



September - October 2016

ISHRAE NEWS

Linking ISHRAE Chapters Across India

Compiled and edited by Rakesh Kumar, Technical Editor, Air Conditioning and Refrigeration Journal

ISHRAE in Overdrive in Current Society Year

ISHRAE has been working at breakneck speed during the current Society Year. Here is a sampler from the President's address to the second National BoG at Kolkata:

- Online working has been the highlight: online dashboard reporting, online CAFÉ, 100% online student membership and Job Junction test, ISHRAE Connect, programs registration, ICP registration, online diploma course, e-News, e-Journal and publications, ISHRAE Technical Forum, feedback form and birthday wishes.
- Bifurcation of responsibility at Presidential level has created better focus.
- There are over 900 working committee members in over 60 committees.
- IEQ Standard has been launched and appreciated internationally.
- VRF Standard has been finalised.
- Record entries have been received for ISPG, and research projects have been initiated.
- New web page and brochures have been created for IIE and ICP.
- Several ICP courses have been conducted.
- Ahmedabad has conducted a skill development course with the state government.
- MoUs have been signed this year with International Associates like ISIB – Turkey, TTMD – Turkey, SAREK – Korea, REHVA, IIF-IIR and IAQA.
- MoUs have been renewed with IFMA, IAR, RAMA and IGBC.
- ACREX MoUs have been worked out with RATA and AIACRA.
- Contacts with CCSI have been renewed.
- Turkey is participating in ACREX 2017 as a Sponsor – Guest Country.
- India Day was celebrated at Chillventa in Germany.
- Joint programs have been conducted with IGBC, FSAI, IPA and IFMA.
- Model course curriculum on HVAC&R has been developed for engineering colleges.
- Various Industry Think Tank meetings have been held with industry captains, marketing and government advocacy heads, automation captains and refrigeration and cold chain captains.
- Professional agency being hired to promote Searcho, extensive marketing efforts being made, and a dedicated resource being added at HQ.
- Build Fair Alliance has been launched by ISHRAE, and 5 shows have been held.
- Close to 9,000 students have been registered online, covering more than 300 colleges.
- Over 3,500 students were registered for Job Junction, and good response was received at Mumbai and Bangalore.
- 13 projects have been awarded Student Research Grants.
- ISHRAE Student Member won 3rd prize at World Design Competition conducted by REHVA.
- Nation-wide aQuest shows have been held at over 25 locations.

Bangalore Chapter Maintains its Pace

Maintaining its hectic pace, Bangalore Chapter conducted the following activities during September and October:

September 2016

1. Product presentation by Hira Technologies Private Limited (Aerofoam Insulations) on September 2 at The Chancery, attended by more than 140 members.
2. Product presentation by Maico India on September 2 at The Chancery, attended by more than 140 members.
3. Technical seminar on *Importance of Service Aspects for Light & Commercial Products* by A. Madhukar on September 23 at The Chancery, attended by more than 40 members.
4. Student programs:
 - Installation along with technical seminar for students on September 7 at Sai Vidya Institute of Technology, attended by more than 250 students.
 - Installation along with technical seminar for students on September 10 at Nagarjuna College of Engineering & Technology, attended by more than 250 students.
 - Installation along with technical seminar for students on September 10 at REVA College of Engineering, attended by more than 250 students.
 - Technical seminar on *Basics of HVAC* by T. Nagaraja on September 16 at RV College of Engineering, attended by more than 150 students.
 - Technical seminar on *Basics of Cold Storage* by Anish Simha on September 19 at RV College of Engineering, attended by more than 150 students.

