
ACADEMIC YEAR

2024-25



DEPARTMENT OF MECHANICAL ENGINEERING, MBCET
ISHRAE (Office bearers)

Name	Office post
Dr. ARVIND P	Faculty Advisor
MR. ANANTH P NAMPOOTHIRI (S7ME)	President
MR. AAROMAL SANTHOSH S (S5ME)	President-Elect
MR. ADHIL NAVAS (S7ME)	Secretary
MR. DARSAN DEVANAND (S7ME)	Treasurer
MR. ABHIJITH RR (S5ME)	CWC member
MR. JOHN SONY KURIEN (S7ME)	CWC member
MR. ATHUL SHAJI (S5ME)	CWC member

ISHRAE



The **Indian Society of Heating, Refrigerating and Air Conditioning Engineers (ISHRAE)** was founded in 1981 at New Delhi by a group of eminent HVAC&R professionals. It is led by a team of elected officers, who are members of the Society, working on a voluntary basis, and collectively called the Board of Governors. ISHRAE objectives are advancement of the Arts and Sciences of Heating, Ventilation, Air Conditioning and Refrigeration Engineering and Related Services, Continuing education of Members and other interested persons in the said sciences through Lectures, Workshops, Product Presentations, Publications, Expositions and Encouragement of scientific research. ISHRAE conducts Conferences, Seminars, Exhibitions, Workshops, Panel Discussions and Product Presentations throughout the country with both national and international participants to discuss, promote and display the state of the art technologies, systems, products and services.

ISHRAE Objectives:

- Advancement of the Arts and Sciences of Heating, Ventilation, Air Conditioning and Refrigeration Engineering and Related Services.
- Continuing education of Members and other interested persons in the said sciences through Lectures, Workshops, Product Presentations, Publications and Expositions.
- Rendition of career guidance and financial assistance to students of the said sciences.
- Encouragement of scientific research.

ISHRAE Mission:

To promote the goals of the Society for the benefit of the general public. Towards this objective, the Chapters of the Society participate in, and organize, activities to protect the Environment, improve Indoor Air Quality, help Energy Conservation, provide continuing education to the Members and others in the HVAC & related user Industries and offer certification programs, career guidance to students at the local colleges and tertiary institutions.

ISHRAE Activities:

As part of its objectives to promote the interests of the HVAC&R Industry, ISHRAE is involved in various activities. ISHRAE reaches out to all its members and seeks their active participation & involvement in all the Events/Programs organized by the society.

ISHRAE student chapters in more than 150 engineering colleges encourage students to opt for careers in the HVAC&R industry. Knowledge dissemination is done through seminars, quiz contests like aQuest, plant and site visits.

ISHRAE has launched “ISHRAE Job Junction” nationally, providing a platform for leading

employers to recruit candidates who are members from ISHRAE student chapters.

K-12 initiative of ISHRAE is focused on school students' contests, in making them aware of subjects like, energy conservation and environmental concerns through drawing competitions, poster design, quiz and planting of trees. Emphasis on STEM education is stressed to inculcate a scientific fervor & help develop these young children into responsible citizens.

Research: ISHRAE promotes research in the field of HVAC&R technology. It offers financial support to Graduate/Post Graduate students, to carry out innovative work on R & D in Technology, Systems, and Processes. ISHRAE partners with Industry to carry out scientific research t Institutes associated with ISHRAE for this purpose.

ACREX INDIA: ISHRAE organizes ACREX INDIA, the largest international exposition in South Asia on the Air-Conditioning, Refrigeration, Ventilation and Building services industry. Held annually, ACREX with nearly 500 exhibitors is considered to be a major opportunity to showcase the latest technologies/innovations, and provide a platform for buyer-seller meet, for technical & commercial personnel in the HVAC&R field.

Publications: ISHRAE publications strive to help its members & the industry keep up-to date with the technical developments, latest trends, and sunrise technologies. ISHRAE Standards, Fundamental books on various topics, HVAC&R Handbooks and the extremely popular & informative ISHRAE Journal, are a few such publications.

