

## HOD's Pen

It is a matter of great pride and privilege for me to be associated with the Department of Mechanical and Automation Engineering for this 19th year. Year 2019-20 has been a year of accomplishments for the Department. We got Accreditation status from NBA. Three of the faculty members of the Department received their PhD degrees from reputed institutes viz. NIT Kurukshetra and DTU. The Department organized Faculty Development programme in which faculty of other institute from NCR participated. A course on SCILab organized by us with the help of NMEICT, IIT Bombay benefitted number of teachers of various schools of Delhi. A large number of faculty members and students presented their research papers in various conferences in Delhi, Pune and Hyderabad.

This year we organized industrial visits almost every fortnight for the students. Two national seminars, sponsored by CSIR and GGSIPU, respectively were organized by the Department. Number of lectures have been also arranged by ASHRAE society and SAE Collegiate Club of MAIT.

*Dr. V. N. Mathur*

## Faculty Corner



**Mr. Ramakant Rana** completed his PhD in "Study of Environmental Friendly Diamond Like Coating on Tool Inserts for Precision Machining" from Delhi Technological University, in July 2022.

## ASHRAE, Student Chapter MAIT

*Membership Number: 8370536*



The ASHRAE Student Chapter MAIT was started in Feb 2019. Since its inception the ASHRAE Student Chapter MAIT has witnessed exponential growth. The society was started with 15 members under the guidance of Dr. Vaibhav Jain and its strength has been gradually increasing. The students of this chapter have shown extreme compassion and exuberance in discharging all the tasks taken up by them with utmost dedication and hard work. The Chapter has grown to be stronger, compassionate, tech savvy and slated to give the better engineers of tomorrow. They are continued to indulge in new, green and sustainable technological research and generated more practical experience in our society and with that work smart towards developing new models in the field of HVAC&R. Even, the COVID-19 couldn't stop them from doing their best and making the best use of the time at home and keep on expanding the chapter and its activities. ASHRAE is a world-renowned organization and they only want to uphold that name by constantly trying hard to be better than before.

*Dr. Vaibhav Jain*

# *AEROSTARS: Drone & UAV Development Society*

## **DRONACHARYA Drone Competition at IGDTUW**

**Team Aerostars** participated in Dronacharya Drone Competition at Inerve'22 (Annual technical fest of IGDTUW) on 1<sup>st</sup> October 2022 under the guidance of Dr. Vaibhav Jain. The drone and UAV development team from Maharaja Agrasen Institute of Technology secured 1<sup>st</sup> position in this competition and won a cash prize of Rs 25,000/-.



## **Drone Racing Competition at BML Munjal University**

**Team Aerostars** participated in Drone Racing Competition at Fest 67<sup>th</sup> Milestone at BML Munjal University, Sidhrawali, Gurgaon on 1<sup>st</sup> October 2022 under the guidance of Dr. Vaibhav Jain. The drone and UAV development team from Maharaja Agrasen Institute of Technology secured 3<sup>rd</sup> position in this competition displaying its quick responses to obstacles and showcased their ability to achieve great heights.



## *Faculty Pursuing PhD*



- ✚ Mr. Anil Kumar Dahiya
- ✚ Mr. Atul Kaushik
- ✚ Mr. Naveen Solanki
- ✚ Ms. Piu Jain
- ✚ Mr. Rakesh Chander Saini
- ✚ Ms. Rachna Chawla
- ✚ Ms. Surbhi Upadhyay
- ✚ Mr. Vikas Sharma
- ✚ Mr. Madhukar Chhimwal
- ✚ Mr. Anupam Thakur
- ✚ Mr. Deshdeep Gambhir
- ✚ Mr. Ashwni
- ✚ Mr. Satish kumar
- ✚ Ms. Surabhi Lata

## *One-Day Workshop on "3D Printing Technology and its Applications"*

3D Space (3D Printing Society) organized a one-day workshop on "3D Printing Technology and its Applications" on 23<sup>rd</sup> December 2022 at Maharaja Agrasen Institute of Technology under the guidance of Ms. Surabhi Lata. The event was conducted to create awareness about the 3D printing techniques and its importance in today's modern world. The ongoing research and innovations were illustrated through ppts and short videos. The nature of creativity, and methods to enhance creativity through this technology were outlined challenging each individual to personalize the ideas.

