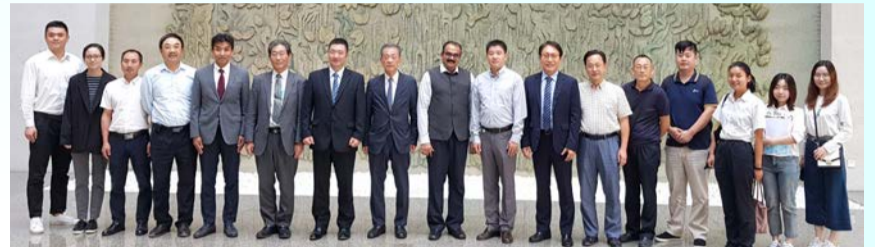


ISHRAE's Global Outreach

ISHRAE Attends Asian Heat Pump Network Workshop in Beijing

The annual meeting of Asian Heat Pump Network (AHPNW) was held in Beijing, in which ISHRAE was represented by Prof. R. Saravanan. He made a presentation on 'Heat Pump Progress, Potential and Applications in India'. The presentation was well received and the Director of Heat Pump & Thermal Storage Technology Center of Japan (HPTCJ) was interested in knowing about and visiting some of the applications mentioned in the presentation during his visit to India. He also expressed his willingness to participate in ACREX 2020.

The General Agreement of AHPNW has been revised and the draft will be sent to ISHRAE for approval. It was decided to hold the annual meeting in 2021 in India during REFCOLD or any other event during November.



Prof. R. Saravanan (centre) with other delegates at AHPNW meeting

CAR Delegation Meets ISHRAE

A delegation from the Chinese Association of Refrigeration (CAR) visited ISHRAE HQ on November 25. The delegation comprised Wang Congfei – Deputy Secretary General of CAR; Tian

Changqing – Professor and Co-Director of Research Center of Thermal Process & Energy-saving Technology in Technical Institute of Physics and Chemistry, Chinese Academy of Sciences; Kang Lu –

Project Manager at BIEC; and Sun Yukun, Assistant at CAR. ISHRAE was represented by Richie Mittal (President-elect), Vishal Kapur (Past President), Vikram Thakur (HQ) and Ashwini Mehra (Executive Secretary).

Various possibilities for collaboration between CAR and ISHRAE were discussed relating to knowledge dissemination at conferences, workshops, seminars and forums. Three concrete measures to strengthen collaboration were agreed upon:

1. The success of the Sino-Indian Cold-Chain Forum held during REFCOLD India 2019 should pave the way for a similar forum during the CAR Exhibition next year.
2. One of the subjects for future joint forums could be 'Air Quality', with

speakers outlining the success story of Beijing in controlling air pollution, which would be of much interest to Delhi Administration.

3. The Asian Conference on Cold-Chain, which has significant participation from China, Japan, Korea and other Asian countries, will invite ISHRAE to participate in the next Conference. It was mooted that in 2022 or 2023, an edition of the Asian Conference on Cold-Chain could be organised by ISHRAE in India.

The CAR Exhibition has about 1,200 exhibitors, and the visitors include an estimated 300 from India.

CAR has a membership base of 20,000, which includes professionals and 700 corporate members.



ISHRAE and CAR delegates pose for a group photo

National Programs

Ahmedabad to Hold Confluence

The 13th edition of ISHRAE Ahmedabad Chapter's flagship national program Confluence will be held on January 17 and 18, jointly with ASHRAE Western India Chapter. The theme of this year's Confluence is 'Indoor Air Quality'. The program will cover various aspects of indoor as well as outdoor air quality management, where

renowned national and international speakers will address industry specialists.

