



July - August 2015

ISHRAE NEWS

Linking ISHRAE Chapters Across India

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

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 the reports to help **eNews** become a powerful catalyst of chapter activities:

- The deadline for receiving reports is the last day of the relevant period. For example, for publication in the September-October issue, the deadline is October 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.

Kolkata Holds Program on Shop Drawings

Kolkata Chapter held a program on *Best Practices for Preparation of HVAC Shop Drawings* on July 25. Manoj Chakravorti was the faculty. The program was attended by 15 participants.

Learning Session in Mumbai for Architects

Mumbai Chapter held a session on *Working Together – MEP Inputs to Architects* on August 8 at its training centre.

Cooling Today, Preserving Tomorrow Held in Thane

ISHRAE Thane Chapter along with ASHRAE Mumbai Chapter organised their signature full day seminar *Cooling Today, Preserving Tomorrow* on August 28 at Hotel United 21. The speakers included Ashish Rakheja, Rohan Parikh and Ar. Shekhar Ganti.

National President Launches Official BoG Note Book

National President K. Ramachandran launched the official Board of Governors Note Book 2015-16 during the second South Zone Regional Chapter Conference at Madurai on August 22.



Dr. R. Saravanan, K. Thirunavukkarasu (President Madurai Chapter), D. Nirmal Ram (Immediate Past National President), K. Ramachandran, Ajay Sawhney (RD South 2), G. Ramesh Kumar (RD South 1) and Pankaj Shah (Presidential Member) during the launch

Mumbai Holds National Program Symposia 2015

Mumbai Chapter organised a National Program on Pharmaceutical Facilities, under the banner of Symposia, on July 24 at Hyatt Regency. It was addressed by an array of eminent speakers who spoke on different aspects of pharmaceutical facilities like design, construction, installation, operation and maintenance. About 200 delegates attended the program – HVAC engineers, pharma consultants, contractors, end users, equipment manufacturers and others.

Harit-Jal-Vaayu in Mumbai

The second edition of Harit-Jal-Vaayu, held in Mumbai on August 22 at The Lalit, was a joint initiative of ISHRAE Mumbai Chapter, CII-IGBC Mumbai Chapter and Indian Plumbing Association (IPA) Mumbai.

Some of the eminent speakers who addressed the delegates were Dr. Prem C Jain (Chairman – IGBC and CEO – AECOM India), Ar. Kapil Gupta (Co-Founder and Principal Architect, Serie Architects), Rohan Parikh (Head – Green Initiatives, Infosys Ltd.), Sandeep Goel (Plumbing Consultant), Gurmit Singh Arora (Co-Chairman – CII-IGBC Mumbai Chapter),

Ar. Sharat Rao (Chairman, IPA Mumbai Chapter) and Raveendra Shetty (President, ISHRAE Mumbai Chapter).

The event focused on best Green practices, sustainability, conservation of resources, built environment, energy and water efficient practices and new innovative technologies to improve indoor environmental quality. It was attended by over 250 delegates including architects, real estate developers and builders, MEP consultants, corporate decision makers, Green product manufacturers and educational Institutions.

Tech Talk in Mumbai



Vinod Jethani explains VFDs

Mumbai Chapter organised a Tech Talk on *Understanding Variable Frequency Drives* on July 15.

The speaker was Vinod Jethani, Head, National Sales – HVAC&R, Danfoss Drives, Danfoss Industries. There were 21 participants.

Jal Vayu Agni 2015 Held in Ahmedabad



K. Ramachandran lights the lamp



Pankaj Dharkar welcomes the delegates

A seminar on Emerging Technologies for Smart Cities and High Rise Buildings was held under the banner of Jal Vayu Agni on June 13 at IIM Ahmedabad.

