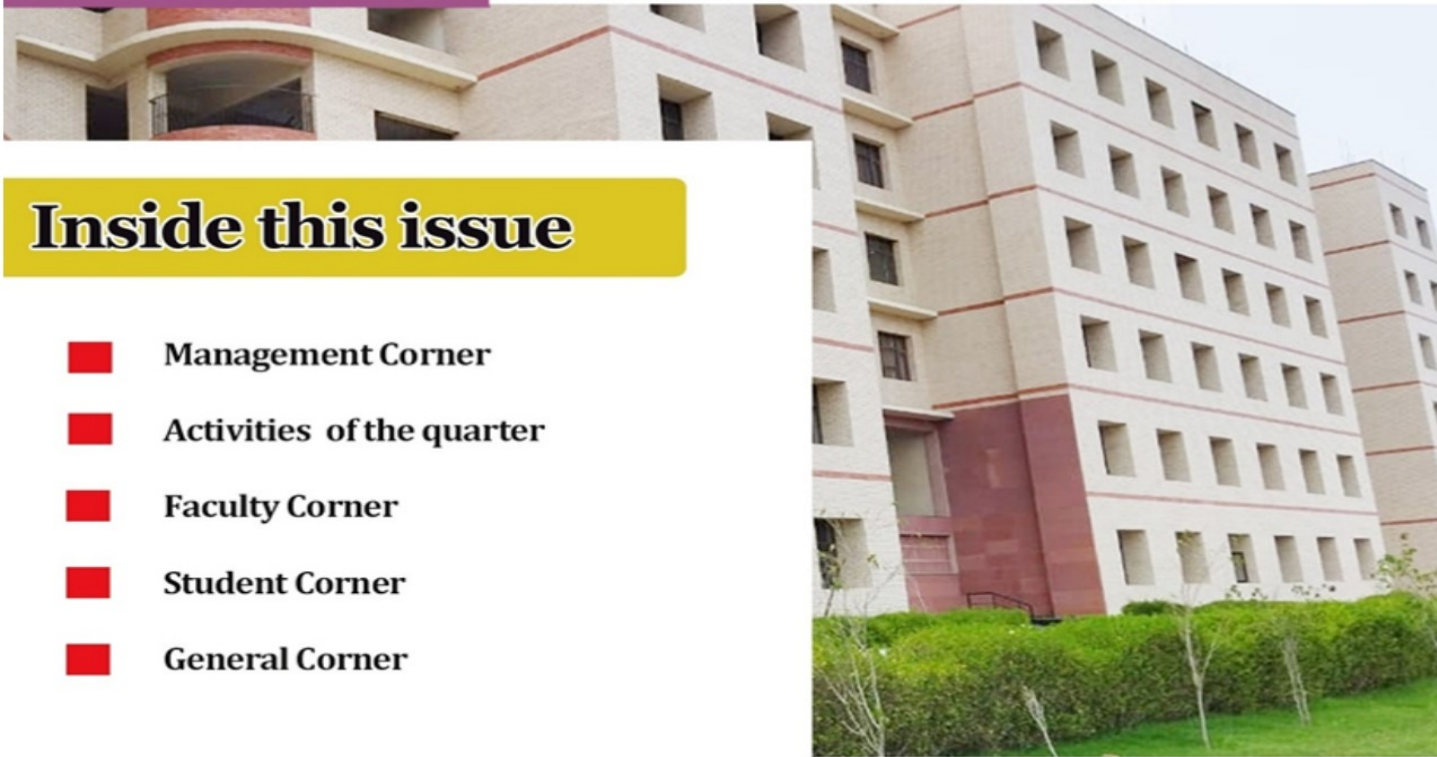




Polyयांत्रिकी



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- Management Corner
- Activities of the quarter
- Faculty Corner
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MANAGEMENT CORNER



Prof. Umesh Kumar

Director

IIMT College of Polytechnic

Breaking the Physical Barrier: VR Makes Strides in Education and Physical Therapy

Virtual reality (VR) technology has long captured imaginations with its potential to transport users to fantastical worlds. But beyond the realm of gaming, VR is quietly making a revolution in education and physical therapy, blurring the lines between the virtual and the real to create transformative learning and healing experiences.