The program brochure may be downloaded from <https://ishraehq.in/Content/UploadFiles/1g0hr25undg.pdf>

For online registration, please visit <https://www.ishraeconnect.in/Events/Index/7080>

Delhi Chapter Holds Ventconf 2019

Delhi Chapter of ISHRAE (DCI) organised its annual flagship event Ventconf on November 2 at Indian Aviation Academy, New Delhi. Its theme this year was 'Indoor Air Quality – Opportunities & Challenges'. The event was supported by Indian Building Congress (IBC), Design Infrastructure Planning and Management (DIPM) Society, Society for Indoor Environment (SIE), International Air Quality Association (IAQA), Green Rating for Integrated Habitat Assessment (GRIHA), Indian Pollution Control Association (IPCA), Associated Chambers of Commerce of India (ASSOCHAM), Indian Green Building Council (IGBC), Green Building Certification Inc. (GBCI), International Association of Plumbing and Mechanical Officials (IAPMO) India, Fire & Security Association of India (FSAI) and International Facility Management Association (IFMA). TRION-Johnson Controls was the Platinum partner.



Lighting the lamp

The traditional lamp to start the event was lit by Dr. T. K. Joshi (Director – Occupational Health & Environment Program, and Board Member – Central Pollution Control Board), K. Raghavan (Director – Channel Sales at TRION-Johnson Controls), Richie



Anoop Ballaney welcomes the delegates

Mittal (National President-elect, ISHRAE), Anoop Ballaney (Chair – Ventconf 2019) and K. K. Mitra.

It was not lost on the speakers and delegates that a public health emergency had been announced in Delhi and nearby areas the same day as air quality entered the 'severe plus' category following Diwali. The Environment Pollution Authority had declared schools shut and barred construction activity in the capital till November 5. Anoop Ballaney, in his welcome address, thanked the event partners and introduced the Ventconf team. He highlighted that pollution is a major cause for concern, especially in the National Capital Region.

Richie Mittal, in his address, remarked that this was just the right time for such a conference, with outdoor air quality having touched hazardous levels – prompting the Supreme Court to intervene. He



Richie Mittal



Dr. T. K. Joshi

spoke about ISHRAE and its various activities, exhorting non-members to enrol for ISHRAE.

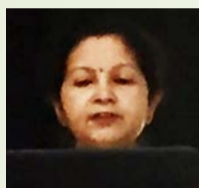
Dr. T. K. Joshi delivered the keynote address, underlining the need to correlate air quality with its health-related consequences. He concluded that physicians need to interact more often with engineers and environmental scientists, and the health angle needs to be considered while designing buildings.

The inaugural session concluded with a product presentation on TRION air quality products by K. Raghavan.



On the dais during the inaugural session: Pradeep Kumar Dua (President – DCI), Richie Mittal, Anoop Ballaney, Dr. T. K. Joshi and K. Raghavan

The first post-break session was chaired by G. C. Modgil. Rahul Prabhakar – Chief Engineer, ITC Maurya – began the session by presenting case studies on IAQ in the hospitality sector, outlining the pioneering work done by ITC Group to monitor and improve IAQ. Tarun Mudgal of CBRE took the next session on 'Improving IAQ in Existing Buildings'. Rohit Kumar Singh of GMR presented a case study on IAQ in airports. Mili Majumdar, Managing Director of Green Business Certification Institute, India and Senior Vice President, USGBC was the next speaker, with a presentation on 'Design for Health and Well Being: Connecting



Mili Majumdar



Dr. Jyotirmay Mathur

People with Places'. Dr. Jyotirmay Mathur from Malaviya National Institute of Technology, Jaipur unveiled and explained the oven-hot 2019 version of ISHRAE IEQ Standard.

The session concluded with a product presentation of AAF India by Kent Petersson, and a skit on 'The Air we Breathe' by students of Institute of Home Economics (IHE), Delhi University.

The post-lunch session was chaired



Shankar Rajasekharan



Participating in the panel discussion (L to R): Dr. Naresh Gupta, Dr. Arun Sharma, Sunil Gupta, K. Raghavan and Dipankar Saha

by Sunil Gupta. Shankar Rajasekharan of IMPEC Filters began by presenting an overview of ISHRAE Standard for Performance Testing of Air Filters for Air Conditioning and Ventilation Applications.