Pankaj Dharkar (Past President ISHRAE National, Ahmedabad Chapter and ASHRAE WIC, and National President – FSAI) welcomed the delegates. Chief guest Ramakant Jha, MD & Group CEO – GIFT City Gandhinagar spoke on development in smart cities. Dipen Mehta (Convener – Jal Vayu Agni 2015) made



A view of the packed hall

a presentation on the seminar theme Jal Vayu Agni. More than 550 delegates packed the hall.

Clean Room Program in Kolkata



Subhasish Dasgupta addresses the audience

A program on *Clean Room Applications* was held on August 8 by Kolkata Chapter, with Subhasish Dasgupta as the speaker. 19 participants attended the program.

DL Program on Acoustics at Indore

ASHRAE Distinguished Lecturer Dr. S Rajagopalan held a workshop on *Acoustics in the Built Environment* on August 8 at Hotel Best Western Plus 02, Indore.

Chapter President Sapan Shah delivered the welcome note. A briefing on ACREX 2016 and membership initiatives was given by Nishant Gupta, National Chair Programs. Sharad Chaudhary, President-Elect introduced Dr. Rajagopalan.

Dr Rajagopalan, in the workshop that lasted almost four hours, gave an exhaustive presentation on how acoustic considerations play an important role while designing a concert hall, auditorium, hotel guest room or corporate building. The workshop was attended by more than 30 delegates including leading architects, interior designers, structural consultants, MEP consultants and contractors, and end users from the hotel and infrastructure sectors.

Advocacy

Chandigarh Supports Green Buildtech

Chandigarh Chapter supported Green Buildtech 2015 Conference and Expo as an associate society. The event was organised by IGBC on August 21-22 at Chandigarh. Around 150 members of ISHRAE and IGBC and high ranking government officials participated. RD North-2 Pankaj Sareen, President Harpreet Singh and CWC member Ajay Bansal were present. Dr. Prem C. Jain delivered the keynote address. The Chapter had a display stall for ISHRAE publications at the venue.

Nashik DL on Compressor Failure



M. Ganeshan being welcomed by President Nishad Satardekar

Nashik Sub-chapter conducted a Distinguished Lecturer talk on *Compressor Failure Analysis and Green Maintenance* on August 17. ISHRAE DL M. Ganeshan was the speaker. He covered topics like reasons for compressor failure, troubleshooting AC&R systems and Green based maintenance. Table partners Shubham Refrigeration, Om Tech and Infinity HVAC also made presentations.

Workshop on AutoCad in Surat



AutoCad workshop in progress

Surat Chapter organised a workshop on Designing with Autocad for HVAC Professionals on July 1, attended by 30 ISHRAE members and 3 students. It was a hands-on session with the software. AutoCad 2016 special upgraded features were also shared.

Coimbatore Arranges Technical Talk



G. Senthil Raj explains installation standards

Coimbatore Sub-chapter held a technical talk on *Installation Standards of VRF Systems* by G. Senthil Raj, HVAC Consultant on June 27. Over 30 delegates attended.

Seminar at Guwahati



Amarendra Goswami lights the lamp

Guwahati Sub-chapter held a seminar on *Selection of Unitary Air Conditioners - Impact on Energy*. Prof. Muthukumar Palanisamy, President-Elect; S. Ganesh, Program Chair, Kolkata Chapter; Manish Tibruwal, Secretary; Arijit Krory, Blue Star; Jitendar Rawat, LG Electronics; Kaushik Kumar, Mitsubishi Electric; and Debajit Sen, Haier were the speakers. Twenty members and 35 non-members participated

Vadodara Conducts Technical Workshop Series

Vadodara Chapter launched a Technical Workshop Series of 4 sessions on four consecutive Saturdays. The program was inaugurated by Past Presidents Ketan Soni, Himanshu Patel, Manan Vora and Rajesh Shah.

The first session was held on July 25 by Dr. J.R. Mehta on *Basics of Air Conditioning & Refrigeration*. It was attended by 36 participants, including Nilesh Patel (President), Hasmukh Patel (President-Elect), Manish Dandekar (Treasurer), D.D. Koranne, Shrirang Puntambekar and Krunal Shah.

