

## The Head'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*

## ASHRAE, Student Chapter MAIT



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*

## Faculty Corner



**Mr. Anil Kumar Dahiya** completed his PhD in “*Experimental Investigations on Abrasive Water Jet Machining of Glass Fibre Reinforced Polymer Composite*” from Manav Rachna International Institute of Research and Studies, in February 2023.

**Mr. Deshdeep Gambhir** completed his PhD in “*Thermodynamic analysis of CCHP Cycle*” from Jamia Millia Islamia, in March 2023.

## ASHRAE Scholarships 2023-24

1. Mr. Saquib (3<sup>rd</sup> Year ME) received the scholarship of \$10000 by ASHRAE, USA.
2. Mr. Kavya Taneja (3<sup>rd</sup> Year ME) received the scholarship of \$5000 by ASHRAE, USA.
3. Mr. Kamran Ali (3<sup>rd</sup> Year MAE) received the scholarship of \$5000 by ASHRAE, USA.

## Annual Conference AIC Tech 2023

The students of ASHRAE Student Branch MAIT along with their mentor Dr Vaibhav Jain were felicitated for their active participation and work in the field of HVAC&R by ASHRAE India Chapter during their Annual conference AIC Tech 2023 organized at Hotel Pride Plaza, Aerocity, Delhi on 28 April 2023.

The conference was highly informative and focused on net zero educational campuses, and the discussions were centered around how we can reduce carbon footprint of educational institutions while maintaining a comfortable learning environment.

Apart from net zero educational campuses, the conference also focused on topics such as thermal comfort, energy efficiency, and building automation systems. The speakers at the conference were highly experienced and provided valuable insights into the latest technologies and best practices for achieving sustainability in the built environment.



## Faculty Pursuing PhD



- ✚ 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. Ashwni
- ✚ Ms. Surabhi Lata

## Virtual Industrial Visit to EDGETECH Air Systems

The Students of MAE and ME Deptts, Maharaja Agrasen Institute of Technology joined the Virtual Industrial visit of EDGETECH Air Systems (a leading manufacturer of Air Handling Units) organized by ASHRAE India Chapter 6 May 2023.



# *Industrial Visit to Shriram Pistons and Rings Pvt. Ltd.*

Department of MAE and ME, MAIT organized an industrial visit at Shriram Pistons and Rings Pvt Ltd, Ghaziabad on 2 June 2023. 40 students of MAE and ME participated in the same.

Shriram Pistons & Rings Limited is an India-based company, which is engaged in the manufacturing of various products, such as pistons and piston pins, piston rings, and engine valves. The company caters to both domestic and international markets. The principal business of the company is Automobile Piston Assemblies.



# *Technoxian World Robotics Championship*

Team Aerostars under MAE and ME Deptt, MAIT participated in Technoxian World Robotics Championship that was held in Noida Indoor Stadium from July 25th to July 27th, 2023. The Robotics Championship attracted a crowd from all around the world and got more than 32 countries visited this prestigious competition. Team Aerostars took part in the Drone championship with 172 other teams including teams from Iran, Bangladesh, Israel, Sri Lanka, Russia, Brazil etc. The team managed to secure a position in the top 5 by the piloting skills shown by team Aerostar and came out in 5th position.



# Placements 2023

<p>Department of Mechanical and Automation Engineering 2022-23 Batch</p> <p><b>Congratulations !!</b></p> <p>for getting placed in</p>  <p>CHIRAY BHAKTA 20214807430 ETA Engineering</p>	<p>Department of Mechanical and Automation Engineering 2022-23 Batch</p> <p><b>Congratulations !!</b></p> <p>for getting placed in</p>  <p>PRATYUSH ANANDKUL 20214807430 Curiosity 3D</p>	<p>Department of Mechanical and Automation Engineering 2022-23 Batch</p> <p><b>Congratulations !!</b></p> <p>for getting placed in</p>  <p>AJITHA SHARMA 20214807430 Consultadd</p>
<p>Department of Mechanical and Automation Engineering 2022-23 Batch</p> <p><b>Congratulations !!</b></p> <p>for getting placed in</p>  <p>RIKASH 20214807430 Ormate Solar</p>	<p>2022-23 Batch</p> <p><b>Congratulations !!</b></p> <p>Students for getting placed in</p>  <p>ANIKET KUMAR JHA 20214807430 Spiders</p>	<p>Department of Mechanical and Automation Engineering 2022-23 Batch</p> <p><b>Congratulations !!</b></p> <p>for getting placed in</p>  <p>PRATYUSH JHA 20214807430 Prodo Technologies Pvt. Ltd.</p>
<p>Department of Mechanical and Automation Engineering 2022-23 Batch</p> <p><b>Congratulations !!</b></p> <p>for getting placed in</p>  <p>AJITHA SHARMA 20214807430 Accenture</p>	<p>Department of Mechanical and Automation Engineering 2022-23 Batch</p> <p><b>Congratulations !!</b></p> <p>for getting placed in</p>  <p>AJITHA SHARMA 20214807430 V3</p>	<p>Department of Mechanical and Automation Engineering 2022-23 Batch</p> <p><b>Congratulations !!</b></p> <p>for getting placed in</p>  <p>PRATYUSH ANANDKUL 20214807430 TEN</p>
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<p>Department of Mechanical and Automation Engineering 2022-23 Batch</p> <p><b>Congratulations !!</b></p> <p>for getting placed in</p>  <p>DRISHTI UPRETI 02614803619 Delhivery</p>	<p>Department of Mechanical and Automation Engineering 2022-23 Batch</p> <p><b>Congratulations !!</b></p> <p>for getting placed in</p>  <p>SATYK SHARMA 00214831119 Daikin India</p>	<p>Department of Mechanical and Automation Engineering 2022-23 Batch</p> <p><b>Congratulations !!</b></p> <p>for getting placed in</p>  <p>VISHOR SURYAVANSHI 1814803619 Daikin India</p>

