

## Activities/Events organised by the Department of Mechanical Engineering

**DATE: 03 AUG 2021** 

Activity: Students of Department of Mechanical Engineering participated in the 'organized

by the Society of Automotive Engineers (SAE) India Southern Section (SAEISS)

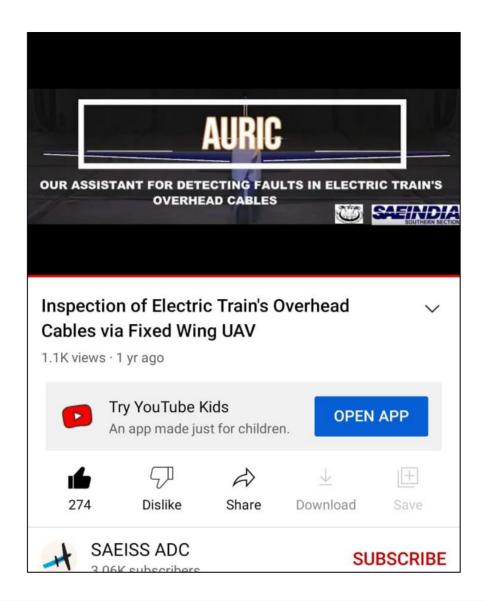
Supervisor: Prof. S. M. Muzakkir

A team of seven students from the Department of Mechanical Engineering and Electronics and Communication Engineering, Jamia Millia Islamia (JMI), have won the second position in the 'Aero Design Challenge-2021' organised by the Society of Automotive Engineers (SAE) India Southern Section (SAEISS). The team has won the second position in "Design" under the regular category.

Out of the seven members in the team, four, including the team leader, are girls, JMI said. The JMI team – Team Lammergeier – includes team captain Emama Firdaus Zama, Elham Nissar Mahajan, Kanza Zafar, Reda Fatma Mobin, Hitesh Tyagi, Rahul Goyal, and Zishan Shahzad. Over 60 teams from engineering colleges across the country participated in this competition.

The Jamia team was mentored by Professor S. Muzakkir, Department of Mechanical Engineering, JMI. Congratulating team members, Prof. Najma Akhtar, Vice-Chancellor, JMI, said that prize from such an elite society SAE is a big boost to competence of JMI's teaching-learning and image as a leading institution.





Design Video created by the students of the Department of Mechanical Engineering, JMI for the 'Aero Design Challenge-2021' organized by the Society of Automotive Engineers (SAE) India Southern Section (SAEISS) (Video Link: https://www.youtube.com/watch?v=jNvXCNFgZ1E)





Design created by the students of the Department of Mechanical Engineering, JMI for the 'Aero Design Challenge-2021' organized by the Society of Automotive Engineers



Students of Jamia Millia Islamia in the NDTV news for their outstanding performance in the competition



# Cognitive Applications using Machine Learning /Artificial Intelligence

**DATE: 09-22 AUG 2021** 

**Title:** Cognitive Applications using Machine Learning and Artificial Intelligence by Aditya Jyoti Paul



Poster of Event: Cognitive Applications using Machine Learning and Artificial Intelligence by Aditya Jyoti Paul



### Name of Event:- TEDXJMI

**DATE: 27 MARCH 2022** 

Faculty Advisor: - Prof. SM Muzakkir

Jamia Millia Islamia (JMI) organized the fourth edition of TEDxJMI on March 27, 2022 on the theme 'Different Lenses'. Adhering to Covid protocols it was conducted in a closed format, where only TEDxJMI volunteers were allowed inside the campus. The event was organized under the leadership of the JMI Vice-Chancellor Prof. Najma Akhtar.

The event was graced by eminent speakers from different walks of life. The group of orators included JMI Vice Chancellor Prof. Najma Akhtar, Senior Advocate Sanjay Hegde, Mrs. Arushi Kapoor, Dr. Maria Khan, and Miss. Oviya Singh. They were welcomed by the Faculty Advisors and TEDx student volunteers at the Nehru Guest House of the university. Meanwhile, Mr. Ankur Warikoo opted for a digital alternative to give his speech. Recording of their lectures at different time slots were done at the AJK MCRC Studio of the university. The videos are expected to be released soon on the official TEDx platform.

The speakers were interviewed by the media partner of TEDxJMI, the interactive Q& A session helped the students witness the first-person narrative and gain innovative ideas. After successfully recording the speeches of our speakers, the TEDxJMI conference steered towards cultural activities. Dr. Ayub Khan, Dean Students' Welfare, Prof. S.M.Muzakkir, Department of Mechanical Engineering, and Prof. Rahela Farooqi, Hony. Director, University Placement Cell rejuvenated the event with their presence.

The event hosted several well-known personalities, who entertained the guests and volunteers with their performances, including, The Jamia Tarana Team, Ali Khan, The Timber: Deshbandhu College Musical Society, Ahmad Parvez, and Adil and Aman (@Twinztagram).