ISHRAE MEMBERSHIP LIST

<u>SL NO</u>	<u>NAME</u>	<u>ID</u>
<u>1</u>	Ananth	S00117965
<u>2</u>	Bharath	S00117979
<u>3</u>	John Sony Kurien	S00117982
<u>4</u>	Adhil Navas	S00117986
<u>5</u>	Aaromal Santhosh S	S00117998
<u>6</u>	Abhijith RR	S00118016
<u>7</u>	Nitin Sreekesh	S00118135
<u>8</u>	Athul Shaji	S00118133
<u>9</u>	Skaria Vinod	S00118194
<u>10</u>	Darsan Devanand	S00118222
<u>11</u>	Arjun S Nair	S00119501
<u>12</u>	Akshay Manoj	S00119503
<u>13</u>	Aswin Rajesh	S00119502
<u>14</u>	Vivek V	S00119504
<u>15</u>	Anand Krishna	S00119505
<u>16</u>	Sp Athul Krishna	S00119506
<u>17</u>	Bijoy B Sekar	S00119507
<u>18</u>	Adithya Jayakumar K T	S00119509
<u>19</u>	Vighnesh B	S00119556
<u>20</u>	Pranavsankar	S00119609
<u>21</u>	Jonathan Roy Haris	S00119667

ISHRAE ANNUAL INSTALLATION CEREMONY

Venue: Google meet

Date: 01 -AUGUST -2024

ISHRAE-MBCET Student Chapter Installation Ceremony at Mar Baselios College of Engineering and Technology (MBCET) was a momentous occasion that took place on 1st AUGUST. The campus was filled with anticipation and excitement as the chapter embarked on a new journey to promote knowledge, networking, and career opportunities in the HVAC industry.

The program commenced with a vibrant rendition of the National Anthem, filling the air with a sense of pride and unity. Dr. Arvind P the faculty in charge of ISHRAE-MBCET Student Chapter, delivered a warm welcome speech, setting the tone for the event. His words resonated with enthusiasm and highlighted the significance of ISHRAE-MBCET in shaping the future of HVAC professionals.

A highlight of the ceremony was the introduction by the esteemed guest, MR. Kishore H, President of ISHRAE Trivandrum Chapter. His presence added prestige to the event, and his insightful remarks on the HVAC industry's prospects captivated the audience.

To honor the occasion, Dr. Remil George Thomas, Head of the Department of Mechanical Engineering, extended his felicitations to the newly formed chapter. His words of encouragement and support further reinforced the significance of ISHRAE-MBCET in fostering excellence in the field.

The highlight of the installation ceremony was when the newly appointed office bearers of ISHRAE-MBCET Student Chapter took their oath. This solemn moment symbolized their commitment to the chapter's values and responsibilities, promising to uphold the highest standards in their roles.

Continuing with the program, a technical talk session on "Career Opportunities in the HVAC Industry" was conducted. The session aimed to enlighten the attendees about the vast possibilities and potential within the HVAC field. The speaker shared valuable insights and real-life experiences, inspiring the students to envision a successful career path in this dynamic industry.

MR. Ananth P Nampoothiri, the incoming President of ISHRAE-MBCET Chapter, delivered an engaging speech, expressing his vision and goals for the chapter. His words resonated with passion and determination, inspiring the student members to actively participate and contribute to the chapter's growth.

The event concluded with a vote of thanks by MR. Aaromal Santhosh S, the incoming President-Elect of ISHRAE-MBCET. He expressed gratitude to all the individuals who made the event a success, including the staff, student members, and esteemed guests. His words of appreciation reflected the unity and teamwork within the chapter.

The installation ceremony witnessed the enthusiastic presence of staff and student members of ISHRAE-MBCET, creating an atmosphere of camaraderie and excitement. The event not only marked the beginning of a new chapter but also instilled a sense of responsibility and pride among the student members as they embarked on their journey in the HVAC industry.

The ISHRAE-MBCET Student Chapter Installation Ceremony at MBCET was a resounding success, emphasizing the chapter's commitment to fostering professional growth, knowledge sharing, and career development opportunities. With a strong leadership team and dedicated members, the chapter is poised to make a significant impact and create a positive difference in the HVAC industry and beyond.