## Workshop on “Unmanned Aerial Vehicles (UAV) and Drone Technology”

The Workshop on Unmanned Aerial Vehicles (UAV) and drone technology was held between 15th March 2023 to 17th March 2023 by the Department of Mechanical and Automation Engineering and Mechanical Engineering in association with Team AEROSTARS, MAIT. The primary objective of the program was to provide participants with a basic understanding of the Drones, its anatomy and its flying techniques and opportunities to fly a drone. The program was designed to cater the interest of students from various academic branches, who showed a keen interest in exploring the latest trends and technologies in the field of UAVs. The program consisted of a series of informative lectures, soldering and simulation session, drone building, assembly and flying session, with society members serving as the primary speakers.



## *Workshop on “Hands-on Training on 3D Printing Technology”*

A 3 Days Workshop on “Hands-on Training on 3D Printing Technology” was held from 15<sup>th</sup> -17<sup>th</sup> March 2023, by the Department of Mechanical and Automation Engineering and Department of Mechanical Engineering in association with 3D Space Club at Maharaja Agrasen Institute of Technology. The primary objective of the workshop was to provide exposure to the students about the 3D printing technology and its application and ongoing research in today’ modern world. An interactive session was conducted to deliver the latest research opportunities in this field.

The workshop was designed to provide the hands-on training and let the participants transform their own ideas into real objects. The ideas were printed according to the participants choices. The session started with a brief discussion about 3D printing technology, its need, application, and research in this field which was followed by basic steps to transform the idea to real world. The speakers Bhavey Goel and Saquib delivered this session through a series of informative talks and interactive sessions.

The second was completely dedicated to the designing of ideas on software such as Fusion 360, SolidWorks etc and slicing the design in Ultimaker Cura. This session was headed by Anish Kumar who designed items like keychain with name, logo of society, society’s badge which were later considered for printing. The students were asked to design their ideas and were assisted by the team members to develop error free designs. The next day all the ideas were printed after giving the details about how to set up the printer. During the setting up of printer, bed levelling was the most significant step which was taught to the participants before the printing process. The students were assisted by A. Pratyush, Bhavey Goel, Saquib and Anish Kumar and team.



## *6<sup>th</sup> Research Excellence Awards Function*

Ms. Piu Jain, faculty of Department of Mechanical and Automation Engineering received research excellence award at a 6<sup>th</sup> Research Excellence Awards function organized at Delhi Technological University on 6<sup>th</sup> April 2023 for her commendable performance.



## *Alumni Talk on Placement Opportunity in Refrigeration Sector*

An alumni talk was organized by Department of Mechanical and Automation Engineering and Mechanical Engineering on 7<sup>th</sup> March 2023 at Maharaja Agrasen Institute of Technology. Dhruv Malhotra is working with Daikin Airconditioning India Pvt. Ltd. as Graduate Engineer Trainee. He is working in the sales department of the VRV Business. He completed his B.Tech in MAE from Maharaja Agrasen Institute of Technology in 2022. During his college years, he was an Active member of ASHRAE MAIT Student Chapter and was the president of the same from 2021-2022. His team scored Rising star position in Setty Family Foundation Applied Engineering Challenge 2021. His research project was selected for publication in ASHRAE Journal and he was invited to present the same at ASHRAE Winter Conference 2023.



*“The quality of your effort today determines the magnitude of your success tomorrow.”*

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