October 2016

1. Technical seminar on *Next Generation Refrigerants* by Achyut Kulkarni on October 6 at ISHRAE Bangalore office, attended by more than 25 members.
2. Technical seminar on *VRF Systems and their Advantages* on October 19 at ITC Windsor Hotel, attended by more than 80 members.
3. ASHRAE NITK presented a webinar series on *Energy Efficient Cooling Products, HVAC Design, and High Performance Buildings* on October 22 at ISHRAE Bangalore office, attended by more than 40 members.
4. Technical seminar on *Energy Efficiency in Air Conditioning Systems: Latest Trends & Case Studies* on October 22 at Akshaya Lalbagh Inn, Jaynagar, attended by more than 70 members.
5. Student programs:
 - aQuest preliminary quiz competition for students on October 20 at Dayanand Sagar College of Engineering, participated by more than 200 students.
 - Job Junction for students on October 21 and 22 at Meenakshi Institute of Technology, participated by 280 students.
 - Chapter level quiz competition on *Basic Thermodynamics, Heat Transfer and HVAC&R and its Applications* on October 22 at NITK, Surathkal participated by more than 200 students.

Mumbai Packs Half-Year with Activity

Mumbai Chapter has completed an action packed first half of the current Society Year. During this period, the chapter completed 23 programs, 10 advocacy events with other societies, 16 student activities and 2 K-12 programs, adding up to more than 50 events in six months. Brief details of the events are:

1. Chapter installation along with *Supply Chain Management* program on April 7 at The Mirador.
2. Full day seminar on *Sustainability through Energy Management and Renewable Energy*, jointly with ISHRAE Thane, ASHRAE Mumbai Chapter and Indian Association of Energy Management Professionals (IAEMP) on April 9 at Hotel United 21, Thane supported by Indian Green Building Council, India Plumbing association, RATA and AWESOME.
3. Tech Talk 1 – *Low Humidity by Refrigeration, to Energy Saving Techniques* in association with ASHRAE Mumbai Chapter on April 15.
4. Seminar on April 22 at Hotel Sofitel, in Association with IFMA Congress.
5. First anniversary *pooja* at Chapter office on April 23.
6. Tech Talk 2 – *Air Separator/ Expansion Tank* by Dilip Datey on April 23.
7. Contamination Control Society of India (CCSI), in association with ASHRAE and ISHRAE Mumbai Chapters, conducted a technical talk on *Latest Trends in HEPA Filter Testing, and New Developments in Contamination Control* by Air Techniques Inc. USA, together with MeasureTest Corporation, Mumbai on April 28.
8. RATA India and ISHRAE Mumbai Chapter conducted a half-day seminar on *VRF Business* on June 3 at Hotel VITS, by R. N. Joshi and Amod Dikshit.
9. ISHRAE Mumbai and Thane, ASHRAE Mumbai Chapter along with the Indian Association of Ammonia, International Institute of Ammonia Refrigeration, RATA and India Association of Energy Management Professionals (IAEMP) conducted a full day seminar on *Industrial Refrigeration* on June 4 at Hotel United 21, Thane.
10. K-12 programme on June 5 at House of Charity, Versova.
11. National Program *Symposia 2016* on the theme 'Non-Conventional HVAC Systems' in association with ISHRAE Thane Chapter and ASHRAE Mumbai Chapter on June 17 at Hyatt Regency, supported by AWESOME, FSAI, IAEMP, IFMA, IGBC, RATA and IPA.
12. One day learning session on *Design of Sprinkler Systems for Engineers*, in association with ASHRAE Mumbai Chapter and FSAI on July 2, by Milind Rane, Rajesh Shirke and Chintu Kiran Asher from FSAI.
13. ICP Cleanroom Certification Program Level-1 from July 13 to 16 by V Krishnan, Shankar Rajasekharan, Vikram Murthy, Prashant Desai and Sasidharan Menon.
14. *Basics of Refrigeration* on July 23 by Vikram Murthy.
15. One day learning session on *Design of Sprinkler Systems for Engineers*, in association with ASHRAE Mumbai Chapter and FSAI on July 30, by Milind Rane and Chintu Kiran Asher.
16. Tech Talk 3 – *Direct Indirect Evaporative Cooling Systems* on August 3 by Ajey Joshi.
17. K-12 program on August 13 at Sneha Sagar Ashram, Vasai.
18. Third edition of *Harit-Jal-Vaayu* on August 27 at Hotel Hyatt Regency, in association with IPA and CII-IGBC, Mumbai Chapter.
19. *Managing Projects* on September 3 by Nandlal R. Singh and Ajay Kazi.
20. AGM on September 17 at The Mirador.
21. Tech Talk 4 – *Dedicated Outdoor Air Systems* on September 23 by Ajey Joshi.
22. ICP AC Design Certification Program Level-1 Module 1 from September 27 to October 1 by Vishwas Naware and Sangita Jhangiani.
23. Road show for ACREX Hall of Fame on September 27 at Hyatt Regency.