The event was successfully conducted under the guidance and support of the JMI Vice-chancellor, Prof. Najma Akhtar, DSW, faculty advisors, Prof. SM Muzakkir and Prof. Rahela Farooqi.



Prof. Najma Akhtar (VC, Jamia Millia Islamia, New Delhi) with TEDxJMI 2022 organizing team



Event Photograph: TEDxJMI 2022



# ENGINEERING INVESTMENTS FOR THE PLANET by ASME

Date-27th April 2022

Speaker: Dr. Hanif Qureshi, IPS, IGP Haryana Police

Chairperson: Prof. Mohammad Muzaffarul Hasan, HOD, Department of Mechanical

Engineering, JMI

Coordinator: Prof. Sabah Khan, Department of Mechanical Engineering, JMI

### Description

The webinar on "Engineering Investment for the Planet" was organized with the aim of exploring the role of engineering in addressing environmental challenges and promoting sustainable development. The event witnessed a significant turnout, with more than 150 participants attending.

#### **Impact**

Dr. Qureshi stressed the importance of policies for sustainable engineering, while Prof. Dr. Hasan highlighted the role of innovation in addressing environmental issues he also had an extensive Q&A session with the students. A research paper writing competition was held to promote academic discourse and effective communication of research findings, fostering scholarly discussions and knowledge sharing.





### Shortcomings

One potential shortcoming of the webinar may have been the limited interaction between the attendees and the speakers. Due to the large number of participants, it might have been challenging to address individual questions or engage in in-depth discussions.



## WEEK LONG BOOTCAMP by ASME

Date-22<sup>nd</sup> June 2022

**Event:** Weeklong Bootcamp

#### Description

The weeklong Bootcamp aimed to provide skill development opportunities for juniors, with a particular focus on the design sector. The event also emphasized interdisciplinary learning, encouraging participants to explore various fields of knowledge and enhance their overall skill set.

#### Topics and Sessions:

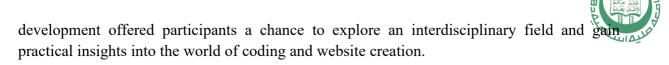
**Introduction to Solidworks and Additive Manufacturing: -** By Moin Khan (ex-intern DRDO): This session provided participants with an overview of Solidworks, a popular computer-aided design software, and its application in additive manufacturing. Moin Khan, an experienced professional who had interned at DRDO, shared insights and practical knowledge on the subject.

**Introduction to Siemens NX and Computer-Aided Manufacturing -** By Adnan Qayyum (ex-intern CMTI): Adnan Qayyum, an ex-intern at CMTI, led this session, introducing participants to Siemens NX, a powerful software for computer-aided manufacturing. The session covered the basics of using Siemens NX and its relevance in the manufacturing industry.

**Introduction to Web Development -** By faculty of gurucool. xyz (an ed-tech startup): This session was conducted by the faculty members of gurucool. xyz, an ed-tech startup specializing in web development. Participants were introduced to the fundamentals of web development, including HTML, CSS, and JavaScript, providing them with a foundation to explore this interdisciplinary field.

#### **Impact**

The Bootcamp had a significant impact on the participants, as it provided them with valuable opportunities for skill development. The sessions on Solidworks and Siemens NX equipped participants with essential knowledge in computer- aided design, manufacturing &3D printing, which are crucial skills in the engineering industry. The introduction to web











### **Shortcomings**

One potential shortcoming of the Bootcamp may have been the limited time available for each topic. Since the Bootcamp covered three main topics with five sessions, it might have been challenging to delve into each subject in great detail. Participants might have desired more in-depth learning experiences and hands-on activities to further solidify their skills.





Date-31st Aug 2022

### Description

The expert corporate talk on "Engineering Skills for Youth of the Decade" featured Javed Beg, a successful alumnus of JMI and currently the Senior Vice President of Deloitte. The talk aimed to provide valuable insights and guidance to the youth regarding the essential engineering skills required to excel in the current decade and had an attendance of over 100 students.

He discussed the evolving landscape of the engineering industry, highlighting the key skills that are highly sought after in the current job market. The talk aimed to inspire and motivate the youth to acquire and develop these skills to thrive in their engineering careers.



### **Impact**

The expert corporate talk had a significant impact on the participants by providing them with valuable industry insights and guidance. Javed Beg's success story as an alumnus of JMI and his senior leadership position at Deloitte served as an inspiration to the attendees.

Participants gained a deeper understanding of the skills required to succeed in the engineering field, Mr. Javed also had a thorough interactions with the students present enabling them to understand and align their educational and professional pursuits accordingly.

### **Shortcomings**

One potential shortcoming of the expert corporate talk might have been the limited time available for Q&A or interactive discussions. Due to time constraints, participants might not have had enough opportunity to engage with Javed Beg and ask specific questions or seek personalized advice.

