

From the Desk of the President



Dear ISHRAE Members,

We have completed a quarter of the Society year 2019-20. We set out with the theme EXCELL – Excellence in Communication, Engineering and Lifelong Learning – and those are our driving directions.

We have become Excellent Communicators with several institutions and departments that include MoEFCC for the India Cooling Action Plan, BEE for the planned development of an India Building Energy Efficiency Standard, the Ministry of Science and Technology for whom we have formed a Consultative Advisory Group on Thermal Comfort, and UNEP where

we have joined a Coalition for District Cooling, amongst other engagements.

Our Technical Committee is buzzing. Three Standards on AHUs, Filters and Commissioning are well on their way to getting completed and we are closer to becoming a Government recognised Standards Development Organisation. The Technical Groups are meeting regularly and creating useful technical references. You should consider joining a Technical Group if you haven't already. It is the best contribution you can make to the Society and towards your own professional development. Research in ISHRAE has completed two projects and awarded a few more research grants this year. We have formed a Research Promotion Committee that will drive funding for Research in ISHRAE. Each one of you individually and your companies can make a noble contribution to ISHRAE Research online at <https://research.ishrae.in/donate>.

Education shall always be the backbone of ISHRAE's activities. As a premier technical society, ISHRAE encourages the professional development of its members through their Lifelong Learning. ISHRAE Certified Professional Committee continues to offer its

flagship certification programs at multiple chapter locations. Visit <https://www.ishraehq.in/>. New certification courses will roll out this year. Practical workshop courses are being developed too, and online certification programs shall begin later this year.

ISHRAE is growing organically across India. We have opened two new sub-chapters at Puducherry and Jalandhar, and chapters are working to add three more ISHRAE locations as the year goes by. Activity at chapters and sub-chapters is at an all-time high. Chapter Working Committees are working relentlessly to deliver value to their membership. That is the essence of your Society – Chapter Programs. Join your chapter sub-committees, and volunteer to create new programs. Larger chapters are taking their programs across their cities to multiple locations, so that more members can reach and attend. The ISHRAE online newsletter will tell you more about some of the programs. You can always login to [ishraehq.in](https://www.ishraehq.in/) members' area with your membership no. and password, and see what programs are going to happen near you. If you travel on work, plan to visit another ISHRAE chapter's program. There is no society that gives you such a pan-India networking opportunity. Squeeze out multiple benefits from your membership – the more you attend meetings and the more you surf [ishraehq.in](https://www.ishraehq.in/), the more you will discover. Download the ISHRAE app onto your mobile device and keep yourself informed on the go.

ISHRAE is a diverse Society. We have Youth and Women's wings that are promoting the diversity and intermingling of members. Look out for the representatives of Youth and Women in your chapter and join their efforts.

If you like to volunteer your time, join the Student and K-12 Committees in your chapter and spend time to interact with young engineering students at our student chapters or young children in schools. You will be blessed and you will feel rejuvenated. ISHRAE gives you that opportunity.

It is not every profession that networks its community with the vibrancy that ISHRAE does. You will grow old soon. The time to live your life professionally and purposefully is now. Become the ISHRAE Member who brings another Member and who grows our Society as you grow too.

It is the welcome season of the Indian monsoon. It won't last very long. Take time to enjoy it indoors or outdoors with your friends in ISHRAE.

– Vikram Murthy
President, ISHRAE

AROUND THE CHAPTERS

Puducherry Sub-chapter was presented its charter on June 15 in a grand function, with M.O.H.F. Shahjahan, Minister for Revenue, Industries and Commerce of Puducherry, as the Chief Guest. C. Subramaniam, National Immediate Past President and N. S. Chandrasekar, Vice President, South were the Guests of Honour. K. Thirunavukkarasu, RD South 2, installed the office bearers.



Puducherry CWC members take the oath

The function was attended by the President of Chennai Chapter – the Parent Chapter, its CWC Members and Past Presidents besides National and Zonal officials of ISHRAE.