This was followed by a panel discussion on 'Policies and Regulations – a Way Forward'. The participants were K. Raghavan, Dr. Arun Sharma (President, SIE and Professor, Community Medicine, University College of Medical Sciences, Delhi University), Dipankar Saha (Ex-Additional Director and Head of Air Division, Central Pollution Control Board) and Dr. Naresh Gupta from Maulana Azad Medical College. The discussion was moderated by session chair Sunil Gupta.

Dr. Pratima Singh from IHE made a presentation on her research topic, 'IAQ and Productivity in Air Conditioned (AC) and Non-AC Schools in Delhi'. She concluded that adequate ventilation and pollution-free classroom environment is necessary to increase satisfaction, comfort, concentration and performance of stu-

dents; schools must be aware of different methods to improve IAQ and classrooms must be designed according to standards.

Rajesh Jain from Delhi Metro Rail Corporation (DMRC), in his presentation on 'IAQ in Metro Stations', outlined the measures taken to ensure healthy air quality at the stations. Dr. Arun Sharma made a presentation on 'IAQ and Health'. Namita Gupta from Airveda Technologies, during her presentation on 'Measurements and Visualisation Techniques', concluded that real time continuous monitoring is the only way to ensure that a building is healthy.

Dr. Yash Shukla from Center for Advanced Research in Building Science & Energy (CARBSE), CEPT University spoke about 'Occupant Behaviour with Regard to Ventilation', and concluded that effective and well designed ventilation positively affects occupant well being and productivity, and the occupant has a major influence on building operations.

The last speaker of the session, Barun Aggarwal from Breathe-easy Labs, spoke about Room Purifiers, highlighting the poor air quality in the auditorium by wearing a mask and citing data from the sensors brought by him.

The session was followed by partner felicitations, a lucky draw, and the vote of thanks by Pradeep Dua.

Kolkata Celebrates RACON 2019

'Celebration' is the only word that can truly describe the way Kolkata organises its annual flagship event RACON. It is the biggest event of the HVAC&R industry in Eastern India. Its 2019 edition was held on December 6 and 7 at Raajkutip Swabhoomi, Kolkata preceded by a Curtain Raiser evening on December 5.

The theme of the two-day conference was 'Sustainability & the Built Environment'. The Curtain Raiser set the tone for the conference. Partnered by Daikin, the Curtain Raiser was kicked off by Manoj Chakravorti, President-Emeritus of Kolkata Chapter by expressing his thanks to Daikin for supporting the event and helping knowledge sharing on the subject of sustainability and power efficiency. K. J. Jawa, CEO and MD of Daikin India and a non-resident Board member of Daikin Industries, Japan was the Chief Guest. Jag Mohan, IPS, Director-General of Fire and Emergency Services, West Bengal was the Guest of Honour for the evening.



Manoj Chakravorti



Vikram Murthy

Vikram Murthy, National President, ISHRAE spoke about the price paid for the growth of HVAC&R industry in terms of environmental impact, and called for mitigation efforts. Speaking about the Global Cooling Challenge thrown by the Ministry of Environment one year back, he revealed that out of the eight shortlisted entries, three were from India, including Daikin. He announced the induction of 26 HVAC&R engineers from Bangladesh into ISHRAE.

Jag Mohan spoke about some of the issues that need to be addressed by the HVAC&R industry to avert fire incidents, wishing the industry a grand success.

K. J. Jawa expressed his delight at Daikin being selected as one of the finalists of the Global Cooling Prize. He spoke about Daikin's pioneering efforts in the field of energy efficiency – such as the invention of VRV and the introduction of R32 refrigerant. He commended ISHRAE for taking forward global issues related to cooling, and Kolkata Chapter for organising RACON.

Shailesh Nigam, GM – Applied Business Group, Daikin – made a product presentation.