MAR BASELIOS COLLEGE OF ENGINEERING AND TECHNOLOGY (AUTONOMOUS)

DEPARTMENT OF MECHANICAL ENGINEERING

ISHRAE-MBCET STUDENT SECTION

EVENT LIST

Event Name	Date	Venue
CWC installation of ISHRAE MBCET Student Chapter	1-8- 2024	Google Meet
Bim Mep Bridging The Gap Between Design And Constructiom In Aec Webinar	30-8-2024	Google Meet
AQUEST Inter College Chapter Level Quiz Competition	9 -12-2024	MBCET Seminar hall MECH. DPT.
Talk Session on Insight to Low GWP Refrigerants	28-12-2024	Google Meet
PHARMA CONNECT bridging the gap between PHARMA and HVAC	3-1-2025	Residency Tower, Statue, Tvm
Tips and Opportunities for Career Growth in HVAC	01-02-2025	Google Meet

Report on Bim Mep Bridging The Gap Between Design And Construction In Aec Webinar

Date: August 30, 2024

Venue: Online Google Meet

Organized by: MYOC

Event Overview

MYOC Academy, a venture by CET alumni, successfully hosted a free webinar on BIM MEP: Bridging the Gap Between Design and Construction. The event was designed to provide valuable insights into Building Information Modeling (BIM) in Mechanical, Electrical, and Plumbing (MEP) systems and its role in transforming the Architecture, Engineering, and Construction (AEC) industry.

Objectives and Key Takeaways

The webinar aimed to bridge the knowledge gap between design and construction professionals by offering a deep understanding of BIM MEP technology. The key highlights of the session included:

1. In-depth Understanding of BIM MEP:

- Explanation of how BIM MEP is reshaping the AEC industry.
- Insights into real-world applications and case studies.

2. Benefits of BIM MEP for Engineering and Construction:

- Enhanced design accuracy and reduced project costs.
- Improved coordination between teams to minimize errors and rework.
- Seamless collaboration between architects, engineers, and contractors.

3. Expert Insights from Industry Professionals:

- Knowledge sharing by experienced professionals in the field.
- Practical tips and strategies for leveraging BIM MEP in projects.

4. Networking and Community Engagement:

- Opportunity to connect with fellow AEC professionals.
 - Access to a dedicated community for continued learning and discussions.
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Conclusion

The BIM MEP webinar hosted by MYOC Academy provided an enriching learning experience for attendees. It successfully highlighted the importance of BIM MEP in modern construction and design, equipping participants with valuable knowledge to apply in their careers. The interactive session facilitated professional networking and encouraged future collaboration in the AEC industry.

Report on AQUEST Inter College Chapter Level Quiz Competition

Date: July 30, 2024

Venue: MBCET

Event Topic: HVAC

The AQUEST Chapter College Quiz Competition was successfully held with enthusiastic participation from various colleges including College Of Engineering TVm, MBCET, TKMC. The event aimed to foster knowledge-sharing and intellectual engagement among students, creating a dynamic and competitive atmosphere.

Winners and Qualification

College of Engineering Trivandrum (CET) secured the championship title, earning a well-deserved qualification for the quarter-final round. TKM College of Engineering finished as the runner-up, also advancing to the quarter-final, which will be held in Madurai.

Conclusion

The competition concluded with an exhilarating final round that kept both participants and the audience captivated. CET and TKMC delivered remarkable performances, demonstrating their proficiency and determination to excel.

All participants of AQUEST will received participation certificates at the Pharma Connect event, held on January 3rd at Residency Tower, Trivandrum.



Opening ceremony and speech by Dr Ashok Kumar Quiz Coordinator



Quiz taking place at Seminar Hall of MBCET MECH dpt.



Team Members

Report on Talk Session on Insight to Low GWP Refrigerants

Date: 28th December, 2024

Time: 7:00 PM - 8:00 PM

Mode: Online

Topic: Insight to Low GWP Refrigerants

Speaker: Sarath S S, Combined MS/PhD Student & Researcher, Smart Refrigeration and Control Lab, Kookmin University, Seoul, South Korea.

Event Summary

The ISHRAE TKMCE Students Chapter successfully organized an engaging and informative session on "Insight to Low GWP Refrigerants." The event featured Sarath S S, an esteemed researcher in the field of smart refrigeration, who provided valuable insights into the latest advancements in refrigeration technology and the shift towards low Global Warming Potential (GWP) refrigerants.

Key Highlights

- Introduction to low GWP refrigerants and their environmental impact.
- Emerging trends in sustainable cooling technologies.
- Role of refrigerants in energy efficiency and climate change mitigation.
- Real-world applications and ongoing research in the field.

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- Interactive Q&A session where participants engaged with the speaker on various aspects of refrigeration.

Conclusion

The talk session was highly beneficial for those interested in HVAC&R and sustainability. It encouraged participants to explore innovations in refrigeration technology and contribute to a greener future.