VR Field Trips Come Alive

Imagine a history student standing amidst the erupting chaos of Mount Vesuvius, witnessing the destruction of Pompeii firsthand or a biology student dissecting a virtual frog, manipulating its organs in 3D space without harming a single creature. VR field trips are making this a reality, transporting students to locations and experiences that would be impossible or impractical in the real world.

"VR allows us to create immersive simulations that bring complex concepts to life," says Dr. Amelia Moore, a VR integration specialist at a leading high school. "Students are no longer passive learners; they become active participants in the learning process."

VR Therapy: Healing the Body and Mind

Beyond the classroom, VR is making significant strides in the field of physical therapy. Patients recovering from strokes or spinal cord injuries can now engage in virtual rehabilitation exercises, practicing movements in simulated environments that mimic real-world scenarios.

"VR therapy allows us to create a safe and controlled environment for patients to push their boundaries," explains Dr. William Chen, a physical therapist specializing in VR rehabilitation. "Patients can practice walking on uneven terrain, climbing stairs, or even playing virtual sports, all while receiving real-time feedback and encouragement."

VR therapy can also be used to address psychological conditions such as phobias and anxiety. Patients can confront their fears in a gradual and controlled manner, building confidence and coping mechanisms in a safe virtual space.

The Future of VR: Breaking Down Barriers

The potential applications of VR in education and physical therapy are constantly evolving. As VR technology becomes more affordable and accessible, we can expect to see even more innovative and immersive experiences emerge.

One of the biggest challenges for VR education is the initial cost of headsets and equipment. However, with advancements in technology and the growing popularity of VR, costs are expected to decrease significantly in the coming years. Additionally, cloud-based VR solutions are being developed, allowing students to access VR experiences without needing expensive hardware.





NATIONAL CONFERENCE-2K24

The National Conference on “Recent Innovations & Evolution in Engineering, Science & Management” took place on 25th January, 2024 at C.V. Raman Hall. The Conference brought glories and success under the guidance and instructions of Honourable Managing Director, Dr. Mayank Agarwal, Group Director, Dr. K.K. Paliwal, Director, Prof. Umesh Kumar. The conference aimed to bring together the scholars, practitioners, and students to discuss and exchange the ideas on recent innovation in various and respective fields. In whole total we have received 150 research papers from across India, out of which 100 speakers have presented their paper on the given platform. Dr. Naved Jafar Ansari from Jamia Milia University, Delhi was invited as the speaker of the session.

URJA-2K24

A major event named as “URJA-2K24” organized by Mechanical Engineering (Maintenance) Department of IIMT college of Polytechnic, brought together enthusiasts from diverse backgrounds for a day filled with excitement, competition, and camaraderie. The event featured a range of popular games including Gully Cricket, Carrom, Chess, Volleyball, Kabaddi, Kho-Kho, Table Tennis, and Badminton. Held at different venues of IIMT Group of Colleges on 15th March 2024, the event attracted participants and spectators alike, showcasing the spirit of sportsmanship and unity.

NATIONAL CONFERENCE
ON
RECENT INNOVATIONS & EVOLUTION
IN ENGINEERING, SCIENCE & MANAGEMENT

Date: **25th JANUARY, 2024**

Organized by: IIMT College of Engineering, Greater Noida (IIMT)
IIMT College of Polytechnic, Greater Noida (IIMT)

Conference Date: 25th January, 2024
Submission Last Date: 20th January, 2024

Modification of Date of Paper: Within 03 days after accepting the Research Paper
Final Submission: With in 03 working days from the date of acceptance

URJA-2K24

• Gully Cricket
• Kabaddi
• Kho-Kho
• Volleyball
• Chess

• Badminton
• Table Tennis
• Carrom
• Fun Race

ATTRACTIVE CASH PRIZE WITH CERTIFICATE & MEDALS

Faculty Co-Ordinators:
1. Kamal Kishor Sharma
2. Dev Kumar Singh
3. Anil Kumar

Student Co-Ordinators:
1. Vansh Tyagi
2. Harsh Pal
3. Mayank Singh

Time : 9:30 am | Date : 15th March 2024
Plot No. 19 & 20, Knowledge Park - III Greater Noida - 201310