The highlight of the evening was a panel discussion on the topic 'Sustainability is the Key to the Built Environment', moderated by Dr. Himadri Guha. The panellists were Pradeep Sureka, Sanjay Goyal, Ashish Acharjee, Prabhat Goel and K. D. Singh. Summing up the discussion, Dr. Himadri Guha said that the industry should look at the issue holistically and come out with ways to reduce the environmental cost of cooling. There were additional comments by Vikram Murthy, Ashu Gupta, G. C. Modgil, Sushil Choudhury, Satish Iyengar, Pankaj Dharkar and Manoj Chakravorti.



K. J. Jawa

Jayanta Das, Convenor – RACON 2019 – proposed the vote of thanks.

Day One of RACON 2019 began with the lighting of the lamp by Vikram Murthy, K. D. Virmani from Daikin, K. D. Singh, Jayanta Das, Mohammed Assadul Haq from Bangladesh, and Gautam Mukherjee (Regional Director – East).

Debashish Banerjee – MD, Distribution, CESC – was the Guest of Honour for the day. Arvind Surange chaired the first session. The first speaker of this session was Anne-Lawrence Chevalier, who spoke on 'Energy Optimisation in Chilled Water Plant'. She was followed by Barun Aggarwal (CEO, Breathe-Easy Consultants), who made a presentation on 'Indoor Environmental Control'. Dr. Anand Murthy spoke on 'Building Acoustic Concept and Control'. The last speaker of the morning session, Andrew Brooks from Belimo, New Zealand made a presentation on 'The Low Delta T Syndrome in HVAC'.

The post-lunch session was chaired by N. S. Chandrashekar (Vice President – South), in which M. S. Manjunath made a presentation on 'Sustainable Refrigerant System'.

In the last session of the day, Sameer Shinde spoke about 'HVAC System Energy Optimisation using Earthware Design'.



Participating in the panel discussion: Pradeep Sureka, Sanjay Goyal, Ashish Acharjee, Prabhat Goel, K. D. Singh and moderator Dr. Himadri Guha



Lighting the lamp: Mohammed Assadul Haq, Jayanta Das, Vikram Murthy, K. D. Virmani, K. D. Singh, Debashish Banerjee and Gautam Mukherjee

He was followed by Sandeep Kohli of Johnson Controls, with a presentation on 'Technologies Delivering High Efficiency for Chilled Water Systems'.

The technical sessions were interspersed with partner presentations by Blue Star, V. K. Building Services, Advance Valves and Kehems Technologies. Sushil Choudhury – Chair, ACREX 2020 – made a presentation on the upcoming ACREX.

The much-awaited Felicitation Night took place on the evening of December 6. It was partnered by ALP Aeroflex. In-



Shankar Chatterjee



C. K. C. Gupta



Ashok Virmani



S. Sankaran



T. Hari Rao



Late Deepak Kemkar's wife and daughter Kshama accept the memento



K. Ramu

Industry stalwarts who have completed 50 years of service to the industry were felicitated: Shankar Chatterjee (Kolkata Chapter), CKC Gupta (Deccan Chapter), Ashok Virmani (Delhi Chapter), S. San-

karan (Chennai Chapter), T. Hari Rao (Bangalore Chapter), K. Ramu (Chennai Chapter) and Late Deepak Kemkar (Pune Chapter).

In addition, V. K. Building Services, K. D. Singh and J. P. Aggarwal – leading entrepreneurs of Kolkata – were felicitated. This was followed by the felicitation of office bearers of Bangladesh Refrigeration and Air-conditioning Merchants' Association (BRAMA): Maktiur Rehman (President) and Asaul Rehman.

Vikram Murthy and Manoj Chakravorti released a book, 'The Complete



Book launch by Manoj Chakravorti, Mitul Jain and Vikram Murthy

Guide to Air Curtains', authored by Mitul Jain.