### SWACHHTA PAKHWADA 2022



**DATE:** 6 SEPT. 2022

Name of Speaker: - Prof. S.M. Muzakkir







### स्वच्छता पखवाड़ा Swachhta Pakhwada

Department of Mechanical Engineering

Faculty of Engineering and Technology Jamia Millia Islamia- New Delhi (01st - 15th September 2022)





Picture: Representing the event addressed by Prof. S. M. Muzakkir, Department of Mechanical Engineering, JMI









Photograph: Cleanliness Drive

Picture: Representing the event attended by B.Tech ME 2<sup>nd</sup> Year student



## DRISHTI SOCIOINNOVATION PROJECT PRESENTATION

DATE - 24 SEPTEMBER, 2022

Name of student: Arif Jamal

**Name of achievement:** Secured 3rd position in DRISHTI Socio-Innovation Project Presentation Competition organized by the National Service Scheme (NSS) unit of Gargi College (University of Delhi).

University Name: Gargi College, University of Delhi

Place: Gargi College

Whether Dept./Faculty/District/State/National/ International level: National level





No of participant: 100+

### Description

Social work and innovative ideas when channelised together lay the foundation of a progressive and inclusive future. It is the very spirit of National Service Scheme (NSS) to work towards the societal upliftment of masses and spread awareness by propagation of novel ideas. In this project, my team (comprising of Arif Jamal and Ayesha Bano from the

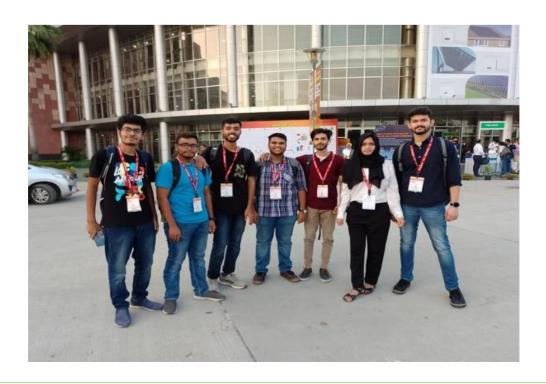
Department of Mechanical Engineering) presented our project titled "Sankalp" under the theme Padhega India Tabhi Badhega India: Each One Teach One– Education to all in every remote area of India.

# RENEWABLE ENERGY EXPO by ASME

Date-28th Sept 2022

### Description

The Renewable Energy Expo provided an opportunity for the ASME JMI team to explore the latest advancements and innovations in the field of renewable energy. The event, held in the last remaining days of September 2022, focused particularly on solar panel technology and its various aspects, such as panel design and orientation optimization. Additionally, the expo featured the showcasing of robotic cleaners designed to maintain and clean the solar panels.





### **Impact**

The Renewable Energy Expo had a significant impact by increasing the awareness and knowledge of renewable energy technologies, specifically in the context of solar power. Observing the advancements in solar panel design and orientation optimization allowed us to understand the efforts being made to enhance the efficiency and effectiveness of solar energy systems. The showcasing of robotic cleaners highlighted the role of automation in maintaining and optimizing the performance of solar panels. It provided valuable insights into the latest trends and innovations in the field, motivating individuals to consider careers and further research in renewable energy.

### **Shortcomings**

- Lack of Diversity
- Limited Practical Demonstrations
- Insufficient Networking Opportunities
- Limited Focus on Policy and Regulatory Aspects



# SOLIDWORKS AND ANSYS WORKSHOP by ASME

Date-10th Oct 2022

### Description

The workshop on "Design and Simulation" aimed to provide participants with a comprehensive understanding of Solidworks and ANSYS software, focusing on both part modeling and Finite Element Analysis. The workshop spanned two weeks, allowing participants to delve into the basics of Solidworks, including part modeling and assembly, as well as ANSYS for structural analysis and computational fluid dynamics (CFD).





### **Impact**

The workshop on "Design and Simulation" had a significant impact on the participants by equipping them with valuable skills in Solidworks and ANSYS. Through the hands-on approach, participants gained practical experience in part modeling, assembly, and structural as well as fluid simulation, enabling them to apply these skills in real-world engineering scenarios.

The workshop also fostered a deeper understanding of the Design for Manufacturing (DFM) principle and the Finite Element Method (FEM), empowering participants to develop innovative solutions and optimize their designs.

### **Shortcomings**

Participants may have desired more in- depth coverage or additional sessions to explore advanced features or specific applications.

Additionally, the individual learning pace could have led to differences in the duration of the course for participants. While accommodating individual learning speeds is beneficial, it might have resulted in varying depths of understanding among the participants.



### SOLIDWORKS WORKSHOP by SAE

Date - 12 OCTOBER 2022

Name of Speaker: - QASIM FAROOQUI (former vice president)

Name of Coordinator: - S.M. MUZAKKIR

### Description-

The workshop basically focused on teaching the students about the elements and working of solidworks software.