National AGM Held in Delhi

The National Annual General Meeting of the Society was held at Habitat Centre, New Delhi on September 16.

Minutes of the last AGM were approved. Audited accounts for Society Year 2015-16 were presented by Vishal Kapur, National Treasurer for the year, and passed.

Appointment of Nominating Committee for the Society Year 2016-17 was taken up. As per a BOG decision, six Past National Presidents constitute the Nominating Committee apart from the National President and the National

President-Elect. Accordingly, the Nominating Committee comprises Vishal Kapur (National President-Elect), Sachin Maheshwari (National President), K. Ramachandran (Immediate Past President), D. Nirmal Ram, Dipak Barma, Sushil K. Choudhury, V. Krishnan and Pankaj Shah.

K. Ramachandran highlighted the activities of the Society during 2015-16. National President Sachin Maheshwari welcomed the Society members to the AGM, and highlighted the activities and new initiatives taken in the current year. Aneesh Kadyan, President of Delhi Chapter, presented the vote of thanks.

Guidelines for Reports in eNews

It is heartening to see the number of reports submitted for publication in **eNews** going up exponentially. It reflects the rising competition among chapters to carry out activities in line with the Society's objectives, and shows increasing member engagement.

Here are some simple and useful guidelines for your reports:

- The deadline for receiving reports is the last day of the relevant period. For example, for publication in the November-December issue, the deadline is December 31.
- Please send or copy reports of events to news@ishraehq.in
- Please send a Word file containing a brief report of the event: **what, when, where, who** and any other relevant information. **Word file is preferable to pdf or ppt.**

- Relevant photos in jpg format should accompany the report. Each photo should have a **caption describing the occasion and giving the full names of persons** in the photo from left to right. Only first names or only last names are not enough. (In case of large group photos, e.g. a batch of 20 participants in a training programme, all names are neither feasible nor necessary. Key names would do in such cases.)
- In addition to the jpg files, photos may also be copy-pasted into the Word file at relevant places, with captions below each photo.
- While "a picture is worth a thousand words", **only pictures** do not constitute a report. A Word file describing the event must accompany the pictures.

ADVOCACY

Ranchi Chapter Conducts Program with IEI on Ozone Day

Ranchi Chapter conducted an advocacy program with Institution of Engineers (I) at Jharkhand State Centre (JSC) on September 16, Ozone Day. It was attended by almost 50 members of IRC and IEI.

Shivanand Roy (Chairman-IEI, JSC) welcomed members from ISHRAE Ranchi Chapter and Institution of Engineers (I). S. Ganesh (ISHRAE) gave a brief talk on the importance of Ozone Day. He recounted the history behind the formation of ISHRAE and its mission, programs – conferences, seminars, workshops and exhibitions, ISHRAE Institute of Excellence (IIE) and its mission of human resource development in the HVAC&R industry, research, publications, student activity, etc.



R. K. Singh gave a brief introduction of ACREX 2017.



Advocacy by S. Ganesh

Durga Puja Celebrations at Ranchi

An advocacy program was conducted at by Ranchi Chapter during Durga Puja Celebrations at SAIL Satellite Township on October 8.

There was a crossword contest for children in three categories – *Environmental Pollution, General Awareness, and Durga Puja-related*. Another event was a Drawing and Painting competition for children in four categories – *Fruits, Maa Durga, Durga Puja Arati and Environmental Pollution*. In addition, there was an *Alpana/Rangoli* competition for ladies on the topic *Maa Durga*.

Around 100 children, 40 ladies, a team from Dainik Bhaskar, puja committee members and residents of Satellite Township were present during the program. Prizes were distributed by Anand Trivedi, CWC member of Ranchi Chapter and Deep Raj Sinha from Dainik Bhaskar. Anand Trivedi also addressed the gathering on the mission and vision of ISHRAE.