The entire RACON team felicitated Manoj Chakravorti for his exemplary leadership. A partner presentation by ALP Aeroflux followed. The rest of the evening was full of fun and dancing accompanied with lilting music.

The first session of Day Two on December 7 was chaired by Sunil Gupta. Ramesh Paranjpey began the session with a presentation on 'Environmental Refrigerants', emphasising ammonia and its safety aspects. Prashant Desai made a

presentation on 'Sustainability and Humidity'. Cyril Beaussart spoke on the topic 'Screw Compressors for Large Capacity Chiller and Heat Pump Solutions'. The session was interspersed with partner presentations by LG and Pidilite.

There was an interesting debate on the topic 'Are we Overselling VRF?' conducted by Ashish Rakheja. The participants represented all the major stakeholder groups of the industry – Pankaj Dharkar, N. S. Chandrashekar and C. Subramaniam (consultants), Samir Paul of LG (VRF manufacturer), Kedar Patki of Keshems (chiller manufacturer), Vikram Murthy and Vishal Kapur (contractors), and Manoj Kumar (end user). There was an animated discussion in which the audience also participated. The conclusion was that VRF is being oversold, but a correction is taking place now with the realisation that every problem has a different solution.

The last session of RACON 2019 was devoted to a student design competition on 'AC Design for a Hospital Building in Kolkata'.

Pharma Connect Held in Mumbai

ISHRAE Thane and Mumbai Chapters, supported by ASHRAE Mumbai Chapter, Contamination Control Society of India (CCSI) and Maharashtra Branch of The Indian Pharmaceutical Association (IPA), organized Pharma Connect – a national technical seminar – at Sahara Star, Mumbai on November 16. The theme of the seminar was 'From Concept to Validation' (C2V).

The lamp to mark the beginning of the seminar was lit by S. R. Salunkhe (IPA), Manjula Deshpande (President, ISHRAE Thane Chapter), Mihir Sanghavi (President, ISHRAE Mumbai Chapter), N. K. Mahajan (Past President, ISHRAE Thane Chapter and program convener), Santsaran Advani (CCSI) and Jagdish Dore (MD – Sidvim Life Science).



Lighting the lamp: S. R. Salunkhe, Mihir Sanghavi, Manjula Deshpande, N. K. Mahajan, Santsaran Advani and Jagdish Dore

Manjula Deshpande briefed the audience about ISHRAE and the activities of Thane Chapter.

Mihir Sanghavi addressed the audience on the activities of ISHRAE, and encouraged



Manjula Deshpande



Mihir Sanghavi



N. K. Mahajan



Jagdish Dore

non-ISHRAE members among the audience to join ISHRAE. N. K. Mahajan gave an introduction to the day's program.

The keynote address was delivered

by Jagdish Dore, on the theme 'Pharma Industry in the Throes of Change'.



Dr. Bharat Doshi



Gautham Baliga



Santsaran Advani

Dr. Bharat Doshi – MD, Doshi Consultant – was the next speaker. He spoke on the 'Importance of Conceptual Design Philosophy'. A product presentation by Silver partner Spectraco Filter Solutions was made by Dr. Kirti Kelkar. Gautham Baliga – Director, OPAL HVAC – made a presentation on 'Pressurisation Challenges in Pharma Industry'. Santsaran Advani – Advisor, Contamination Control – elaborated 'Cleanroom Classification to ISO 14644-1: 2015'.

Sandeep Rathi – CEO, Sierra Instrumentation & Controls – spoke on the 'Importance of Controls and Future of

IOT'. Rajendra Tamboli – Ex-Director, Dr. Reddy's Laboratories – made a presentation on 'Validation of HVAC Systems in Cleanrooms'.



Sandeep Rathi



Rajendra Tamboli



Kishor Datar

Kishor Datar – Director, Technosolutions – summed up the event. The valedictory session was handled by Amit Deshmukh.