# Online Webinar on “3D Printing – The Future of Manufacturing”

An online webinar was organized under the guidance of Ms. Surabhi Lata by 3D Printing Society “3D Space”, Department of Mechanical and Automation Engineering and Mechanical Engineering, in association with Curiosity 3D on “3D Printing – The Future of Manufacturing” on 30<sup>th</sup> July 2022. The guest speaker Mr. Raunaq Dua, Alumni, MAIT and founder of Curiosity 3D discussed about the 3D printing technique and its scope in the various fields. He gave practical examples and also defined the insights on various materials used in 3D printing and machines dependent on the application areas. He also provided students with numerous research and job opportunities and discussed how they can be availed. It was a good learning experience about the new technique in the field of modern manufacturing.



# E-Poster Making Competition on Engineer's Day

Department of Mechanical & Automation Engineering and Department of Mechanical Engineering in association with the Institute Innovation Council (IIC) and ASHRAE Student Branch MAIT under the guidance of Dr. Vaibhav Jain organized an E-poster making competition on Engineer's Day (15th September 2022). The theme of the poster was 'Engineers Day'. Online submissions were invited through a Google form for the poster. Students were allowed to use any software of their own choice to make the poster using their creativity. A total of 53 E-posters were received for the activity. After the scrutiny, 3 posters were selected for the 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> prizes amounting to Rs 1500/-, Rs 1100/- and Rs 750/- respectively. Further, a consolation prize was given amounting to Rs 500.

1<sup>st</sup> Winner



2<sup>nd</sup> Winner



3<sup>rd</sup> Winner



Consolation Prize



## *Online Seminar on “Success by Design”*

Department of Mechanical & Engineering and Department of Mechanical Engineering in association with the IIC and ASHRAE Student Branch MAIT organized a seminar on “Success by Design” on 18<sup>th</sup> November 2022. The speakers for the session were Ms Vandana Kapuria, Director Enmax Smart System. Co-Chair (Student Activity), AIC and Mr Gaurav Verma, Scientist, BARC. The objective of the vent was to motivate and encourage the students to set and achieve ther goals. Ms Vandana Kapuria delivered an inspiring talk on the topic “Success by Design”. The talk was primarily focused on the smart way of achieving success. Ms. Kapuria emphasized the participants for setting their goals in the S.M.A.R.T. way i.e. Specific, Measurable, Actionable, Relevant and Time-bound. In the seminar students were guided on the following points: clarity about their goals, identifying their limiting beliefs, How to have Focus, understanding their WHY, the daily success habits, overcoming procrastination, freeing up large chunks of their time and much more. Mr Gaurav Verma from BARC shared his success story and guided the students for achieving success in the current challenging environment.



## *One-Day Seminar on “Hands-on Training on Basics of 3D Printing”*

A seminar was organized under the guidance of Ms. Surabhi Lata by 3D Printing Society “3D Space Club”, Department of Mechanical and Automation Engineering and Mechanical Engineering, on “Hands-on Training on Basics of 3D Printing” on 19<sup>th</sup> September 2022. The session was delivered by the senior students to their junior students discussing about the 3D printing technique and its scope in the various fields. The basics of 3D printing were explained and 3D printing process of physically demonstrated. It was a good learning experience about the new technique in the field of modern manufacturing.



# Research Publications

S.no.	Name	Conference Details	Year
1	Ms Piu Jain	International Conference on Mechanical, Industrial and Production Engineering, (ICMIPE)Salem	August 2022
2	Dr. Anil Kumar Dahiya	International Conference on Advancement in Manufacturing Engineering (ICAME-2022)	November 2022
3	Dr. Vikas Acharya	International Conference on Advancement in Manufacturing Engineering (ICAME-2022)	November 2022
4	Dr. Anil Kumar Dahiya	Fourth International Conference on Recent Advances in Materials and Manufacturing (ICRAMM 2022), Tamil Nadu	December 2022

## Individual Achievements

Dr. Sachin Gupta received a Research paper Award of Rs 50,000/- for publishing a research article in SCI Journal (Publisher: Elsevier, Journal: International Journal of Heat and Mass Transfer) from J. C. Bose University of Science and Technology, YMCA, Faridabad.

*“Education is not preparation for life; education is life itself.”*

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