# Participation of student in International Conference on Nanotechnology; Opportunities and Challenges (ICNOC) 2022

DATE – 28 NOVEMBER, 2022

Name of student: Arif Jamal

Name of achievement: Participated in International Conference on Nanotechnology;

Opportunities and Challenges (ICNOC) 2022

University Name: Jamia Millia Islamia

Place: Department of Applied Sciences & Humanities, FET JMI (Online Mode)

Whether Dept./Faculty/District/State/National/ International level: International Whether

Dept./Faculty/District/State/National/International level: International



	ICNOC-2022	
	International Conference	
Nan	on otechnology: Opportunities & Chall	enges
CERTI	FICATE OF PARTICIPA	ATION
This is to certify that Prof./Dr./Mr./Ms.	ARIF JAMAL	
Products of Biomass-Nanoparticle Com	A Decision Support System for Selection bination for Co-Firing Operation with Control technology: Opportunities & Challenges (	ıl– An AHP-TOPSIS Approach
of Applied Sciences & Humanities, 1 on November 28-30, 2022.	faculty of Engineering & Technology, J	amia Millia Islamia, New Delhi, India
al.	and to	He >
Prof. Zishan Husain Khan Organizing Chair	Prof. Nafis Ahmad Organizing Secretary	Dr. Mukesh Prartap Singh Organizing Secretary
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No of participant: 500+

### Description

International Conference on Nanotechnology; Opportunities & Challenges (ICNOC-2022) was held at Jamia Millia Islamia (Central University), New Delhi during November 28-29, 2022. This conference was organized by the Department of Applied Sciences and Humanities, Jamia Millia Islamia, New Delhi-110025. It brought together leading scientists, academicians and industry experts working in the field nanotechnology to share their ideas and exchange information about latest research and developments. ICNOC-2022 featured talks from national and international experts in nanotechnology and its applications. The conference also provided an opportunity for industry experts to present the latest technologies and equipment available for research in the field of nanotechnology and its allied areas.



## G20 UNIVERSITY CONNECT

**DATE - 1**ST DECEMBER, 2022

Name of student: - Muskan Ahmad

Name of achievement: - Delegate at G20 University Connect

University Name: - Jamia Millia Islamia

Place: Sushma Swaraj Bhawan, Ministry of External Affairs

Whether Dept./Faculty/District/State/National/ International level- National Level

No of participant- 200



In the frame, Subhrahmanyam Jaishankar, Minister of External Affairs of the Government of India at G20 University Connect.





In the frame, the Delegate's ID Card of myself and my classmate. From the Dept. of Mechanical Engineering, Muskan Ahmad and Shishir Singh were chosen as Delegates for G20 University Connect.

### Description

G20 University Connect was a program held for the students of universities from all over India. It was also important as it was the first event of the many scheduled G20 events that the G20 conducted after India assumed the G20 presidency.



### PROF. ABDUL MUBEEN MEMORIAL

**Date** – 20<sup>th</sup> Dec 2022

Name of Speaker: - Dr. Hanif Qureshi, IPS, IGP Haryana Police

Dr. Hanif Qureshi, IPS, Joint Secretary, Ministry of Heavy Industries, Govt. of India delivered Prof. Abdul Mubeen Memorial Lecture on the topic "Future of Automobiles in Digital India" on 21st December 2022, followed by a Q&A session at Jamia Millia Islamia (JMI). The lecture was organised by the Department of Mechanical Engineering, Faculty of Engineering & Technology, JMI in memory of the founder Head of the Department, Prof. Abdul Mubeen.

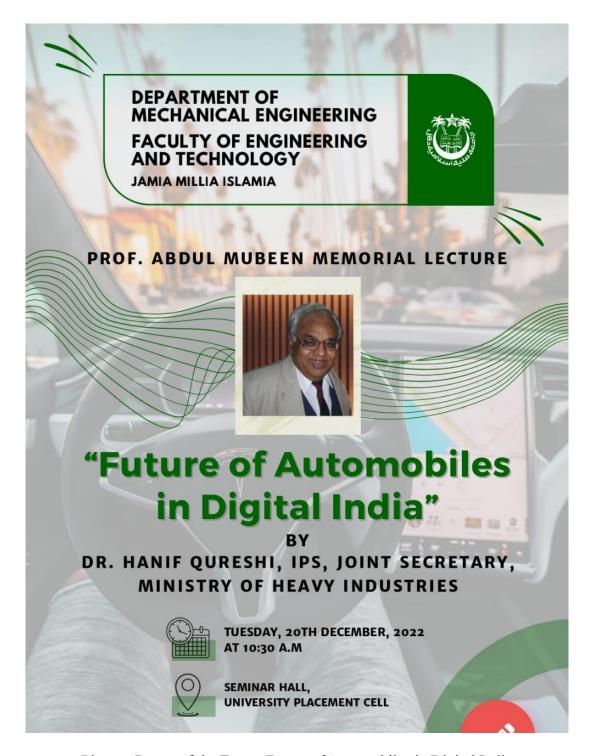
Prof M M Hasan, Head Deptt of Mechanical Engineering, JMI welcomed the distinguished speaker, faculty members and the audience. He highlighted and appreciated the contribution of Prof. Abdul Mubeen who was not only an exemplary academician but also an ardent researcher, good teacher and a good human being.