AHU Testing Standard

ISHRAE & RAMA have jointly developed the draft of the Standard for Air Handling Units – General Requirements, Performance Testing and Rating. The work of preparing the draft standard has been carried out through a consultative process by a Technical Committee comprising of

representatives from consultants, users, manufacturers, academicians and testing agencies.

The Standard has already completed one round of review and comments from manufacturers and invited experts. The draft Standard is now circulated for public review, and comments are

invited from everyone.

The draft was uploaded on ISHRAE Website on 22nd November 2019 for public comments and can be downloaded from https://ishrae.in/Content/Download/ISHRAERAMA_20002_V1.26_draft_Nov20_widecirculation.pdf

It can be viewed at <https://ishrae.in/>

[home/PublicCommentsStandard/home/PublicCommentsStandard](https://ishrae.in/home/PublicCommentsStandard/home/PublicCommentsStandard)

Please note that comments are to be submitted only in the prescribed template available at the above URL, latest by January 20, 2020. Comments can be submitted using the link at the same URL.

Guidelines for Reports in eNews

- The deadline for receiving reports is the last day of the relevant period. For example, for publication in the January - February issue, the deadline is February 29.
- 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. **Pdf and ppt files must be avoided.**
- 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 program, all names are neither feasible nor necessary. Key names would suffice in such cases.)

- In addition to the jpg files, photos may also be copy-pasted on the Word file at relevant places, with captions below each photo.
- **News related to student and K12 activities may be sent to youth@ishraehq.in and v.thakur@ishraehq.in respectively, for publication in Student Connect and K12 Activity Newsletter.**

Around the Chapters

Visakhapatnam Conducts Urjavarana

Urjavarana 2019 was conducted at Visakhapatnam on the November 2 at Hotel Ambica Sea Green.

Dr. R. V. S. S. Prasad made the first technical presentation on 'IAQ in Hospital Environment'. Dr. B. Somasundaram was the next speaker, who spoke on 'IOT and Data Analytics for Energy Efficient O&M of HVAC'.

N. Ramprasad covered the topic of Risk Management – Hospitals and Hotels. M. Namasiyayam made a presentation on 'Passive Fire Safety – a Need of the Day'. The topic of the next presentation, by B. Anand, was 'Green Hospitals'. U. K. Ananth Padmanabhan rounded up the seminar with a presentation on 'IOT, LORA and BLE Energy Management Systems in Hospitals'.

Event partners also made their product presentations.

Mumbai Organizes Harit Jal Vayu

Mumbai Chapter, along with Indian Green Building Council (IGBC) and Indian Plumbing Association Mumbai Chapter, organized the seventh edition of Harit Jal Vayu on December 20 at Taj Santacruz. The theme was 'Back to Basics – Strengthening our Future'.

The lamp of knowledge was lit at the beginning of the program by Sharat Rao (Chairman – IPA Mumbai Chapter), Mihir Sanghavi (President – ISHRAE Mumbai Chapter), Dnyanesh Bhawe (IPA), Sandeep Mendiratta (Convener), M. Gopi Krishna (Consultant), Ar. Shabbir Kanchwala (K. Raheja Group) and Ar. Gaurav Shorey (Director – PSI Energy).



After lighting the lamp: Sandeep Mendiratta, Ar. Shabbir Kanchwala, Mihir Sanghavi, Sharat Rao, M. Gopi Krishna, Dnyanesh Bhawe and Ar. Gaurav Shorey.

In his mesmerizing keynote address that received a spontaneous standing ovation, Ar. Gaurav Shorey spoke about the influence of five Ds that define a region: Dialect, Diet, Dress, Dwelling, and Dances and Songs. Every region adopts the Ds that are most appropriate for the region.

The next session was a panel discussion. The panelists were Ar. Shabbir Kanchwala, Ar. Kamal Malik, M. Gopi Krishna, Sharat Rao, Ar. Gaurav Shorey and Mihir Sanghavi. The moderator was Sandeep Mendiratta.