A winner receives his prize

The event was sponsored by Dainik Bhaskar, which carried the news in its October 9 issue.

Indore Chapter Organises Green Rally

On World Ozone Day, September 16, Indore Chapter organised a Green Rally from Janjeerwala Crossing to Nehru Park and back, with Dr. Narendra Kumar Dhakad, Vice Chancellor of DAVV Indore, as the Chief Guest. There were about 100 participants.



A view of the Green Rally at Indore

Chapter President Dr. Sharad Chaudhary, in his welcome address, explained the importance of ozone layer to Mother Earth. Students from various engineering colleges of Indore along with members of Indore Chapter, faculty advisor and eminent citizens participated in the rally.

World Ozone Day at Vizag

Visakhapatnam Chapter celebrated World Ozone day in association with IIAM college.



Ozone Day celebration at Vizag

Vizag Distributes Clay Ganesh Idols

Visakhapatnam Chapter distributed 200 clay Ganesh idols in various parts of the city on September 4 on the eve of Ganesh Chaturthi, in order to spread awareness about nature conservation.



Clay Ganesh idols being distributed

ISHRAE Supports Research Programs

To give an impetus to scientific research in India in the HVAC&R industry, ISHRAE has set up an Academia-Industry Sub-committee under the existing ISHRAE Technical Committee. The Sub-committee is chaired by Nitin Deodhar, a well-known consultant, and has distinguished members like C. Subramaniam, R.N. Joshi and Debajyoti Dey as members. Its primary task is to promote closer partnership between the Industry and Academia towards the encouragement of scientific research.

ISHRAE invites industry partnership in the following manner:

- Identification of projects by an industry/manufacturer for research to be carried out by an Institute/College to address a nagging problem, or enhance efficiency, or seek a new innovative solution. Some industry units may like to outsource their R&D

or supplement their efforts by involving an academically strong outside team.

- Identification of a subject by an industry unit bearing relevance to its line of activity, and committing to ISHRAE their intention and to sponsor research, leaving the choice of the specific project or Institute to the Sub-committee.
- Some industry units may simply commit a specified amount to ISHRAE to conduct scientific research without specifying any project or Institute, but act as donors to promote the cause of R&D in our industry.

This is an opportunity for the industry to get involved in scientific research and at the same time get some technical issues sorted out. This would bring the Industry and Academia closer for a worthy cause, using ISHRAE support in encouragement of scientific research in the HVAC&R Industry.

JOB JUNCTION

Bangalore Organises Job Junction

Bangalore Chapter, with the support of student chapters of various colleges in Karnataka, Tamil Nadu, Andhra Pradesh, Telangana, Orissa and Kerala organised a two-day campus recruitment drive named ISHRAE Job Junction (IJJ). It was held on October 21-22 at Nitte Meenakshi Institute of Technology (NMIT), Yelahanka, and around 250 students from various leading colleges participated. From ISHRAE, it was attended by S. N. Raju, Regional Director South 1; C. Subramaniam, Immediate Past President, ASHRAE Bangalore Chapter; N. Srikanth, President, Hosur Sub-chapter; T.

Nagaraja, President-Elect, Bangalore Chapter and IJJ Co-ordinator; Dr. N. Kapilan, National Chair – Student Activities and Chair – IJJ; S. Elangovan, Secretary; Ajay Bararia; Vinod Saladi; and several others.

Among the companies that came for recruitment were Voltas, Blue Star, Bosch, Johnson Controls-Hitachi Air Conditioning India, Rinac India, Psychrometric Solutions & Systems, Utility Projects & Services, Stream Line Refrigeration, VKA Power Master, Accure Power Technologies, Airflex Engineers, CNC Associates, Intelligent Building Consultants, Saptha Innovations and N Air Systems.

HALL OF FAME ROAD SHOW

Mumbai Hosts Hall of Fame Road Show

A road show to promote ACREX Hall of Fame, an initiative by ISHRAE and Danfoss India, was held in Mumbai on September 28, aimed at increasing participation for Hall of Fame 2017 which would recognize excellence in conserving energy by commercial buildings in the country.