The second session on August 1 was conducted by Abhay Date on *Accessories & Components of Air Conditioning & Refrigeration Systems*. It was attended by 35 representatives of contracting firms, corporates and industries.

The third session was held at GETRI on August 8. It was conducted by D.D. Koranne, GM Technical, GEABock India Ltd. on *Compressor Application, Diagnosis & Troubleshooting*. It was attended by 38 participants.

The last session of the series was conducted by Ketan Soni, General Manager (MP & Gujarat), Blue Star on August 22 on *Testing & Commissioning and Operational Issues in HVAC Systems*. It was attended by 40 participants, including Rajen Vyas (Regional Director West-II), Manan Vora (Zonal Chair Advocacy, West), D.D. Koranne, Abhay Date, Rajesh Shah, Brian Lobo (Past President), Nilesh Patel, Hasmukh Patel, Ashwin Patel (Secretary), Shrirang Puntambekar (Workshop Series Coordinator) and Kunal Shah (CWC Member).

RAC Field Technician Program in Goa



Sanjay Gosavi explains the basics of refrigeration

Goa Chapter organised a training session for RAC field technicians in association with Emerson Climate Technologies on July 4 at International Centre, Panaji. Chapter President Mahesh Prabhu briefed the participants during the inaugural session about ISHRAE, its national programs, ACREX and other activities.

Sanjay Goasavi (HoD Training) and Bhaskar Reddy from Emerson comprised the faculty. The seminar was attended in two sessions by 47 participants from various industries of Goa.

Ventilation Workshop at Chandigarh

Chandigarh Chapter organized a half day workshop by Sushil Choudhury on *Basement and Kitchen Ventilation* at Hotel Pearl on July 18. It was attended by over 25 delegates and seven student members. Sushil Choudhury also briefed the delegates on the ventilation chapter in the new NBC 2015. ISHRAE, ACREX 2016 and aQuest Movies were played at the event.

Technical Talk on Alternate Refrigerants at Chandigarh

Chandigarh Chapter organised a talk by Dr. Anshu Kumar on *Alternate Refrigerants* on August 22. It was attended by 40 delegates, including members, non-members, student members and IGBC members. Past National President Sushil Choudhury briefed the attending delegates about the initiatives taken by ISHRAE for disseminating knowledge among its members and citizens. ISHRAE and ACREX films were played at the end of the event.

Kitchen Ventilation at Ludhiana

A DL workshop on *Kitchen Ventilation* was organized by Ludhiana Sub-chapter on August 22. The speaker was Sushil Choudhury. President-Elect Sharanjit Singh Bedil, RD North-2 Pankaj Sareen and Chandigarh Chapter President Harpreet Singh participated in the proceedings. Thirty five delegates attended.

Coimbatore Workshop on Ducting Design

Coimbatore Sub-chapter organised a workshop on fan basics, duct basics and duct design on July 18.

Guwahati Holds Seminar on Variable Refrigerant Technologies

Guwahati Sub-chapter organised a seminar on *Evolution of Variable Refrigerant Technologies & Latest Developments* on August 20. It was addressed by Amarendra Goswami, President and U. D. Trivedi of Daikin. Twenty members and 60 non-members attended.

Chennai Conducts Second Seminar

Chennai Chapter conducted a full day seminar on *AHU Selection, Duct Design, Piping Design & Pump Basics and Selection* on July 4 at ISHRAE classroom. The speakers were K. Premkumar, B. Sankaranarayanan, S. Sankara and T.S. Mohanarangan. It was attended by 48 participants. This was the second technical program for the year 2015-16.

Product Presentation in Vadodara

Vadodara Chapter organized a product presentation on Hitachi Power Tools on June 27. Jayesh Rajpuria (Marketing Manager, Hitachi Koki India - Rajasthan and Gujarat) made the presentation. About 70 participants attended.