Mihir Sanghavi, Gaurav Shorey, Sharat Rao, M. Gopi Krishna, Ar. Kamal Malik and Ar. Shabbir Kanchwala participate in the panel discussion

There were presentations on 'Design and Beyond – an Experience' by Ar. Kamal Malik; 'Mumbai's Water Distribution Network' by K. B. Wadhawane; and 'Energy Conservation in HVAC&R using Novel Heat and Mass Exchangers' by Dr. Milind Rane. The program ended with a vote of thanks.

Mumbai Chapter Supports Copper Association Seminar

International Copper Association (ICA) India organized a seminar on 'Selection, Design and Manufacturing of Energy Efficient Tube and Fin Heat Exchangers' on December 14 at Taj Santacruz, in association with ISHRAE Mumbai Chapter and ASHRAE Mumbai Chapter.



Lighting the lamp: Avinash Khemkar, Shankar Sapaliga, Amod Dikshit, Mihir Sanghavi, Bhavesh Mehta and Mayur Karmarkar

The program began with the lighting of the lamp by Mayur Karmarkar (MD – ICA India), Mihir Sanghavi (President – ISHRAE Mumbai Chapter), Amod Dikshit (President, ASHRAE Mumbai Chapter), Shankar Sapaliga (ICA India), Bhavesh Mehta (Reliance Industries) and Avinash Khemkar (ICA India).

Mihir Sanghavi, in his welcome address, said that coil design is one of the most mystical subjects in HVAC&R.

Mayur Karmarkar opined that the HVAC&R industry has a promising future; according to The Economist, the Indian AC market will be more than 5 million units by 2030. ICA is now promoting the use of 4 mm and even 3 mm microgroove copper tubes.

Amod Dikshit thanked ICA India for its support to the Indian HVAC&R industry. He exhorted non-members to join ASHRAE for acquiring the latest knowledge ahead of others.

Technical presentations were made by Pranav Shah (Blue Star), Sampath Kumar (Voltas), Frank Gao (ICA China), Zhou Jie (Hailiang Tube Manu-



Mihir Sanghavi



Mayur Karmarkar

facturing), S. Srinivasan (MD – Spirotech), Kerry Song (ICA China), Ajay Mehendiratta (MD – MSD Technologies), and Anand Sharma (Burr Oak India).

ACRETECH 2019 at Bangalore

Bangalore Chapter hosted ACRETECH – a full day technical seminar for design and project personnel from the HVAC&R industry on November 27 at NIMHANS. The theme of the event was '360 Degree Approach to Building Wellness'. The speakers were Naresh Narasimhan, Liaqut Ali Khan, Punit Desai and Rohit Mansukhani. In addition, R. Dinesh was the moderator for a panel discussion with participants from leading architectural firms, consulting engineers and contractors. The program was attended by more than 225 delegates.

Talk on Building Management System by Chandigarh Chapter

Chandigarh Chapter organized a Technical Talk for students on Building Management System at Chitkara University, Rajpura on November 15. The talk was delivered by C. Subramaniam, Immediate Past President, ISHRAE. It was attended by 80 participants.



C. Subramaniam addresses Chitkara University students

ACRESERVE at Ludhiana

Ludhiana Sub-chapter organized ACRESERVE on November 23 at Guru Nanak Dev Engineering College. The speaker was Naveen Birla, who explained inverter technology with the help of a demonstration.

ISHRAE Reaches Out to Students and Children

So as to take ISHRAE's engagement with students and children to the next level, HQ has started newsletters devoted exclusively to activities related to these target groups. Student Connect is a newsletter meant for members of Student Chapters, and K12 Activity Newsletter is targeted at children from Kindergarten to Std. 12.

Chapters and Sub-chapters may, in future, send news related to student and K12 activities to the following email addresses:

Student activities: youth@ishraehq.in
K12 activities: v.thakur@ishraehq.in