Dr. Hanif Qureshi shared with the audience some of his own memories of Prof Abdul Mubeen. He also enlightened the audience the importance of making India one of the major Automobile producing countries among USA, Germany, Japan, United Kingdom and China. He shared the role of various leading automotive testing, validation and R&D organizations of the country set up by Government of India, such as Automotive Research Association of India (ARAI), Pune (Maharashtra) and International Centre for Automotive Technology (ICAT), Gurugram (Haryana). He elaborated that ICAT has testing and analysis facilities to assess effects of different types of lubricants, additives and fuels on Fuel Consumption and Exhaust Emission.

Dr. Qureshi also emphasised on the necessity of using Ethanol blended fuels and Flex fuels for ecological balance and cost effectiveness. Ethanol can easily be extracted from the agro waste such as sugarcane bagasse and rice husk.

His expert talk was followed by an interactive Q & A session with enthusiastic involvement by both academicians and students. The session ended with a memento presentation by Prof

Z A Khan to Dr. Hanif Qureshi and a vote of thanks by the convener of the program Sabah Khan.



Picture: Poster of the Event, Future of Automobiles in Digital India







Picture: Representing the event addressed by Dr. Hanif Qureshi, IPS



## EFFICYCLE 2022 BY SAE INDIA

### **DATE** – 20<sup>th</sup> DEC 2022

Name of student: - Team XLR8 (Aman Khan, Akram Afridi, Omar Farooq Khan Suri, Mohd Abdullah Majid, Mohd Suhail, Amaan Ahmad, Mohd Waseem Akram, Mohd. Asadullah, Shifa Syed, Muskan Ahmad, Farmaan Xarra, Wajahat Hashmi, Shahnawaj)

**Name of achievement: -** Achieve all India rank 4 under advanced category in "EFFICYCLE 2022" by SAEINDIA

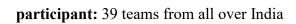
University Name: - Jamia Millia Islamia

Place: New Delhi

Whether Dept./Faculty/District/State/National/ International level: National Level



No of







Team XLR8 has represented Jamia Millia Islamia in "EFFICYCLE 2022" by SAEINDIA at Lovely Professional University, Phagwara, Punjab and achieve 4<sup>th</sup> rank.



### Description

EFFICYCLE is a national level competition organised every year by SAEINDIA (society for autonomous Engineer) in which teams from different colleges and universities across India has participated and they have to design and fabricate a 3-wheeler electric vehicle. Teams have to pass all the necessary vehicle test at the main event and compete with all the teams. Team XLR8 from Jamia Millia Islamia, New Delhi has design and fabricated the efficycle at the college's workshop under the guidance of Prof. S.M. Muzakkir and achieve 4<sup>th</sup> rank under advanced category in "EFFICYCLE 2022" by SAE INDIA.

Date: - 31 Jan 2023

Name of Speaker: - Mr. Hardeep Singh Arora

Faculty Advisor: - Prof. Mohd Suhaib

### JMI organizes Trends of Robotics in India (TORI-23)

The Faculty of Engineering and Technology, Jamia Millia Islamia (JMI) successfully organized Trends of Robotics in India (TORI-23) on 31<sup>st</sup> January 2023. The event was organized by the Robotics Society-JMI Student Chapter under the guidance of Prof. Mohd Suhaib, faculty advisor of the Society.

The event commenced with the inaugural session which was graced by Mr. Hardeep Singh Arora, a Technology and New Product Development expert, who has served in the Minda Group of Industries for more than three decades, as the Chief Guest. The session was also presided by Prof. Mini S. Thomas, Dean, Faculty of Engineering and Technology and Prof. Zahid Akhter Khan, Head, Department of Mechanical Engineering. The inaugural session featured the felicitation of the respected dignitaries followed by their addresses to the audience, complimented by words of wisdom shared by the Chief Guest.





Picture: Representing the Students giving presentation



Picture: Representing Posters of the models

Post this session, multiple events were held associated with the field of robotics, namely Model Making Competition, Poster Presentation Competition, and Research Paper Presentation. These events observed a lot of enthusiastic and inquisitive participants joining in to showcase their valuable contributions to this vast field, and striving hard to engage in these technical competitions. The events were judged by highly experienced faculty members and experts who have been associated with this field of innovations.

At the end of the evaluation rounds, a valedictory session was held under the august present of respected dignitaries from the Department of Mechanical Engineering, JMI. The winners from the respective competitions were awarded with certificates and cash prizes for their commendable efforts and persistent hard work. The session concluded with a vote of thanks by Prof. Mohd Suhaib, faculty advisor for TRS JMI Student Chapter. The event turned out to be grand success as the entire organizing committee strived hard to ensure the same.



## ENGINEERING, EXCEPTIONS AND ENTREPRENEURSHIP by ASME

Date-13th Feb 2023

### Description

Organized an interactive session on "Engineering Exceptions and Entrepreneurship. "The event featured distinguished speakers who were JMI alumni and successful entrepreneurs in their respective fields. The speakers included Mr. Emmauel Haque, VC Founder and Director of Hunch ventures and also the former board member of ASME Eclipse, Mr. Kunal Sen Verma, Co- Founder of CGFLY Studioz, and Mr. Abdul Majid, CEO and Founder of Gallant Orbit. During the session, the speakers shared their experiences and insights into the intersection of engineering exceptions and entrepreneurship. They discussed how engineering expertise and innovative thinking can lead to exceptional solutions and opportunities for entrepreneurship.