ISHRAE Certification Program

Bangalore



D. Nirmal Ram, A. Madhukar, G. Ramesh Kumar and Prashant Rayadu light the lamp

ISHRAE Certification Program (ICP) AC Design Level 1 - Module 1 on *Basics of Psychrometry* was conducted at The Chancery Hotel from July 16 to 18. National IPP D. Nirmal Ram was the Chief Guest at the launch of the program. C. Subramaniam, RD South-1 and G. Ramesh Kumar were also present. Prashant Rayadu was the lead faculty.

Past IBC Presidents Leslie D'Souza and A. Pandimurali, President A. Madhukar, President-Elect Shilpan Shah, Secretary T. Nagaraj, Treasurer S. Elangovan and CWC Members Ajay Bararia, Ananth Kumar, Amar Narayan, R. Anish Simha, M.K. Sreekesh, Muniraju, S. Deepak and Narayan K. Shetty were also present.

Fellowship

Ahmedabad Celebrates Silver Jubilee



Dr. P. C. Jain and K. Ramachandran welcome the delegates



National Presidential Members Pankaj Dharkar, V. Krishnan, M. P. Agarwal, D. Nirmal Ram and K. Ramachandran being felicitated



MoU being signed between FSAI and ISHRAE

The silver jubilee celebrations of Ahmedabad Chapter were held on June 13 at Gujarat University Convention Hall. Ganesh vandana, music performance by the ace music group of Sanket Khandekar (Guitar Guruwar) and dance performances by Agile Dance Galaxy of Boogie Woogie fame marked the inaugural session. Aakash Patel (Chapter President) delivered the welcome speech. Dr. P. C. Jain (Founder Member ISHRAE) and K. Ramachandran (National President) welcomed all Past Presidents of the Chapter on the dais one by one. A Memorandum of Understanding was signed between Fire & Security Association of India (FSAI) and ISHRAE on this occasion. More than 2100 delegates attended the function.

ISHRAE Premier League at Bengaluru

A cricket tournament, named ISHRAE Premier League, was held on August 1-2 at Loyola Cricket Ground. Sixteen teams from Blue Star, VKBS, Vayuts Systems, Orient Eco Systems, ABS Aircon Engineers, VTS Group, Quality Thermopack, P2V2 Engineering, VKA Powermaster, Utility Projects & Services, Stream Line Refrigeration, Rolastar, ETA Engineering, Samritu, ABB Ltd. and Airtemp participated in the tournament. ABB was the winner.

Among those who cheered the teams were IBC Past Presidents S.N. Raju and A. Pandi Murali, Immediate Past National Secretary C. Subramaniam, Regional Director South-1 G. Ramesh Kumar, CWC Member Shilpan Shah, President-Elect T. Nagaraj, Secretary Deepak S., Program Chair Ananth Kumar and Zonal Program Chair M.K. Sreekesh.

Student Activity

Chennai Organises Orientation Program



Orientation program in progress

Chennai Chapter organised an orientation program for its Student Chapters on July 25 at ISHRAE Classroom, Alapakkam. From each student chapter, the President, Secretary, Treasurer and Faculty Coordinator were invited. The program was attended by 38 student members and faculty from 10 student chapters.

ISHRAE, ACREX and aQuest videos were played. Student chapters shared the events they were planning to conduct. The program was attended by Past Presidents V. Sridhar, Raja Sriram and Pandian, President-Elect Balakrishnan, President Shankar Rajasekaran and Student Activities Chair Dr. Balachandar.

New Student Chapter at Sree Sastha CoE, Chennai



Office bearers being administered the oath



Sandeep Lokare addresses the students

A new student chapter was inaugurated at Sree Sastha College of Engineering on July 4. About 200 students were present.

The team of student office bearers was installed by President Shankar Rajasekaran in the presence of Principal Dr. Vemuri Lakshmi Narayana, HoD Dr. Vincent Balu and other faculty members. President-Elect D. Balakrishnan was also present. After the installation, the President spoke on the importance of HVAC&R and opportunities in the industry. The inauguration function was followed by a technical guest lecture by Sandeep Lokare.