www.iimtindia.net

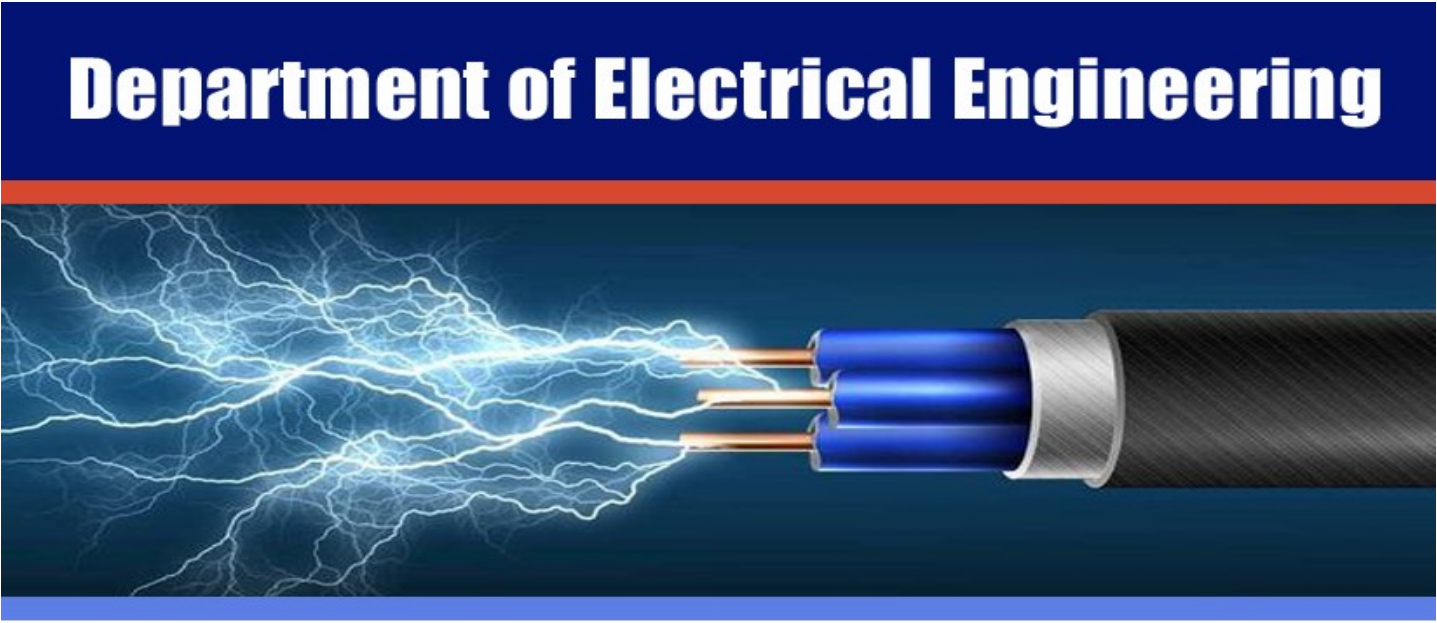


Conference Proceeding released by the Delegates



Students Wrestle with each other in a Kabaddi Competition





GUEST LECTURE ON BRIDGE TOWARDS INDUSTRIAL SECTOR

A one day Guest lecture on “**Bridge Towards Industrial Sector**” was conducted for the students of EE on March 5th, 2024. The organizers of this occasion were Mr. Mirtunjay Kumar, Lecturer [EE] and Mr. Gopendra Kumar, Lecturer [EE].

The speaker invited to grace the occasion was Mr. Veer Shankar, General Manager, SOFCON India Pvt. Ltd., Lucknow, India who delivered a lecture and shared his knowledge and approaches about the connection of industrial world with that of the Electrical Engineering.

It offered a platform for the students to get introduced with the specialized topics or emerging areas of the field that may not be covered extensively in the regular curriculum.