### **Impact**

The interactive session on "Engineering Exceptions and Entrepreneurship" had a significant impact on the participants. By hearing from successful JMI alumni who had established themselves as entrepreneurs, participants gained valuable insights into the practical application of engineering knowledge and the entrepreneurial journey. The session inspired participants to think beyond conventional career paths and consider entrepreneurship as a viable option.





### **Shortcomings**

One potential shortcoming of the webinar may have been the limited interaction between the attendees and the speakers. Due to the large number of participants, it might have been challenging to address individual questions or engage in in-depth discussions.



# CLASS AND POWER OF BLOCKCHAIN AND DIVERSITY OF UPI by ASME

DATE-13th Feb 2023

### Description

ASME JMI organized a Pitching Master Class, featuring two distinguished speakers who shared their expertise on different aspects of entrepreneurship and technology. The event aimed to enhance participants' pitching skills and provide insights into the power of blockchain technology.

Adil Meraj, CEO and Founder of Gurucool, conducted a startup pitch deck master class. He guided participants on taking their pitching skills to the next level, offering valuable insights and strategies for creating effective startup pitch decks. The session emphasized the importance of a compelling pitch in attracting investors and securing funding for startups.

Yaseen Ammaar, Founder and CEO of SoPay, delivered a talk on the Power of Blockchain and the diversity of UPI (Unified Payment Interface). Yaseen, an accomplished entrepreneur, shared his knowledge and experience in bridging the gap between crypto and traditional payment systems. He discussed the latest advancements in blockchain technology and how they are transforming the startup landscape.

The session highlighted how Yaseen and his team at Sopay are leveraging blockchain and UPI to revolutionize the payment industry.







### **Impact**

The Pitching Master Class had a significant impact on participants. Adil Meraj's startup pitch deck master class equipped attendees with the necessary skills and knowledge to create compelling pitches for their startups. The session empowered participants to effectively communicate their ideas and attract potential investors.

Yaseen Ammaar's talk on the Power of Blockchain and UPI provided valuable insights into the potential of blockchain technology and its impact on the payment industry. Participants gained a deeper understanding of how blockchain can revolutionize business processes and create new opportunities for startups. The session inspired attendees to explore the integration of blockchain technology into their own ventures and adapt to the evolving market trends.

Additionally, the networking opportunities offered during the event facilitated connections with like-minded individuals and industry professionals. Participants had the chance to



exchange ideas, seek advice, and potentially establish collaborations or relationships.

### Shortcomings

One potential shortcoming of the event could be the limited time available for in-depth discussions on pitching and blockchain technology. Given the vastness of these topics, participants may have desired more comprehensive coverage or additional sessions to delve deeper into specific areas of interest.

Moreover, the availability of experienced speakers and experts in the field might have been limited, potentially impacting the diversity of perspectives and experiences shared during the event.



## CELESTRA by ASME

### DATE-16TH MARCH 2023

### DESCRIPTION

ASME JMI organized the Techfest of Jamia Millia Islamia, a dynamic event comprising various engaging activities and competitions. The Techfest aimed to provide a platform for students to showcase their skills, knowledge, and creativity in different areas of engineering and technology.

### • Product/Prototype Design and Simulation Challenge (PDSC):

This competition focused on challenging participants to design and simulate innovative products or prototypes using their engineering expertise. It aimed to encourage practical application of engineering principles and foster creativity in product development.

### • Poster making on "Engineering for Sustainable Development":

Participants were invited to create visually appealing posters highlighting the importance of engineering in achieving sustainable development goals. The competition aimed to raise awareness about sustainability.

- Original idea presentation: Shark tank: This event provided participants with the opportunity to pitch their original ideas and innovations in a "Shark Tank" style format. It aimed to foster thinking and encourage participants to present their ideas with confidence and clarity
- Quiz on "G20 &Industry 4.0": Participants took part in a quiz that tested their knowledge of the G20 (Group of Twenty) organization and its relation to the concept of Industry 4.0. The quiz aimed to enhance participants' understanding of global economic and technological trends.
- Word hunt: A word hunt competition was organized to challenge participants' knowledge and vocabulary related to engineering and technology. It aimed to encourage participants to explore and learn about different terms and concepts in an engaging manner.

- **Product selling competition:** This competition provided participants with the opportunity to showcase their entrepreneurial skills by presenting and selling their own products. It aimed to encourage participants to think strategically about product marketing and sales.
- Case study competition: Participants were given case studies related to real-world engineering and technology challenges. They were required to analyze the given scenarios, propose solutions, and present their findings. The case study competition aimed to develop participants' problem-solving and analytical skills.