ISHRAE Ahmedabad Chapter and **ASHRAE Western India Chapter** jointly organised a Distinguished Lecture (DL) program on 'Integration of MEPF Services in Tall Buildings' by Pankaj Dharkar and Ketan Soni at Ahmedabad Management Association, Vastrapur on June 1.

Shailendra Vyas (Chapter President) started the program with introduction of the speakers. Sneha Shah (Youth Chair) gave the details of 'One Degree Campaign' launched by the Chapter. Pankaj Dharkar asked

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World Refrigeration Day

June 26, the birthday of Lord Kelvin, was celebrated as the first World Refrigeration Day (WRD) throughout the world. ISHRAE supported this global initiative of the Institute of Refrigeration (IOR) to raise the profile of this sector to the public. The event gained support across the globe with organisations such as UN Environment, ASHRAE, International Institute of refrigeration (IIR) and other international institutes taking part.



To mark the day, IOR organised a series of live social media events including a relaunch of 'Fantastic Fridges', its website for schools that seeks to introduce school children of different ages to understand the science behind cooling technologies, and some of the more vital as well as entertaining applications. Resources offered through the site look at refrigeration, air conditioning and heat pumps and how the technologies can help tackle issues such as global warming. The site also details a range of potential careers and opportunities from studying and better understanding cooling.

A competition was launched as part of the WRD campaign to encourage school pupils and classes aged between 11 and 14 to create videos that can demonstrate cooling science in new and engaging ways. Expanded educational programmes covering some core fundamentals of cooling science and efforts to play up a range of sustainable innovations were some of the ways industry celebrated the first WRD. The event seeks to increase awareness across society of the large number of industries dependent on refrigeration and cooling, and coincides with significant efforts already underway to ensure cooling is increasingly sustainable and affordable around the world.

ISHRAE – along with National Centre for Cold-chain Development (NCCD), REFCOLD India and Nürnberg Messe – supported a webinar organised by UN Environment. YOUTH@ISHRAE organised a webinar of its own on 'Understanding the Basics of Refrigeration in Cold Chain' by Ashish Gupta, Director, Standard Engineering Pvt. Ltd., New Delhi.

NATIONAL PROGRAM

Mumbai Organises Symposia 2019

For the first time, Mumbai Chapter's flagship national program Symposia was spread over two days. Its eighth edition, held at Sahara Star on June 21 and 22, was attended by over 200 enthusiastic participants. Symposia 2019 saw a galaxy of distinguished speakers making presentations around the theme 'MEP – the 4th Dimension'.

The program was co-organised by ASHRAE Mumbai Chapter. It was supported by several Associate Societies: Awesome, Indian Plumbing Association (IPA), Indian Green Building Council (IGBC), Indian Association of Energy Management Professionals (IAEMP), International Facilities Management Association (IFMA) India, Fire Security Association of India (FSAI), and Refrigeration and Air-Conditioning Trades Association (RATA). LG and Wilo were the Gold Partners. The Silver Partners were Pidilite, Bry-Air DRI, and Ebara.



Yogesh Thakkar lights the lamp



Yogesh Thakkar, Mihir Sanghavi, Amod Dikshit, Pankaj Sareen and Manan Vora after the lamp-lighting ceremony

On Day One (June 21), the customary lamp-lighting ceremony was performed by Mihir Sanghavi (President – Mumbai Chapter), Yogesh Thakkar (VP – West), Manan Vora (National Chair – Programs), Pankaj Sareen (National Secretary) and Amod Dikshit (President-elect – ASHRAE Mumbai Chapter).



Mihir Sanghavi welcomes delegates



Yogesh Thakkar speaks about ISHRAE

Mihir Sanghavi welcomed the delegates and acknowledged the presence of HQ officers. Giving the audience an idea of the magnitude of ISHRAE's footprint, he mentioned that it has about 28,000 members (including student members) spread over 51 chapters, and carries out about 1,200 programs every year.