Installation of Largest Student Chapter In Mumbai



Students listen to the technical presentation

Saraswati College of Engineering at Kharghar, Navi Mumbai with 230 members became the largest student chapter to be installed, on August 12. A technical presentation was made on the occasion by Boney Davis of Bajaj Electricals on *Basics of IBM Systems*.

Student Chapter at VIVA Institute of Technology, Maharashtra



Sanjay Verma administers the oath

Mumbai Chapter chartered a student chapter on July 2 at VIVA Institute of Technology, Virar, Maharashtra. Sanjay Kumar Verma, Chair Student Activity administered the oath. A technical presentation was made on *Sustainable Glass* by a team from St. Gobain. Niyati Raut is Faculty Incharge, Nishant Shekhar is President, Anjali S. Pokkalathe is Secretary and Ketan Dhamne is Treasurer.

Student Chapter at St. John College, Palghar, Maharashtra



Office bearers at St. John College

ISHRAE Mumbai chapter installed a student chapter on August 7 at St. John College of Engineering & Technology, Palghar, Maharashtra. Raveendra Shetty, President Mumbai Chapter, Amod Dikshit, Membership Chair and Sanjay Kumar Verma, Student Activities Chair were present. A technical presentation was made by Amod Dikshit. Principal Dr. Satish Takalikar, Head of Department of Mechanical Engineering Dr. Ashok Dhale and senior teacher Shivaji Shelar were also present.

Student Chapter at S.I.E.S., Navi Mumbai



S.I.E.S. students take the oath

A student chapter was installed at S.I.E.S., Nerul, Navi Mumbai on August 27. The event was attended by over 80 students. During the installation, aQuest and ACREX videos were screened. Cheques were handed over to toppers in RAC, TD and HMT. Hard copies and CDs of *Air Conditioning and Refrigeration Journal* were handed over to the faculty. A technical presentation was made on *Building Services – Safety and Security*.

Saraswati Students Visit Mitsubishi Electric

An industrial visit was organized for student members of Saraswati College of Engineering to the sales office of Mitsubishi Electric at Andheri, Mumbai by Student Chair Sanjay Verma on August 22. Zonal Student Chair Bhavesh Mehta and Faculty Incharge Paramjit Thakur also accompanied. The visit started with a presentation on the working of air conditioners and the HVAC&R technology. The topics included types of systems, ACs, scroll compressor, inverter technology, VRF concept, etc. There was a briefing on safety measures also. This was followed by a visit to the training room that houses air conditioning units including room air conditioners and packaged air conditioners.

Walchand College of Engineering, Sangli

Kolhapur Sangli Sub-chapter organised the revival function of the Student Chapter of WCE under the guidance of Student Chapter advisor Prof. Dr. B. S. Gawali, Department of Mechanical Engineering, WCE. There was a technical session by Prof. Gadale on *Boilers Used in Thermal Power Plants*. He explained the need, advantages, disadvantages and applications of thermal power plants and the types of boilers for various temperature ranges used in these plants.

Seminar at MNIT Jaipur

A seminar on *Possibilities and Issues in Change of Refrigerant in Existing HVAC&R Machinery and Equipment* was conducted on August 8 at MNIT, Jaipur in association with ISHRAE Jaipur Chapter and ASHRAE Jaipur. Prof S.C. Bhaduri and Vikas Mehta were the speakers. Prof. Bhaduri has contributed over the years to refrigerant phase-out and was Member, United Nations Environment Programme, Montreal Protocol on Refrigeration, Air-conditioning and Heat Pump Technology Assessment Panel, 1989, 1991, 1993, 1996 and World Bank Consultant on ODS phase-out projects in refrigeration and air-conditioning. Vikas Mehta takes care of the North and East India, Bangladesh, Bhutan and Nepal business (sales and marketing) for the Refrigerants vertical.