### Impact

The Techfest of Jamia Millia Islamia had a significant impact on participants. The event provided a platform for students to showcase their skills, creativity, and knowledge in various domains of engineering and technology. It encouraged participants to think innovatively, develop practical solutions, and enhance their presentation and problem-solving abilities. The competitions and activities promoted healthy competition, teamwork, and critical thinking among participants. They provided opportunities for participants to apply theoretical knowledge to practical scenarios, fostering a deeper understanding of engineering concepts and their real-world applications.

### Shortcomings

One potential shortcoming of the Techfest could be the limited time available for each competition or activity. Given the variety and complexity of the events, participants may have desired more time for preparation and execution. Additionally, the availability of resources and equipment for certain activities, such as product selling or prototype development, might have posed challenges for some participants.



### CELESTRA by SAE

Date - 16 MARCH 2023

Name of Coordinator: - S.M. MUZAKKIR

### Description

CELESTRA' The technical fest of Jamia Millia Islamia organized by SAE JMI. The student chapters of the professional societies, the American Society of Mechanical Engineers (ASME), Society of Automotive Engineers (SAE) and Subject Association of the Department of Mechanical Engineering, Jamia Millia Islamia (JMI) organized a Technical Festival "Celestra" on 16th March 2023 to commemorate India's G20 presidency.

The event was inaugurated by Prof. Mini Thomas, Dean, Faculty of Engineering & Technology, JMI. She elaborated on the importance of being a member of an International professional society for the students of engineering, since such memberships provide access to a wealth of information on the industry, opportunities to connect and volunteer with professionals who share the same passion, interest and guidance throughout the professional journey.

Prof. Zahid Akhtar Khan, Head, Department of Mechanical Engineering, welcomed the faculty members and the students to the event and further emphasized on the importance of professional societies in the present scenario. He encouraged the freshers to enroll in any of the professional societies of their interest, since almost all technical societies are multi-disciplinary. The fest had 8 technical competitive events, such as Product Design Simulation, Case Study, Word Hunt, Shark Tank, Quiz, Art fusion, Richer Rumble, etc. Students from the Faculty of Engineering & Technology and other faculties participated in these events.

The fest was coordinated by Prof. Sabah Khan, faculty coordinator for the technical fest. The student chapters' Heads of ASME and SAE, Adnan Qayyum Khan and Moazzam Farooque, respectively along with their team members, Mohammed Qasim Farooqui, Mayank Anmol, Hiba Zia, Muskan and many others worked hard in a short span of time to successfully organize the fest. The valedictory function at the end of the day culminated with the distribution of certificates to the winners of individual events by Prof. Zahid Akhtar Khan and other faculty members.















## TECHNICAL IDEA PRESENTATION ENCOMIUM 2023

**DATE** – 17 MARCH, 2023

Name of student: Arif Jamal

Name of achievement: Secured 1st place in Technical Idea Presentation during Encomium

2023

University Name: Jamia Millia Islamia

Place: FET Auditorium, JMI

Whether Dept./Faculty/District/State/National/ International level: Department level





No of participant: 20+

In picture, left to right: Arif Jamal and Noor Mohammad (receiving certificate for securing first place in Technical Idea Presentation during Encomium 2023), Dr Sajad Ahmad Loan (Professor, Department of Electronics & Communication Engineering), Dr Ahteshamul Haque (Associate Professor, Department of Electrical Engineering, Dr Arun K Tripathi (Scientist G/Advisor, MNRE, Govt. of India), and Dr Md Waseem Akram (Assistant Professor, Department of Electronics & Communication Engineering)



# INTERDISCIPLINARY SUSTAINABLE SOLUTION FOR MOTHER EARTH

**DATE** –21 MARCH, 2023

Name of Speaker: - Mrs. Farhat Zahoor, Senior Principal Scientist, CSIR







Picture: Representing the event attended by students



Picture: Representing the speaker of the event with Faculty and Students





Picture: Representing the Prof. Zahid A. Khan, HOD, Mech Engg. Dept, giving sapling to speaker

Date: - 3<sup>rd</sup> Nov. 2023



### Name of the Event:- Vigilance Awareness Week



Picture:- Poster of Vigilance Awareness Week





Picture:- Administered the pledge by the Prof. Zahid A. Khan, Head, Dept. of Mechanical Engineering during Vigilance Awareness Week





Picture:- Students discussion on the various aspects of tech addiction during Vigilance Awareness Week