One of the leading industrial hubs in the country, about 70% of Maharashtra's industrial revenue is generated from Mumbai, Pune, Nashik and Aurangabad districts, making it imperative for these cities to look at innovative energy efficient interventions to not just reduce energy consumption but also optimise productivity through process efficiency. Hall of Fame road show is aimed at sensitising and educating architects, consultants and engineers on the need for these energy efficient interventions in commercial buildings. The recognition aims to encourage energy efficiency among stakeholders and to showcase success stories in the HVAC space which have the potential to be replicated across India.



Rajesh Premchandran (Danfoss) speaks about energy conservation

In the inaugural year in 2016, the Mumbai International Airport Ltd (MIAL) project received the honour of being the first organisation to be inducted into the Hall of Fame at ACREX 2016, one of India's largest industry exhibitions.

Based on the selection criteria that include Energy Performance Index, Indoor Environment Quality initiatives, Energy Saving initiatives including Renewable Energy, Building Management System and one-year operational data, the inductee/s will be announced in February 2017 at ACREX, New Delhi.

Hall of Fame Road Show in Chennai

A Hall of Fame road show was held in Chennai on September 21.

Increased consumer spending on air conditioning and other appliances coupled with industrialisation has led to significant increase in power consumption in Tamil Nadu. With the gap in energy supply and demand only increasing day by day, it becomes imperative for states to look at energy efficient interventions that have the potential to save energy.



Ashish Rakheja, ACREX 2017 Chair, addresses the audience

K-12 ACTIVITIES

Drawing Competition for Underprivileged Students at Ranchi

Ranchi Chapter conducted a K-12 program consisting of a Drawing and Painting Competition for underprivileged students on September 11 at M. G. Club, Hundru Village. There were two groups – from class III to V, and from class VI to VIII. Around 50 students participated in the event, conducted by B. K. Bisoyi, Zonal Coordinator – K-12; R. K. Singh, Chapter President; and A. Trivedi, CWC member and Chair – Training.

Prizes were distributed to 1st, 2nd and 3rd winners in each group. Consolation prizes and sweet packets were given to all the students attending the program.



A. Trivedi with the students

Career Guidance for School Students at Kalpakkam

A career guidance program was organised by Kalpakkam Chapter in association with Alumni Association of KV-2, Kalpakkam through Cognizant Outreach on September 17. Two sessions were held – the morning session for three sections of students from Class IX (covering 105 students) and the afternoon session for students from two sections of Class XI and one section of class XII (88 students). The sessions were conducted by volunteers of CTS Outreach Career Guidance Program – Parthasarathy Soundarajan and Ramkumar Karunakaran along with Sudarsan, Director – Projects (CTS).

The program introduced the children to the concept of SEEK/VISTA, definition of success, world of opportunities, and motivated them towards innovation and being employable, with a number of videos about success. The sessions were highly interactive and prompted many students to shed their inhibitions, come forward and participate actively.

Feedback was obtained from both the batches and the program seemed to have an impact on the children in



A student registering his feedback

making them realise that their choice of career was based on their subject of interest and confidence in pursuing it, backed by a strong educational background.

Notebooks and pens were provided to the participants by CTS. Kalpakkam Chapter sponsored snacks during the tea-break in the both the sessions. The program ended with a vote of thanks and presentation of mementos to the volunteers of CTS Outreach.

Tree Plantation Drive at Guwahati



On the International Day for the Preservation of the Ozone Layer, September 16, a K-12 activity – Tree Plantation Drive – was organised near Central Workshop, IIT Guwahati. During the drive, 25 saplings including Rain trees, Gulmohar, Jamun, Neem, Bakul and Jackfruit were planted. The drive attracted the participation of 40 members from Guwahati Sub-chapter and IIT Guwahati Student Chapter, and the support of Horticultural Cell and Engineering Section, IIT Guwahati.