Re-installation of GIT Student Chapter, Jaipur

The re-installation of GIT Student Chapter was held on August 21. Anil Gupta, P.K. Anand and Rahul Jain were present. About 100 students attended. Rahul Jain gave a guest lecture *Fire and Safety*.

Student Chapter Installations at Indore



Members of Indore Student Chapters

The annual student chapter installations at Indore took place at Institute of Engineering & Technology, Devi Ahilya Vishwavidyalaya (IET-DAVV) on August 8. The event was presided over by guest of honour Dr. S. Rajagopalan, Indore Chapter President Sapan Shah, Dr. Sanjeev Tokekar (Director, IET-DAVV) and Dr. Ashesh Tiwari (Dean, Faculty of Engineering and Head of Mechanical Engineering Department). The event was also attended by Nilesh Pandya (IPP, Indore Chapter), Pankaj Tiwari (Secretary) and Deepak Arjare (National Vice Chair). The event was flagged under the guidance

of Dr. Sharad Chaudhary, Professor, IET-DAVV and President-Elect, Indore Chapter; and Student Activity Chair Prof. Ajeet Bargaley. The presence of ten student chapters from Indore consisting of their faculty advisors and student members added value to the event.

The highlight was an hour long technical talk followed by a brainstorming session on the topic *Acoustics in the Built Environment* by Dr. S. Rajagopalan.

The chapters that were installed are: Acropolis Technical Campus (ATC), Chameli Devi Institute of Technology and Management (CITM), Indore Institute of Science and Technology (IIST), IET-DAVV, Malwa Institute of Technology (MIT), Medicap Institute of Technology and Management (MITM), Truba Institute of Technology, Vindhya Institute of Technology (VIT) and M.J.P. Govt. Polytechnic College, Khandwa.

A video highlighting the exceptional performance of IET DAVV for winning the ISHRAE Best Student Chapter Award 2014-15 was shown.

Industrial Visit to Trinity Capsules, Nashik



Don Bosco students at Trinity Capsules

By Kimberly Stewart, President Student Chapter, Don Bosco Institute of Technology, Mumbai.

35 students along with Clea Periera and Aman, faculty members went on an industrial visit to Trinity Capsules, Nashik on August 3. They left by bus from Don Bosco Institute of Technology, Kurla at 7:30 am, stopping at Thane to pick up 6 more students and one faculty member. They

reached the plant at 11:30 am. Nitin Chaudhari briefed them about Trinity Capsules for which his company was installing the HVAC system. Towards the end of his presentation he showed the plot plan detailing the locations of the units. Later the students were taken to the HVAC plant, and saw 3 old reciprocating compressor chiller packages with cooling towers, pumps, condenser water piping, primary and secondary chilled water pumps, piping and hot and cold wells. Then they saw the VRF units in the new wing, air handling units and the heat recovery wheel.

They left the premises at 5.30 pm and reached the college back at 9:00 pm.

Poornima Student Chapter at Jaipur



Poornima office bearers take the oath



A view of the large gathering

On July 24, Department of Mechanical Engineering of Poornima College of Engineering, Jaipur organized a seminar on *Advances in Refrigeration* along with the re-installation ceremony of Poornima Student Chapter. The occasion witnessed the presence of Dr. Om Prakash Sharma, Director PCE, Mahipal Singh, GM, Current Infra Projects Pvt. Ltd., Anil Gupta, President, ISHRAE Jaipur Chapter, R. S. Saxena, Treasurer, and P.K. Anand, along with faculty members.

Dr. Om Prakash Sharma in his opening remarks highlighted that inverter technology has drastically reduced energy consumption and the new refrigerant R410a has zero ozone depleting potential.

Mahipal Singh delivered the lecture on *Advances in Refrigeration*. Anil Gupta administered the oath to the student office bearers. More than 250 students attended.