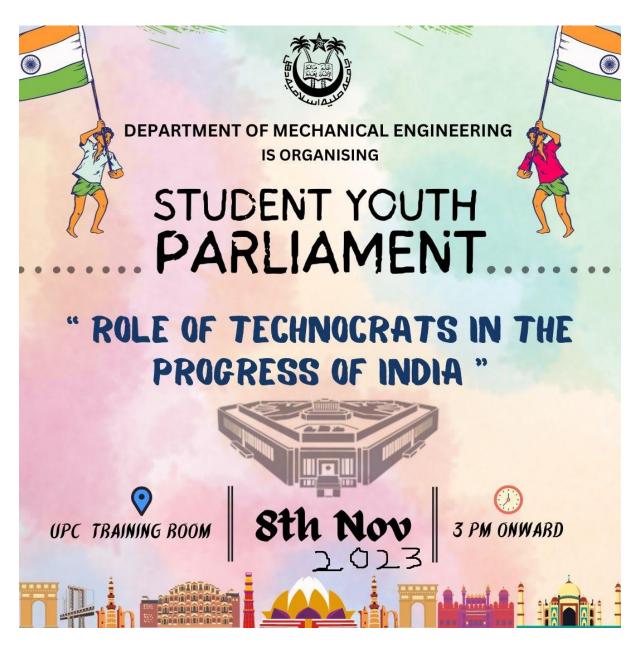


Picture:- Marathon during Vigilance Awareness Week

Date: - 8 Nov. 2023



Name of the Event:- Student Youth Parliament during Igniting India's Journey To 2047



**Picture:- Poster of the Event** 



Picture:- Prof. Zahid A. Khan, Head, Department of Mechanical Engineering inaugurated the programme with the faculty members of the Department.







Picture:- Faculty and Students participation during the event



Date:- 14 Nov. 2023

Event Name:- Seminar on "Hydrogen: The Fight Against Climate Change"

Name of the speaker:- Mr. Hammad Khalid, Project Lead for Direct Air Capture Fraunhofer Institute of Solar Energy Freiburg, Germany



Picture:- Mr. Khalid initiated the audience with the present level of pollution



Picture:- Prof. Zahid A. Khan, faculty members and students during the events

Date: - 21 Nov. 2023



Name of the event:- 8<sup>th</sup> Prof. Abdul Mubeen Memorial Lecture on 'Importance of Ethics in Professional Career'

Guest of honour and the speaker:- Prof. Gayatri Agnihotri, an alumnus of MANIT, Bhopal



Picture:- Prof. Zahid Akhtar Khan, HoD, felicitating the guest of honour and the speaker, Prof. Gayatri Agnihotri



Picture:- Prof. Gayatri Agnihotri during her talk





Picture:- Faculty members and students during 8<sup>th</sup> Prof. Abdul Mubeen Memorial Lecture

Date: - 21 Nov. 2024

Name of the event:- One week online Faculty Development Program on "Additive Manufacturing for Sustainability and Industry 4.0"

The Department of Mechanical Engineering, Faculty of Engineering & Technology, Jamia Millia Islamia (JMI), successfully organized a one-week online Faculty Development Program (FDP) on the theme "Additive Manufacturing for Sustainability and Industry 4.0" from November 18 to November 22, 2024. The program was aimed at equipping faculty members and research scholars with cutting-edge knowledge in additive manufacturing, sustainability, and Industry 4.0 trends.

The FDP, funded by JMI, was coordinated by Dr. Tauseef Uddin Siddiqui and co-coordinated by Dr. Mohd Javaid, Associate Professors in the Department of Mechanical Engineering at JMI. A total of 97 applications were received from faculty members and research scholars across India, out of which 75 candidates were selected to participate.

The inaugural session, held in a hybrid mode, was graced by Prof. Mini Shaji Thomas, Faculty of Engineering & Technology, JMI, as the Chief Guest, and Prof. Zulquernain Mallick, Head of the Department of Mechanical Engineering, JMI, as the Guest of Honour.

Faculty members, supporting staff and Research scholars of the department also attended inaugural session.

The program featured 19 technical sessions over five working days, with 18 distinguished speakers from leading academic institutions and industries, including IITs, AIIMS, NITs, Central universities, and Research laboratories etc. Six eminent speakers from JMI, including Prof. Abid Haleem, Prof. Zahid A. Khan, Prof. Arshad Noor Siddiquee, Prof. S.M. Muzakkir, Dr. Lokesh Kumar, and Prof. Veera Gupta, Honorary Director, Malaviya Mission Teacher Training Centre (MMTTC), JMI, also contributed to the sessions.

The FDP encompassed a wide range of topics, including various aspects of additive manufacturing technologies, sustainability, Industry 4.0, and emerging trends. Additionally, a special lecture by Prof. Veera Gupta on the National Education Policy (NEP) highlighted the importance of aligning academic curricula with NEP guidelines to effectively.













The valedictory ceremony, held in hybrid mode, took place on November 22, 2024, commencing at 4:00 PM. Prof. Ranganath M. Singari from the Department of Mechanical Engineering, Delhi Technological University (DTU), served as the Chief Guest. The event was attended by Prof. Mini Shaji Thomas, Dean of the Faculty of Engineering, Prof. Zulquernain Mallick, Head of the Department of Mechanical Engineering, along with internal speakers from JMI and other faculty members. As a gesture of appreciation, mementos were presented to the internal speakers. The ceremony concluded successfully at 5:00 PM.

This FDP served as an excellent platform for knowledge exchange and skill development, highlighting the critical role of additive manufacturing and sustainable practices in advancing Industry 4.0 and solving societal challenges.