IIMT
 COLLEGE OF POLYTECHNIC
 Greater Noida
 — Aim For Excellence —

Department Of Electrical Engineering
 is Organizing
 Guest Lecture
 On
“Bridge Towards Industrial Sector”

Guest Speaker
 Mr. Veer Shankar
 General Manager
 Sofcon India Pvt. Ltd.
 Lucknow

Date: 5th March, 2024
 Time: 11:00 AM Onwards
 Venue : Vishveshwarya Hall

FACULTY COORDINATORS
 Mr. Mirtunjay Kumar
 Lecturer - Department EE
 Mr. Gopendra Kumar
 Lecturer - Department EE

STUDENT COORDINATORS
 Prince Kumar (EE-2 Year)
 Nivmal Gupta (EE-3 Year)

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Faculties and Students attended the Guest Lecture on Bridge Towards Industrial Sector





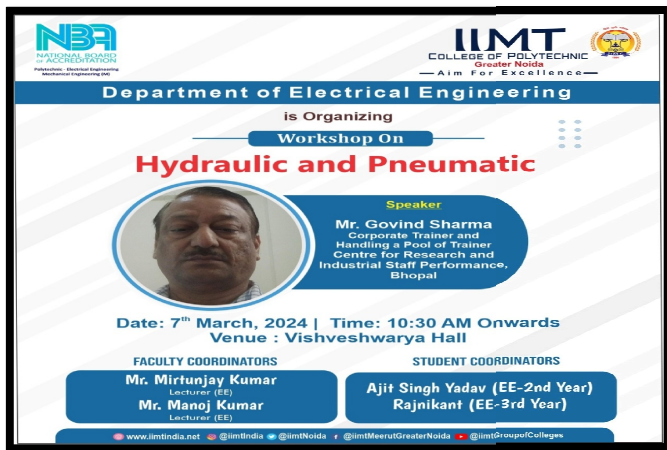
WORKSHOP ON HYDRAULIC & PNEUMATIC

The expert lecture on “Hydraulic and Pneumatic” was organized by Department of Electrical Engineering. The speaker invited on this occasion was Mr. Govind Sharma, Mechanical Engineer and a Certified Energy Manager from GoI. The objective of conducting these types of expert lecture is to make the students aware of various engineering applications where hydraulic and pneumatic systems are utilized. It aims to provide students with the knowledge and skills to design, analyze, and troubleshoot these systems effectively.

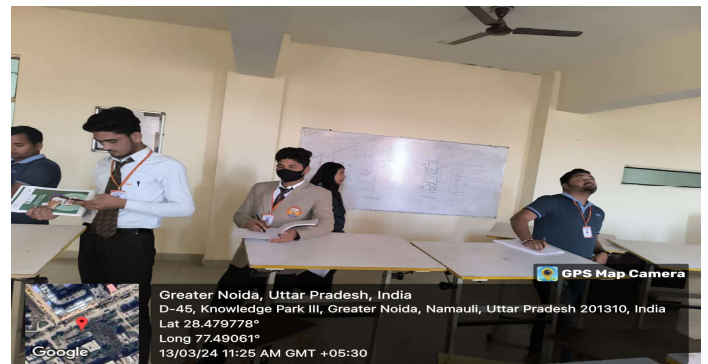
LOAD ESTIMATION

The “Load Estimation”, a minor activity was conducted for the students of EE on 13th March 2024. The facilitator of the event was Ms. Sakshi Rana, Lecturer (EE).

The main purpose of conducting this activity was to make the students understand about the electrical distribution system and to determine whether the electrical system used in daily life at various places is properly balanced or not. Load estimation is vital for planning the utility connection, transformers, switchgear, and initial budget.



Felicitation of Guest Speaker Mr. Govind Sharma



Students learnt to estimate the load of innumerable electronic appliances

Department of Civil Engineering



INDUSTRIAL VISIT

The Department of Civil Engineering coordinated an Industrial Visit on 29th Feb 2024 at “Sofcon India Pvt. Ltd”. The objective of industrial visit was to explore and understand various Software applications used in Civil Engineering.

The visit commenced with an introductory Session by the company's representative, Mr. Avesh Bhatnagar. They provided an overview of the company's background, its role in the industry, and its commitment to technological advancements in Civil Engineering. The visit provided students with a practical understanding of how various software tools are employed in real-world Civil Engineering projects. This exposure was crucial or bridging the gap between theoretical knowledge gained in the classroom and its practical application in the industry.



Industrial Visit of CE students at Sofcon India Pvt.