Report on PHARMA CONNECT bridging the gap between PHARMA and HVAC

Date: 3rd January 2025

Time: 9:00 AM – 4:00 PM

Venue: Residency Tower, Statue

Event Overview

The Pharma Connect with HVAC&R event aims to bridge the gap between the pharmaceutical industry and HVAC (Heating, Ventilation, and Air Conditioning) & Refrigeration sectors. Organized by ISHRAE Trivandrum Chapter, the event will provide insights into the critical role of HVAC&R in pharmaceutical environments.

The event is associated with major industry expos such as **ACREX India 2024** and **REFCOLD India 2024**. Participants will gain valuable knowledge on HVAC applications in the pharmaceutical sector, ensuring compliance with industry standards and advancements.

The certificates for the AQUEST quiz competition was also distributed to the participants in this event.

Conclusion

The Pharma Connect with HVAC&R event is a crucial initiative for professionals looking to enhance their understanding of how HVAC plays a vital role in pharmaceutical environments. The collaboration between ISHRAE and ELGi ensures a well-rounded knowledge-sharing platform for industry experts, engineers, and stakeholders.

Report on Tips and Opportunities for Career Growth in HVAC

Date: 1st February 2025

Time: 7:00 PM

Venue: Online

Event Overview

The Department of Mechanical Engineering, TKM College of Engineering, Kollam, in association with Students ISHRAE (TKMCE Students Chapter), organized a webinar on Unlocking the Power of HVAC and Exploring Career Opportunities. The session aimed to provide insights into the HVAC industry and career prospects for engineering students.

Speaker Details

- Name: Mohammed Imran
- Designation: Senior Manager – Sales, York Chillers
- Company: Johnson Controls India Pvt Ltd, Hyderabad, India

Key Highlights

- Understanding HVAC Systems: The session provided an overview of Heating, Ventilation, and Air Conditioning (HVAC) technologies and their applications.
- Industry Trends & Future Scope: The speaker discussed emerging trends in the HVAC industry, including sustainable and energy-efficient solutions.
- Career Opportunities: Insights were shared on various career paths available in the HVAC sector, including roles in design, sales, project management, and research.
- Q&A Session: Participants had the opportunity to interact with the speaker and gain clarity on their career prospects.

Conclusion

The event successfully educated attendees on **career opportunities in the HVAC industry** and its growing demand in various sectors. With expert insights from **Mohammed Imran**, students gained valuable knowledge on how to build a successful career in this field.

Conclusion

The ISHRAE MBCET Chapter's annual report for the year 2024-2025 reflects a year of remarkable achievements, growth, and contributions to the HVAC industry. Throughout the year, the chapter has demonstrated its commitment to promoting knowledge sharing, professional development, and sustainability in the field.

The chapter successfully organized a series of informative events, workshops, and training programs that catered to the diverse needs of its members. These initiatives covered a wide range of topics, including energy conservation, building codes, heat transfer, and HVAC system troubleshooting. The events provided a platform for industry experts, professionals, and students to exchange ideas, gain practical insights, and stay updated with the latest advancements in the field.

The ISHRAE MBCET Chapter actively engaged with its members through various networking opportunities, fostering a strong sense of community and collaboration. The chapter's efforts in organizing quizzes, cricket tournaments, and webinars created an inclusive environment where members could connect, share experiences, and build lasting relationships.

In addition to knowledge dissemination and networking, the chapter also prioritized sustainability and energy efficiency. It emphasized the importance of adopting eco-friendly practices, energy conservation measures, and compliance with energy codes and standards. The chapter's initiatives aimed to create awareness and drive positive change in the industry, aligning with global efforts towards a greener and more sustainable future.

Looking forward, the ISHRAE MBCET Chapter is well-positioned to continue its trajectory of growth and excellence. With a strong foundation, a motivated membership base, and a commitment to innovation and sustainability, the chapter is poised to further advance the field of HVAC and make a lasting impact in the years to come.

The annual report serves as a testament to the chapter's accomplishments, resilience, and unwavering dedication to the mission and values of ISHRAE. It stands as a roadmap for future endeavors, inspiring the chapter to reach even greater heights in the pursuit of knowledge, collaboration, and sustainability in the HVAC industry.

Prepared by

Ananth P Nampoothiri

Student President of ISHRAE MBCET chapter
