

IEI (Institute of Engineers, India)

GMIT IEI chapter



Organized



Online Technical talk on

“Basics of Psychometry”

Date : 28th Jan 2022

**Through Virtual Platform
(Zoom application)**

Faculty Coordinator: Prof. Suraj Shukla



CONTENT

1.	Acknowledgement	3
2.	General Information	4
3.	Purpose of Technical talk	5
4.	What we learnt?	6
5.	Technical talk snaps	8
6.	Conclusion	9

IEI (Institute of Engineers, India)

GMIT IEI chapter



Acknowledgement

We are thankful to IEI Student chapter to organize such kind of educational webinar for the students which can be helpful to them in more ways than one.

A big 'Thank You' to the speaker of our technical talk Mr. Sunil Bhatia for his efforts towards motivation of our students in the direction of technical field and to help them realize their inner strength.

We are also thankful to our honorable Principal, Dr. H. M. Nimbark and Head of the Department Prof. K. B. Khiraiya and our faculty coordinator who have given us a great guidance regarding this expert talk and also arrange facilities for expert talk.



General Information

❖ About IEI

- The Institution of Engineers (India) is the national organization of engineers in India.
- The Institution of Engineers (India) was established in 1920 in Kolkata, West Bengal and is acclaimed to have pioneered non-formal education in engineering.
- The Institution of Engineers (India) has more than one million members in 15 engineering disciplines in 125 centers or chapters in India and overseas; it is the world's largest multi-disciplinary engineering professional society in the engineering and technology world.
- GMIT also becomes a part of IEI under Ahmadabad local chapter.

❖ About Speaker:

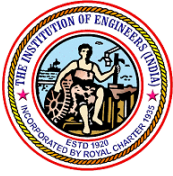


✓ **Name of speaker : Mr. Sunil Bhatia**

- ✓ **Education qualification:** Bachelor of Mechanical Engineering from L.D. engineering college & Master of Business management from SLIMS.
- ✓ **Area of interest:** HVAC ...more than 20 years of experience in the field of HVAC industry. An entrepreneur running his business with the name of Green tech consultant.

IEI (Institute of Engineers, India)

GMIT IEI chapter



Purpose of online Technical talk

This technical talk is intended to update and upgrade the Technical Skills and Fundamental Knowledge of HVAC Also In this expert talk, we focused on motivate the students to built their career in HVAC field.



What we learnt?

❖ “Basics of Psychometry” By Mr. Sunil Bhatia

Mr. Sunil Bhatia explained basic of Psychometric chart. Expert first explained,

What is Psychrometric Chart?

He explained, A Psychrometric Chart is an important tool for HVAC engineers to carry out heat load or cooling load calculations and find solutions to various air condition related problems.

Psychrometric charts are graphic representations of the psychrometric properties of air. By using psychrometric charts HVAC engineers can graphically analyze different types of psychrometric processes and find solution to many practical problems without having to carry out long and tedious mathematical calculations.

The psychrometric chart looks complicated with vast numbers of lines and curves in it, but is very easy to understand if you know the basic properties of air.

You will also understand its worth when you actually use it considering the fact that you won't have to use any formulas to find the properties of air in different conditions, all you will have to know is two parameters of air and the rest are easily found on the chart.

Reading and Interpreting a Psychrometric Chart

Psychrometric charts can be pretty tricky to interpret. Just taking a look at it, you may already be confused. With so many lines and axes, you can get lost trying to follow the chart and find out which line represents which axis.

So why is it important to know how to read a psychrometric chart? Psychrometric charts allow you to track and monitor the physical and thermodynamic properties of gas-vapor mixtures.



Also he explained basic axis,

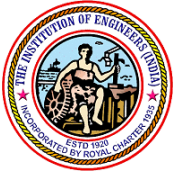
starting at the basics, there are nine different axes, which are categorized one through nine in the graph. Starting at one, they're labeled as follows, respectively:

- Dry bulb temperature
- Vapour pressure
- Dew point
- Humidity ratio
- Enthalpy
- Saturation temperature
- Wet bulb temperature
- Specific volume of dry air
- Relative humidity

The entire session being very interactive, students took active part in understanding the topic. Students absorbed the information and ask doubt to expert talk.

IEI (Institute of Engineers, India)

GMIT IEI chapter



Online Technical talk snaps





Conclusion

After such informative online technical talk students has gained information regarding the Psychometric chart fundamental knowledge and which will improve their technical skills in refrigeration field .