Yogesh Thakkar spoke about ISHRAE, its Mission, programs and events.



(L to R) Architects Hiten Sethi, Vivek Bhole, Vaishali Jain Solanki, Ravi Sarangan, Khozema Chintawala, Sandeep Shikre, Reza Kabul and Annkur Khosla participate in the panel discussion

Since the day coincided with International Yoga Day, Mumbai Chapter's in-house Yoga evangelist Atul Kocharekar was invited to conduct a brief Yoga session.

The first technical session of the day was conducted by Shubham Mishra, CEO – Brio Energy, on the topic 'Micro Turbine and Trigenation'. This was followed by a product presentation by Wilo, a Gold Partner.



Atul Kocharekar



Shubham Mishra



Amit Mittal

Amit Mittal, Technical Director IME – First Solar, made a presentation on 'Harvesting Solar Energy'. He mentioned that solar energy is the most economical form of energy today, available at Rs. 2.44 per unit.

The next session was by Amit Jaiswal of Siemens India, who presented a case study on Dubai International Airport explaining the huge savings achieved in the operating expenses.



Amit Jaiswal

The last session of the day was a panel discussion on 'An Architect's Overview', moderated by Ar. Hiten Sethi. The participants were Ar. Sandeep Shikre, Ar. Reza Kabul, Ar. Annkur Khosla, Ar. Ravi Sarangan, Ar. Vaishali Jain Solanki, Ar. Vivek Bhole and Ar. Khozema Chintawala.



Sandeep Talulicar lights the lamp



Ajaj Kazi, Amod Dikshit, R. N. Joshi, Shankar Sapaliga, Sandeep Talaulicar, Gaurav Shorey and Mihir Sanghavi after the lamp-lighting ceremony

The lamp-lighting ceremony on Day 2 (June 22) was performed by Mihir Sanghavi, Amod Dikshit, R. N. Joshi (President-elect, Mumbai Chapter), Shankar Sapaliga (President, ASHRAE Mumbai Chapter), Sandeep Talaulicar (MD, Jackson Hospitality), Gaurav Shorey (from PSI Energy Pvt. Ltd., Delhi) and Ajaj Kazi (Past President, Mumbai Chapter).



Team Symposia 2019 poses for a photo

The afternoon session commenced with a session on 'IOT – Myths and Facts' by Aditya Prabhu of Secutech Automation. This was followed by a product presentation by LG, a Gold Partner.



Aditya Prabhu speaks on IOT

Welcoming the delegates, Mihir Sanghavi spoke about the 1st Challenge being propagated by Shailendra Vyas of Ahmedabad Chapter, which involves setting the air conditioner



Mihir Sanghavi speaks about the 1st Challenge

thermostat 1° higher than one is habituated to. Some delegates advocated setting the thermostat at 26°.



Sandeep Talaulicar

Sandeep Talaulicar delivered the keynote address with the theme: 'Be an Ambassador of Mother Earth'. He dwelt upon the environment-friendly innovations carried out at his hotel in Phaltan, Maharashtra. His impassioned speech evoked a spontaneous standing ovation.

Sachin Shitole made a presentation on Wilo products.

The next session was conducted by Surendra Bohra on the topic 'Nano Fluid Technology for Energy Saving'. He was followed by Dnyanesh Bhawe, Principal MEP Consultant, who made a presentation on 'Water Curtain System'.



Surendra Bohra



Dnyanesh Bhawe



Sunil Khatwani



Gaurav Shorey

Sunil Khatwani, VP Sales at LG, made a presentation on Air Bearing Centrifugal Chillers. He followed this with a product presentation on LG, a Gold partner.

Gaurav Shorey was the last speaker, who

set the audience afire with his case study on 'Green MEP'.

Symposia 2019 held the houseful audience at Sahara Star captivated for two full days.



The conference hall in Sahara Star packed with delegates

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the participants to pledge to increase the setting of their air conditioners and air conditioning systems by 1°C to help reduce carbon emissions.



