

**A report on**  
**"BASIC REFRIGERATION AND COMPRESSORS"**  
*(An Expert Lecture)*  
**22<sup>nd</sup> September, 2017**

An expert lecture on "BASIC REFRIGERATION AND COMPRESSORS" helped the students to understand thermodynamic processes and thermodynamic cycle on which a vapor compression refrigeration system works. Sri. A. Pulla Rao, President, ISHRAE student chapter-Vijayawada enlightened the students of Mechanical Engineering about the basic refrigeration cycles and evolution in compressor technologies.

The programme, conducted on 22nd September, 2017, was attended by faculty and students of Mechanical Engineering. This programme provided the information on refrigeration and compressor technology as well as about the latest developments.

The objective of the programme was to provide information on theories and principles of refrigeration and air conditioning, as well as on major refrigerator system components and basic laws of refrigeration system. The resource person Sri A. Pulla Rao, presented types of refrigeration and air conditioning systems, operating principles and applications including chilled water systems also. A key element of this expert lecture is to provide a thorough understanding of the fundamentals of the vapor compression refrigeration system, how it works, the key components and the characteristics of refrigerants. This expert lecture also has given an opportunity for students to understand the refrigerant types that are used in refrigerators.

The resource person Sri A. Pulla Rao also emphasized on

- Fundamentals of compressor technology and function of oil lubricated piston compressors
- Design and Function of oil-free piston compressors
- Naming and usage in different compressor types
- Design of different controls
- Functions of different controls

- Dissemination of information on alternative technologies to Chloro fluoro carbon (CFCs) for various application and methodology of retrofitting of existing refrigeration appliances/ equipments.

Sri A. Pulla Rao at the end delivered a talk on Job opportunities for graduates in the area of refrigeration & Air conditioning and he addressed about industry expectation from a graduate, and the necessary skills required to students for getting in to job and suggested to take HVAC training.

Students enthusiastically interacted with the resource person and clarified their doubts.



**Sri A. Pulla Rao addressing Students of Mechanical Engineering**



**Students of Mechanical Engineering taking Participation in the Program.**