Poornima Students Visit Hotel Jaies



Students at Hotel Jaies

Department of Mechanical Engineering, Poornima College of Engineering, Jaipur organized a one day field visit to Hotel Jaies, Jaipur on August 26 in association with ISHRAE and ASHRAE. The objective was to acquaint the students with Variable Refrigerant Volume systems. 27 student members of ISHRAE and ASHRAE participated, along with faculty coordinators Shailendra Kaseria, HoD, Mechanical Department and Sobhag Bhandawat, Assistant Professor, Mechanical Department. Anil Gupta, President, ISHRAE Jaipur Chapter and P.K. Anand were also present.

Vadodara Chapter Arranges Industrial Visit

Vadodara Chapter arranged an industrial visit for PIET Student Chapter to Baroda Dairy on July 9. About 54 students and one faculty member attended. Nilesh Patel (President), Brian Lobo (Student Activity Chair), Manish Dandekar (Treasurer), Krunal Shah, Gaurav Amin and William Jacob (CWC Members), Swati Prajapati (Faculty Coordinator, PIET) and Nikunj Patel from Baroda Dairy coordinated the visit.

Sustainable Energy & Environment Quiz 2015 at MNIT

The 7th Sustainable Energy & Environment Quiz was organized by Energy Club under the aegis of Center for Energy & Environment on August 22-23 at MNIT Jaipur. The event was sponsored by ISHRAE and supported by ASHRAE. A total of 317 teams from 13 colleges across India registered for the quiz. The first round consisted

of 40 objective questions, which lasted for 40 minutes. The top 31 teams stepped into the 2nd round. Kalzang C. A. Bhutia and Shubham Goswami from MNIT emerged as the winners. 2nd and 3rd spots were also occupied by students from MNIT: Anirudha Kumar, Nikhil and Thakur Gaurav Singh, respectively.

Kolkata Conducts Orientation at Jadavpur University Student Chapter



Prabir Kumar Sen talks on Basics of Psychrometry

Kolkata Chapter conducted an orientation program along with a technical talk on *Basics of Psychrometry* by senior member Prabir Kumar Sen at Jadavpur University Student Chapter on August 20. About 35 students attended. Among the members present were Utpal Biswas – Zonal Student Chair, East and Nilanjana Mukherjee – Student Committee Member, Kolkata Chapter.

New Student Chapter at BITT, Ranchi



A. Rituraj and Swadhin Mukherjee with student members of BITT

The installation of a new Student Chapter at Birs Institute Of Technology (Trust) (BITT) took place on August 5. Swadhin Mukherjee (Immediate Past President) briefed the audience about ISHRAE. Anuj Rituraj, President Ranchi Chapter administered the oath to the office bearers and handed over the charter. Certificates were distributed to student members.

Site Visit for Students in Nagpur



Students pose after the site visit

Nagpur Chapter organized a site visit for Student Chapter members of Anjuman College of Engineering & Technology to Haldiram's chiller cooling system. Around 60 students attended in two batches. President Sanjay Tatwawadi, Secretary Sashank Dongarwar, Immediate Past President Moin Naqvi and Student Activity Chair Prof. Satish P. Lokhande from Nagpur Chapter, and Prof. Ahmad, Prof. Nasim and Prof. N. Lotia from the college coordinated the visit.

Student Chapter Chartered at Vadodara

Vadodara Chapter chartered a Student Chapter at Parul Institute of Technology (PIT) at Waghodia on August 17. Bhavesh Mehta (Student Chair – West) accompanied by President Nilesh Patel, Brian Lobo, Manan Vora (Zonal Chair Advocacy and Past President), Has Mukh Patel and Manish Dandekar were present. The function was attended by HoD Prof. Bhavesh Mewada. Bhavesh Mehta administered the oath to the office bearers, and delivered a lecture on *Glass and Sustainability*. Faculty coordinator Alice D'Souza organized the program, which was attended by over 100 students.