The members present were Prof. P. Muthukumar, President; A. Goswami, Immediate Past President; Srikanth Senapati, CWC Member; B. Kiran Naik, K-12 Chair; R. Nithin Narmada, Student Activities Chair; Gurpreet Singh Sodhi, Student President; Bhuvnesh Kumar, Student Secretary and other student CWC members.

ISHRAE CERTIFICATION PROGRAM

Mumbai Announces ICP-AC Service Level 1

Mumbai Chapter is organising ISHRAE Certification Program (ICP) – AC Service Level 1, targeted at junior and senior service technicians, machine and plant operators, preferably with minimum ITI or equivalent qualification in air conditioning and refrigeration systems.

The course will consist of two modules. At the end of the second module, there will be an examination. Certificates of accomplishment will be issued to candidates who attend the two modules and successfully complete the examination. The certificate will be valid for 5 years from the date of certification. After this period, candidates will be eligible to retake the examination by paying the applicable fees.

Those who attend the course and do not pass the examination will be given an opportunity to retake the examination when it is held again, after paying the examination fee of Rs. 750.

Candidates can go in for Level 2 certification once they have been certified for Level 1.

The course will cover the following topics:

Module 1 (January 20-21, 9 to 5.30): Customer service – soft skills, types and classification of AC systems, Thermodynamics – refrigeration cycle and introduction to Psychrometrics, refrigeration components and controls.

Module 2 (January 27-28, 9 to 5.30): Oils, refrigerants, Good Installation Practices, electrical fundamentals for HVAC, troubleshooting, AC plant maintenance, pressure testing, leak detection, vacuuming and practical demonstration workshop.

PROGRAMS

Vizag Holds Workshop on Good Installation Practices

Visakhapatnam Chapter held a workshop on October 28 at BAI Hall on Good Installation Practices for HVAC Systems, including a hands-on session on cleaning of pipes and brazing.

Forty eight members participated.



A lecture in progress at Vizag



Hands-on training session

Raja Sreeram, PP Chennai Chapter was the expert faculty.

Talk on Importance of Ozone Layer at Ranchi

Ranchi Chapter organised a Technical Talk on *Importance of Ozone Layer and Refrigerant Selection* by C. D. Goswami, GM, MECON and Chair – Refrigeration, Ranchi Chapter on Ozone Day, September 16 at Engineer Bhawan.

The topics covered were process of formation of ozone layer, why the ozone layer is important, process of ozone depletion and its effect, ozone depleting chemicals, current condition of the ozone hole, Montreal Protocol and India's commitment, and signs of recovery of ozone layer.



C. D. Goswami speaks about ozone layer and refrigerants

The aspects that were elaborated included ozone depleting substances like CFCs, Halons, CCl4, CHCl3, CH3Br, HCF-Cs, HFCs and their ODP and GWP; trigger leak rates for clean air act selection; low temperature distributed cooling and various equipment/systems; and Hydrocarbon chillers.

Honeywell Holds Technical Session at Vizag

Visakhapatnam Chapter organised a technical session by Honeywell on September 17 on the topic of IBMS.



Session by Honeywell in progress

STUDENT ACTIVITIES

Poornima CoE Jaipur Students Visit Daikin

Department of Mechanical Engineering, Poornima College of Engineering, Jaipur organized an industrial visit to Daikin Air-conditioning India Pvt. Ltd., Neemrana, Rajasthan in association with ASHRAE and ISHRAE on Oct 14. The purpose was to acquaint the students with refrigeration technology, various types of air conditioners, variable refrigerant flow, refrigerants, chillers, AC manufacturing process, etc.



Poornima students pose for a group photo

Twenty eight members of ASHRAE and ISHRAE student chapters of the College and 4 students of Global Institute of Technology, Jaipur visited the facility along with faculty coordinators Shailendra Kasera, Assistant Professor, Mechanical Department, PCE and Sobhag Bhandawat, Assistant Professor, Mechanical Department, PCE. Aromal and Amit Kumar, HR Executives, Daikin coordinated the visit. Sachin Arora made a technical presentation on Basics of Air-conditioning, Inverter Air Conditioner, Variable Refrigerant Volume and R-32 refrigerant.