Pankaj Dharkar addresses the audience



Ketan Soni explains a technical point

More than 85 delegates attended the event. Vijay Panchal (Training Chair) proposed the vote of thanks.

Pune Chapter conducted the first edition of VRF Dangal on May 24 at Sheraton Grand. The objective was to deliberate on the growing importance of VRF technologies in the cooling sector. R.S. Kulkarni, Principal Consultant, HVACR Consulting Engineers was the Chief Guest, while former IAS officer Prabhakar Deshmukh was the Guest of Honour. Bhausaheb Bhosale, owner, Royal Purandar and Courtyard Marriott; Amarsinha Jadhavrao, owner, Fort Jadhavgadh; leading architect Sunil Patil; Rahul Manurkar, Senior Vice President, Magarpatta and Nanded City; Chief Fire Officer Prashant Ranpise; Nandkishor Matode, President, ISHRAE Pune Chapter; Deepak Wani, Convenor, VRF Dangal; Kedar Patki, Regional Director – West, ISHRAE; Virendra Borade, Secretary, ISHRAE Pune Chapter; Satish Menon, Treasurer, ISHRAE Pune Chapter; and Amisha Madan, Program Chair, ISHRAE Pune Chapter were present on the occasion.

Nandkishor Matode, in his welcome address, said that Pune Chapter has a legacy of 25 years and is working with the vision to bring the science and arts of HVAC to the new generation. Through the first edition of VRF Dangal,



Lighting the lamp at VRF Dangal

the Chapter intends to offer a focused technical program to highlight the importance of these technologies.

Ashish Rakheja, Managing Partner of AEON Building Design Consultants LLP, made a technical presentation on 'Decoding of VRF'. This was followed by a panel discussion on 'Evolution of VRF and the Way Forward', moderated by Shailesh Pathak, Managing Director of Albus Engineering. The panelists were R. S. Kulkarni, Ashish Rakheja, Ashish Vaishnav, Rajkumar Iyer, Bijo George and Satish Menon.

Recollecting the arrival of VRF in India, R.S. Kulkarni said that VRF technology was first introduced in India in the mid-nineties and in Pune in 1998. The technology is now used in large commercial spaces, high end villas, hospitals and pharmaceutical establishments.

Prabhakar Deshmukh gave a presentation on the work that Dream Social Foundation is doing in drought prone areas of Maharashtra along with Jalyukta Shivar and Paani Foundation. Responding to his presentation, Pune Chapter announced a donation of Rs. 25,000 to the Foundation and participation of its members in the *shramdaan* initiative to help the cause.

Rajkumar Iyer from Mitsubishi Electric gave a corporate presentation. The program also witnessed corporate presentations from Voltas, Hira Insulation, 24x7 and Hariom Metal.

Over 260 delegates including architects, consultants, manufacturers, professionals, system integrators, developers, OEMs and end customers participated in the program.

Thane Chapter organised Building Services Summit 2019, along with ISHRAE Mumbai Chapter, ASHRAE Mumbai Chapter, FSAI, RATA, AWESOME, IGBC, IPA and IIA. The theme was 'Innovation and Technology Sharing'. The event was held on June 29 at Four Points by Sheraton, Vashi.

Thane Chapter has been organizing this mega event for the last eight years with a different theme every year. The objective is to enable the stakeholders to listen, learn and practice best practices in building services engineering codes and compliances from experts.

Distinguished speakers Lalit Gabhane, DG, National Safety Council; Sharat Rao; Amit Deshmukh; V. Srinivas, a renowned MEP consultant; Jayaraman



Participants pose for a group photo

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from Trident Group of Hotels; Arvind Mandke, CFO CIDCO; and Haroon Siddiqui from Rustomaji Developers spoke at the event, which was attended by over 100 delegates. The topics covered were smoke pressurization, lightning protection, water mist technology and water drainage systems.