BADMINTON TOURNAMNET

The Department of Civil Engineering conducted a “Badminton Tournament” on 28 Feb’2024. The coordinator of the tournament was Mr. Tej Prakash, Lecturer (CE). The objectives of organizing this tournament was to Promote Physical Activity, Skill development, Social interaction, Competition and Sportsmanship, Leadership and Organizational skills and many more. In this tournament Aditya Kumar (CE, I Year) secured first position, Akhil Rana (CE, II Year) secured second position and Pushpansh Vashishtha (CE, I year) secured third position.



Participants compete in Badminton Tournament

INNOVATION & ENTREPRENEURSHIP QUIZ

The Department of Civil Engineering collocated a quiz on the topic “Innovation & Entrepreneurship” on 21st March 2024. The organizer of this quiz was Mr. Tanmay Gupta, Lecturer (CE). The innovation and entrepreneurship quiz activity aims to cultivate essential knowledge and skills pertinent to the dynamic landscape of business creation and development. The winners of this quiz were Gaurav Rai- I Position (IIMT College of Science & Technology), Aditi Singh- II Position (IIMT College of Science & Technology) and Bindesh Kumar Jha- III Position (IIMT,COP).



Students Participated in Innovation & Entrepreneurship Quiz



Department of Mechanical Engineering



GUEST LECTURE ON ELECTRICAL VEHICLE

A Guest Lecture was organized by Mechanical Engineering Department on February 26, 2024 on “**Electrical Vehicle**”. The speaker invited for the session was Mr. Rohit Pahwa, Technical Business Development Manager, Ducat, Noida. The Faculty Coordinator involved in the conduction of this Guest Lecture was Mr. Dheeraj Kumar, Lecturer [MEP]. Total no. of attendees in this expert lecture were 52.

The primary objective of conducting these types of expert lectures was to provide the students cognizance about the electric vehicles (EVs) and also allocate a more sustainable and environmentally friendly mode of transportation as compared to traditional internal combustion engine vehicles.



Felicitation of Guest Speaker Mr. Rohit Pahwa

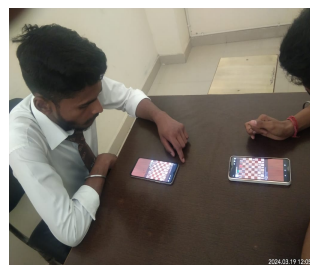


INDUSTRIAL VISIT

The Industrial Visit was conducted by the department of Mechanical Engineering on 5th March 2024 at “**Sofcon India Private Limited, B-5, Sector 2, Noida**”. The Faculty Coordinators who were involved in the conduction of Industrial Visit were Mr. Dheeraj Kumar, Lecturer [ME] & Mr. Harikesh Tiwari, Lecturer [ME]. The objective of the industrial visit was to gain practical insights into the field of Hydraulics & Pneumatics System. An industrial visit offered the participants a comprehensive learning experience, bridging the gap between theory and practice in the field of industrial automation and control.

CHESS TOURNAMENT

A minor activity named as “**Chess Tournament**” was collocated by Department of Mechanical Engineering on 18th March, 2024. In totality 26 Students participated in this activity. The faculty coordinators who were involved in the conduction of this activity were Mr. Sachin Kumar, Lecturer [ME-P] and Mr. Banty Kumar, Lecturer [ME-P]. The prime objective of organizing this activity was to provide a platform for players to test their skills, strategy, and decision – making abilities against opponents of similar or varying levels, fostering personal growth, sportsmanship and community engagement within the chess community.



Industrial Visit of ME Students at Sofcon India Pvt. Ltd., Noida

Plavers comete with each other



FACULTY CORNER

ADVANCING ENGINEERING THROUGH AR/VR TECHNOLOGY

1. Augmented Reality (AR) and Virtual Reality (VR) have emerged as transformative technologies in the engineering field, revolutionizing the way professionals design, analyze, and collaborate on projects. This article explores the pivotal role of AR/VR in engineering, highlighting its myriad applications and benefits.

2. One of the key areas where AR/VR technology has made significant strides is in design and prototyping. Engineers can now visualize complex structures and systems in three dimensions, allowing for more efficient and accurate design iterations. By creating virtual prototypes, engineers can identify potential flaws and optimize designs before physical production, thus reducing costs and time-to-market.

3. Furthermore, AR/VR facilitates immersive training experiences for engineers. Through virtual simulations, professionals can practice operating machinery, conducting maintenance procedures, and troubleshooting problems in a safe and controlled environment. This not only enhances skill development but also minimizes the risk of accidents and equipment damage.