Student Chapter of SVIT Installed at Vadodara

Vadodara Chapter installed SVIT Student Chapter on August 10. Brian Lobo administered the oath to the office bearers. The function was attended by HoD Dr. Ramana, S.P. Patel and other faculty members along with 31 students. Nilesh Patel (President), Has Mukh Patel (President-Elect), Ashwin Patel (Secretary), Manish Dandekar (Treasurer), Dhiren Vyas (K-12 Chair) and Gaurav Amin (CWC Member) were present.

K-12 Programs

Quiz for Government Schools at Jaipur

The first K-12 activity of the Society Year at Jaipur was conducted on August 6 for children of government schools. Presentation material in Hindi familiarised the students with the basics of energy, HVAC and renewable energy. This was followed by a quiz on these topics. The winners were given appreciation certificates.

Independence Day at S. V. P. Primary School, Vadodara

Homage was paid to countless freedom fighters as Vadodara Chapter celebrated the country's 69th Independence Day at Sardar Vallabhbhai Patel Primary School. The school presented a melange of patriotic activities. Children performed patriotic songs and dances. Biscuits and ice cream were distributed to the children. Around 70 students and school staff were present.

Quiz at Duckling School, Jaipur

An awareness cum quiz competition for Class 7, 8 and 9 students of Duckling School was held on August 14. The objective was to create awareness on basics of energy, HVAC and renewable energy sources and career guidance. Awareness was created on environmental pollution by coal and other fossil fuels. Understanding of electricity generation from different sources and basic understanding of heating systems, refrigerators and ACs was shared. Around 90 students attended the session. This was followed by a quiz competition. Principal Sunita Bajpai was present at the event. Chapter President Anil Gupta and Past President Shailesh Verma handed over the certificates to the winners.

Essay Competition at Vadodara

Vadodara Chapter organised a K-12 Program on July 3 at Municipal Primary School, Karelibaug for students from Std. 6 to 8. About 35 students participated. They were asked to write essays on *Save Environment* and *Save Water*.

Nilesh Patel (President), Has Mukh Patel (President-Elect), Dhiren Vyas (K-12 Program Chair), Rajesh Shah (Immediate Past President), Himanshu Patel (Past President), Ashwin Patel (Secretary), Manish Dandekar (Treasurer) and Jaydeep (CWC Member) were present.

Tree Plantation at Ludhiana



Posing for a photo after planting trees

Tree plantation was carried out by Ludhiana Sub-chapter in the presence of the local MLA and Councillor.

K-12 Talent Hunt at Nashik



Head of Shree Sharad Pawar School, Nigdol, Dindori briefs the students about the contest



Participating students at Vidya Niketan Adivasi Ashramshala, Dindori

Nashik Sub-chapter conducted a Talent Hunt at two schools in the Dindori Taluka of Nashik District on August 24. Dindori is 33 km from Nashik. A total of 410 students participated. The objective was to provide free basic computer education to students achieving 60% and above in the contest.

The event was organized in association with Omtech Education Society (OES) under the National Digital Literacy Mission (NDLM) program. OES will provide basic computer education at its branch at Dindori, which is a walking distance from the school.

Chennai K-12 Programs on Global Warming

Chennai Chapter organised the first K-12 program for 2015-16 on *Fifty Things that Cause Global Warming* on July 2 at Chennai Public School, Besant Nagar. The speaker was D. Balaji – Past Chapter President. The event was attended by 76 students of 5th Standard. Arul (Past president), Krishnasamy (Chair – K-12), Vijayabaskaran (Secretary) and Akilan (Chair – Publications) participated in the program.



Pallavapuram Higher Secondary School students listen to D. Balaji

The second K-12 program was conducted in Pallavapuram Higher Secondary School at Chrompet by D. Balaji on July 31 on the same topic. The program was at-

tended by 116 students of 6th Class. The third K-12 program was conducted in Karambakkam Government High School at Porur by Raja Sriram on the same topic on August 12. It was attended by 125 students of 7th Class. D. Balakrishnan – President-Elect, Krishnasamy – K-12 Chair, Sukanya Sriram – CWC Member and Kirthiga – Member were present from ISHRAE.