Students learnt about testing of compressors, components of

split air conditioners, air- and water-cooled chillers, VRV systems, fabrication of condensers and evaporators using fins, etc.

The visit ended with a vote of thanks and interaction between students and experts of Daikin.

Poornima Students Visit Bry-Air (Asia)

Department of Mechanical Engineering, Poornima College of Engineering (PCE), Jaipur organized an Industrial visit to Bry-Air (Asia), Pvt. Ltd., Gurgaon in association with ASHRAE and ISHRAE on September 10. Bry-Air is the flagship company of Pahwa Group, a leader in desiccant dehumidification, with two manufacturing facilities in India, fully owned subsidiaries in China, Malaysia, Switzerland, and Brazil, and a worldwide sales network. Bry-Air Inc., USA serves customers in North America.

The purpose of the visit was to acquaint the students with refrigeration technology, adsorption chillers, dehumidifiers and purification of compressed air. Twelve student members of ASHRAE and ISHRAE student



Students are explained about adsorption chillers

STUDENT ACTIVITIES contd...

chapters of PCE participated along with faculty coordinator Sobhag Bhandawat, Assistant Professor, Mechanical Department.

Dinesh Gupta, President, Bry-Air (Asia) welcomed the students and the faculty member and coordinated the visit. Himanshu Chauhan, Head – Marketing, presented the company profile and products. He explained Adsorption Chillers and Dehumidifiers.

Students visited the fabrication shop, CNC machine shop, paint shop and assembly shop. They observed a trial run of Adsorption Chillers. The visit ended with a vote of thanks and interaction between students and experts of Bry-Air.

MNIT Students Attend Hands-on CFD Workshop



MNIT students attend hands-on workshop

Centre for Energy and Environment, Malaviya National Institute of Technology (MNIT), Jaipur organized a two day hands-on CFD Workshop with Cradle's SCSTREAM on September 16-17, in association with ISHRAE and ASHRAE.

The objective was to make the students and faculties acquainted with fundamentals of Computational Fluid Dynamics, applications in Architecture and HVAC, thermal comfort and natural ventilation. The speakers were Vijay Kumar Mishra, Director, ContraVolts Infotech Pvt. Ltd., and Manjunatha A., technical head in the same company.

Jaipur Charters AIETM Student Chapter

Department of Mechanical Engineering, Arya Institute of Engineering Technology and Management (AIETM), Jaipur installed a new ISHRAE Student Chapter on August 23. The occasion witnessed the presence of eminent speakers Dr. I. C. Sharma, Principal, AIETM, and Dr. Manoj Kumar, Registrar, AIETM, along with faculty members of Mechanical Department.



Student office bearers after the swearing in

Dr. I. C. Sharma, while addressing the gathering, emphasized the advancement of the arts and sciences of heating, ventilating, air conditioning and refrigeration as an objective of ISHRAE. Shailesh Verma, Member, Jaipur Chapter delivered a lecture on *Energy Saving through Building Insulation*. R. S. Saxena, Member, Jaipur Chapter delivered a lecture on *Basics of Air-conditioning and Refrigeration*. He presented an overview of a simple vapour compression cycle, and the working of a refrigerator and air-conditioner.

On behalf of AIETM, Dr. I. C. Sharma, Dr. Manoj Kumar and Ankur Dutt Sharma accepted the Charter from R. S. Saxena and Shailesh Verma. Ankur Dutt Sharma proposed a vote of thanks. More than 150 students from Mechanical Department attended the one-day seminar that was a part of the event.

Jaipur Reinstalls GIT Student Chapter

Jaipur Chapter conducted the reinstallation ceremony of GIT Student Chapter on October 3. As a part of the event, Chanpreet Singh delivered a Guest Lecture on *Opportunities and Ways Towards Energy Efficiency in HVAC&R for Students*.