4. In the realm of construction and infrastructure development, AR/VR plays a crucial role in project planning and management. Engineers can use augmented reality overlays to superimpose digital models onto real-world environments, enabling them to visualize proposed structures in their intended locations. This helps stakeholders make informed decisions and identify potential conflicts early in the planning phase, leading to smoother project execution.

5. Moreover, AR/VR technology enhances collaboration among dispersed teams. With virtual meeting spaces and shared digital environments, engineers from different locations can collaborate in real-time, facilitating communication and knowledge sharing. This fosters innovation and allows for more diverse perspectives to be integrated into the design process.

6. **In conclusion**, AR/VR technology is reshaping the engineering landscape, offering unprecedented opportunities for innovation and efficiency. From design and prototyping to training and maintenance, its applications are diverse and far-reaching. As these technologies continue to evolve, they will undoubtedly play an increasingly integral role in driving progress and innovation across the engineering field.



Mr. Manoj Kumar

B.Tech , M.Tech (EE)



STUDENT CORNER

The Case for Free Education: Empowering Individuals and Society

Introduction: Education stands as the cornerstone of progress, the beacon of opportunity, and the catalyst for societal advancement. Yet, access to quality education remains a privilege rather than a universal right in many parts of the world. The notion of free education, however, challenges this status quo, advocating for a system where knowledge is freely accessible to all, irrespective of socio-economic background.

Economic Advantages: Investing in education yields profound economic benefits, driving innovation, productivity, and overall prosperity. Free education cultivates a skilled workforce, equipping individuals with the knowledge and expertise needed to thrive in an increasingly competitive global economy.

Long-Term Sustainability: Free education is not merely an expenditure but an investment in the future. By equipping individuals with the knowledge and skills needed to address complex global challenges, such as climate change, healthcare disparities, free education fosters long-term sustainability.

Social Cohesion and Equality: Education serves as a catalyst for social cohesion, fostering understanding, empathy, and tolerance among diverse communities.

Conclusion: In a rapidly evolving world where knowledge is paramount, the case for free education grows ever stronger.

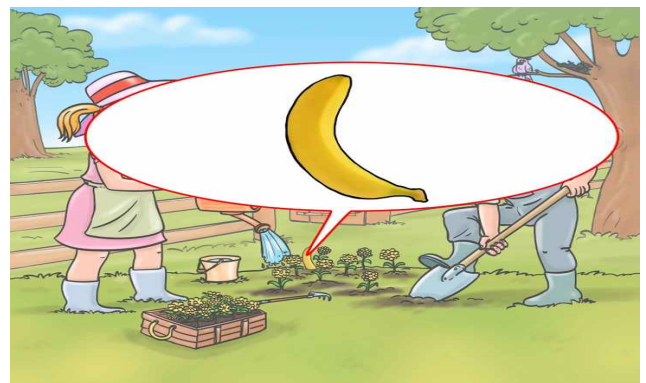


Nishant Kumar EE, III Year

GENERAL CORNER- QUIZ

- 1. Who wrote the famous novel "To Kill a Mockingbird"? a) Harper Lee b) Mark Twain c) J.K. Rowling d) Charles Dickens
2. Who painted the Mona Lisa? a) Vincent van Gogh b) Leonardo da Vinci c) Pablo Picasso d) Michelangelo
3. What is the currency of Japan? a) Yen b) Euro c) Dollar d) Pound
4. Who is known as the father of modern physics? a) Albert Einstein b) Isaac Newton c) Galileo Galilei d) Nikola Tesla
5. Who was the first woman to win a Nobel Prize? a) Marie Curie b) Mother Teresa c) Rosalind Franklin d) Malala Yousafzai

Answers of previous newsletter general corner (Oct-Dec'2023)



Source: www.jagranjosh.com



Editorial
 Board Members

FROM THE
 EDITOR'S
 DESK

"We extend our sincere appreciation to our dedicated readers, whose engagement and support drive the success of our esteemed quarterly newsletter. We also express profound gratitude to our talented authors, whose innovative research enriches the scholarly discourse in our field. Finally, we extend special thanks to our distinguished Editor-in-Chief for his guidance, leadership, and unwavering commitment to excellence."


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