Manjusha Deshpande, Chapter President, appealed to all engineering professionals to become part of ISHRAE and participate in the upcoming programs.

Bangalore Chapter conducted a Technical Talk on 'BMS Integration for MEP Services' on May 24 at Hotel Chalukya, Racecourse. C. Subramaniam was the speaker.



C. Subramaniam speaks on BMS Integration

The program was attended by more than 42 members and 11 non-members from well known HVAC organisations.



Kalapakkam Sub-chapter members at ISRO

Kalpakkam Sub-chapter conducted an industrial visit to SDSC SHAR, ISRO Centre, Sriharikota on June 7. A total of 40 members participated. The sites visited were First Launch Pad, New Machine Control Centre, SLP-UT Area, ISTRAC, Space Museum, etc.

Mysore Chapter conducted a drawing and poster exhibition on the occasion of World Environment Day on June 5 at Cheluvamba Park, Mysore. ISHRAE family children and ISHRAE student members participated in the program.



Some posters at the exhibition

Ranchi Chapter conducted a Technical Talk on June 26 at its office. It was delivered by S. Ganesh, Past President, Ranchi Chapter. The theme was 'Cold Storage Refrigeration'.



S. Ganesh delivers his lecture

ISHRAE Stalwarts Win Laurels at ASHRAE Conference

ASHRAE recognized the outstanding achievements and contributions of members to the Society and the heating, ventilation, air conditioning and refrigeration industry at its 2019 Annual Conference on June 22-26 in Kansas City, the USA. Richie Mittal, Managing Director, Overdrive Engineering Pvt. Ltd., New Delhi and National President-elect, ISHRAE was conferred a Distinguished Service Award, which salutes members who have served the Society faithfully and with distinction and who have given freely of their time and talent in chapter, regional and Society activities.



Richie Mittal



Ashish Rakheja

ASHRAE installed its 2019-2020 President, executive committee officers and directors during the Annual Conference. ASHRAE's 2019-20 president is Darryl K. Boyce, P. Eng., Fellow Life Member ASHRAE. During his inaugural presidential address, Boyce announced that the new Society theme will be 'Building for People & Performance. Achieving Operational Excellence.' He shared insights into leveraging the latest strategies and innovative technologies to ensure operational success for the people living and working within buildings. The list of elected officers who will serve one-year terms includes Ashish Rakheja, Member ASHRAE, Director and Chief Operating Officer, AEON, Noida and Presidential Member, ISHRAE as a Director-at-Large.

ISHRAE Certification Program

Mumbai Chapter Plans ICP AC Service (Level 1)

ISHRAE Mumbai Chapter is organizing an application based professional certification program – ISHRAE Certification Program (ICP), Air Conditioning Service Level 1, spread over two modules, in the chapter office. Module 1 will be held on October 18 and 19, and Module 2 on November 1 and 2. At the end of the second module, there will be an examination. Certificate of accomplishment will be issued to those candidates who attend the two modules and successfully complete the examination.

The program is meant for junior and senior service technicians, and AC machine and plant operators, preferably with minimum ITI or equivalent qualifications in air conditioning and refrigeration, particularly from servicing and repair establishments; installation and contracting firms carrying out routine servicing of light and domestic air conditioning units, packaged and ductable units and small central plant installations; and service departments of manufacturing companies, hotels and commercial establishments. Professionals interfacing with air conditioning industry will also find this certification valuable.

The certificate will be valid for five years from the date of certification, and candidates will be eligible for recertification by retaking the examination after paying the examination 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.

The following topics will be covered:

Module 1 (Faculty: Ajit Thampi): customer service – soft skills; types and classification of AC systems; thermodynamics – refrigeration cycle; introduction to psychrometrics; refrigeration components and controls.

Module 2 (Faculty: Sanjay Nikam): oils, refrigerants and good installation practices; electrical fundamentals for HVAC; troubleshooting; AC plant maintenance; pressure testing, leak detection, vacuumising and practical demonstration workshop.