

**Date: 28<sup>th</sup> February '23**

## **Overview**

IEEE IMS Student Chapter VIT Pune conducted its very first industrial visit on the 28th of February 2023 to The Inter-University Centre for Astronomy and Astrophysics (IUCAA) and National Centre for Cell Science (NCCS). The industrial visit was attended by the core committee members and the coordinators of IEEE IMS.



## Introduction



Inter University Centre For Astronomy and Astrophysics (IUCAA), Pune was set up in 1988. At IUCAA, all the students were first briefed about the importance of IUCAA and the role it plays to help initiate and nurture, research and developmental activities in Astronomy and Astrophysics in the University sector. A small presentation was set up in the “Pulasta” auditorium for all the students attending the visit. A video called the “The space voyage” was shown and all the information in it was discussed by the Faculty at IUCAA. A Q&A session was also arranged for those who were interested in clarifying their doubts regarding astronomy.

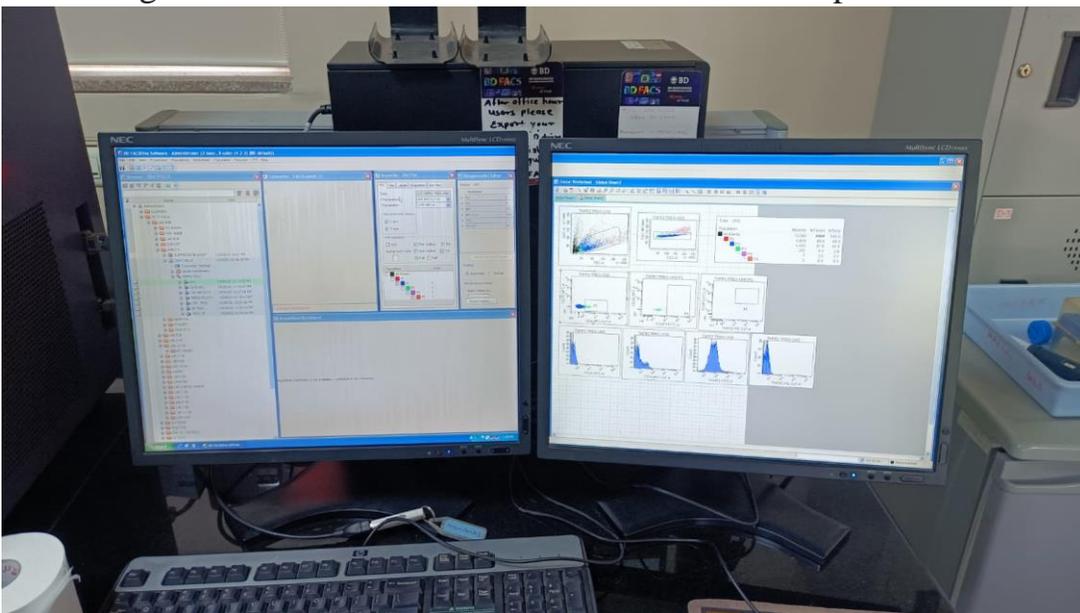
# Vishwakarma Institute of Technology

## Department of Instrumentation

### IEEE IMS Student Chapter



After and enriching and wonderful experience at IUCAA, the IEEE IMS team members headed to the National Centre for Cell Science (NCCS) which is a National Level, Biotechnology, Tissue Engineering and Tissue Banking research center located on the campus of University of Pune. The staff at NCCS welcomed all the students and briefed everyone about NCCS and the work that is carried out. After the brief, everyone was taken to the “Gargi” auditorium where a small video discussing about the previous work of



NCCS and the facilities they have at their centre. The faculty then guided the members to the Fluorescence Activated Cell Sorters (FACS) lab where equipments named FACS Canto II, FACS Aria II SORP, FACS Aria III SORP, FACS Aria III STD were set up.

## Glimpses of the Industrial Visit



## Conclusion

The Industrial visit to IUCAA and NCCS was an excellent and rewarding experience. A total numbers of members present were 22 out of which IEEE IMS members were 16 and non-IEEE IMS members were 6. It was an amazing experience to witness the knowledge about vastness of the space at IUCAA to the tiniest organisms in the cell at NCCS. All the members of IEEE IMS Student Chapter VIT Pune extend their gratitude towards Prof. M Khurjekar sir, Prof. Dr. Shilpa Sondkar ma'am and Prof. Sanika Patankar ma'am for organizing the visit.



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## **IEEE IMS Industrial Visit to Shree Pandurang Sahakari Sakhar, Shreepur**

Date: 1<sup>st</sup> March 2023

An industrial visit of student members of IEEE IMS chapter was arranged on 1<sup>st</sup> March 2023 to Shree Pandurang Sahakari Sakhar Sugar Factory in Shreepur. Total of 25 student members attended the visit. Prof. Dr. Sanika Patankar accompanied the students for the industrial visit. The visit provided exposure to state of are process instrumentation loops, DCS, PLCs, valves, SCADA etc.

The Factory has significant presence in India for sugar and ethanol production along with sustenance in terms of power generation. The factory has crushing capacity of 7500 tonnes crushed per day. The plant is equipped with Siemens PLCs and Honeywell DCS systems. Plant consisted of five Mill tandem with Electric Drive ACVFD and controlled through DCS, Boiling House DCH to clear Juice, Horizontal tube type Continuous Pan, 45 KLPD Distillery plant, which is PLC Controlled Multiprocessor distillation.







The plant manufactures Rectified Spirit, ENA and Ethanol. They are the first and only Co-operative Sugar factory availed CDM benefit. The Factory Generates power from bagasse (a sugar cane by product) for captive consumption and sale to the state grid in Maharashtra. Total Cogeneration capacity is 19MW with exportable surplus of 12 MW. Out of 19 MW, 9MW is of DEC and 10MW is of BP type. 09MW STG set was installed in the year 2005 and commissioned in 2006 and it was first DEC turbine in Maharashtra.

The students were given a brief introduction to the history and operations of the factory. They were then taken on a guided tour of the factory, where they saw the different stages of the sugar manufacturing process. The students were able to see the raw sugar cane being unloaded, cleaned, and shredded into small pieces. They were also able to witness the process of extracting juice from the sugar cane, and the subsequent steps of clarification, evaporation, and crystallization. The students were impressed by the efficiency and scale of the operations at the sugar factory.

In addition to the tour, the students were also shown the various equipment and technologies used in the sugar manufacturing process, including boilers, turbines, centrifuges, and distillation columns. The staff at the factory

explained the working principles and the advantages of the different technologies, and the students were able to ask questions and clarify their doubts.

In conclusion, the industrial visit to the sugar factory in Shreepur was a successful and valuable learning experience for the students. The visit provided them with practical exposure to the sugar manufacturing process and the various technologies and equipment used in the industry. The students gained insights into the different job roles and functions within the factory, and appreciated the importance of the sugar industry. The department IEEE IMS VIT PUNE CHAPTER hopes to organize similar visits in the future.





**FACULTY ON BOARD – PROF. DR. SANIKA PATANKAR**