Ravi Purohit was administered the oath of President by R. S. Saxena. Around 120 students attended the event.

aQuest Round in Jaipur

On October 24, Department of Mechanical Engineering, Poornima College of Engineering, Jaipur organized the local round of aQuest Quiz Competition sponsored by Hitachi India, in association with ISHRAE.



aQuest participants at Jaipur

The objective of aQuest is to create interest among students and the society towards HVAC&R. The winning team at the local level will participate at the zonal level for an opportunity to compete at the national level at ACREX 2017. The competition comprised of three rounds, namely elimination round, audio visual round and final round. Three teams battled it out in the final round, and the winning team will participate at the zonal level.

The occasion witnessed the presence of Amit Sutharia, Branch Head, Hitachi Air-conditioning India; Atul Jain, Manager Sales VRF; Ankit Metha, Manager Sales PAC; Ashu Gupta, Regional Director, North-2, ISHRAE; Johnson Toppo, Event Manager, Go-live Events; and Dr. Om Prakash Sharma, Director PCE along with ISHRAE members and faculty members of Mechanical Department, PCE.

Dr. Om Prakash Sharma highlighted the importance of HVAC and motivated the students to be a part of various technical societies for their better future. Ajit Singh, Quiz Anchor, made a presentation on Hitachi. The inaugural session ended with a vote of thanks by Shailendra Kasera, HoD, Mechanical Engineering followed by *Poornima Gaan*.

A total of 15 teams from reputed institute such as Malaviya National Institute of Technology, Jaipur, Global Institute of Technology, Jaipur, Arya Institute of Engineering, Technology and Management, Jaipur, Jodhpur Institute of Engineering & Technology, Jodhpur along with Poornima College of Engineering participated. Rahul Sharma and Shreyansh Pitaliya from PCE were the winners of the local round.

Vizag Conducts aQuest Round

Visakhapatnam Chapter conducted the local round of aQuest on October 21 at ANITS College. Two teams are selected for the quarter finals.



aQuest being conducted at Vizag

Meerut Sub-chapter Charters Student Chapter at DVSIGT

Meerut Sub-chapter installed a new Student Chapter at Dewan V.S. Institute of Engineering

& Technology on September 24. DVSIGT has updated its website with information about ISHRAE programs. Dainik Jagran carried the news prominently.

Dr. (Col.) Naresh Goel (Executive Director – DVSIGT) facilitated the formation of the Student Chapter. M. K. Gupta (Chair – North, Student Activities) handed over the Charter to Dr. S. B. Gupta (Director – DVSIGT).

After the installation, a workshop on air conditioners was conducted for the students.

Workshop for MIET Student Chapter at Meerut

A workshop on domestic air conditioner anatomy, operation, maintenance and repairs was conducted by Meerut Sub-chapter for MIET Student Chapter on September 21. Amarjeet Maurya, technical head at Samsung and Daikin AC authorized service center for Meerut and Baghpat districts, along with his team of field engineers, conducted the workshop. Window and split high wall air conditioners were brought to the college workshop, and their working principles were explained. Students were demonstrated and given hands-on practice on copper pipe joining and brazing.



Student office bearers with DVSIGT officials and ISHRAE delegates

Director General Dr. J. M. Garg also joined the workshop and motivated the students. M. K. Gupta, Zonal Chair – Students Affairs also conducted a session on theoretical and practical aspects of air conditioning. Satish Kumar, Chair – Programs and U.S. Chauhan, Chair – Students also participated. V. C. Rajpal – President, Meerut Sub-chapter facilitated the team by sending his service-on-wheels van for carrying the equipment and tools to MIET.

Assam Engineering College Student Chapter Chartered at Guwahati

On September 1, Guwahati Sub-Chapter installed a new student chapter at Assam Engineering College, Guwahati. About 30 students were enrolled. The event was inaugurated by Prof. R. K. Dutta. IPP Amarendra Goswami urged the students to look beyond the walls of the classroom, and to utilize their skills for progress of the community. President Prof. P. Muthukumar gave a detailed orientation on the structure and operations of ISHRAE, and the expected benefits and expectations as a Student Chapter. He administered the oath to student CWC members and presented the Charter. The event concluded with a vote of thanks by Prof. Sudip Kumar Deb.



Participants display the ISHRAE banner at Guwahati