



November-December 2017

ISHRAE



news

Linking ISHRAE Chapters
Across India

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SAD DEMISE



Nagaraju Sagiraju (S. N. Raju)

We are sad to announce the untimely demise of ISHRAE's promising young star S. N. Raju, National Chair K-12. He succumbed to a massive cardiac arrest on December 15 in Bengaluru.

Raju was an ISHRAE member for 10 years. He was a member of ACREX India 2018 Host Committee, President of ASHRAE Bangalore Chapter and Past President, ISHRAE Bangalore Chapter.

We pray for everlasting peace to his soul, and for his bereaved family to bear the tragedy with fortitude.

ISHRAE and REHVA Release Commissioning Guide

One of the first international projects of ISHRAE was completed on November 30. A joint project of ISHRAE and REHVA – the Commissioning Guide – was formally launched by ISHRAE National President Vishal Kapur and REHVA President Stefano Corgnati.



Stefano Corgnati and Vishal Kapur exchange the Commissioning Guide

SHASE Invites ISHRAE President for 100th Anniversary Celebrations



Vishal Kapur at the celebrations, with SHASE President Professor Masaya Okumiya to his right



Vishal Kapur addresses SHASE delegates

The Society of Heating, Air-Conditioning and Sanitary Engineers of Japan (SHASE) celebrated its 100th anniversary in 2017. At the invitation of SHASE, ISHRAE National President Vishal Kapur visited Tokyo on November 11 to take part in the celebrations.

ISHRAE Signs MoU with PHDCCI

ISHRAE signed a Memorandum of Understanding with Punjab, Haryana and Delhi Chamber of Commerce and Industry (PHDCCI) on December 21. This will enable greater cooperation between the two powerful bodies, who will pool their resources for collective benefit. ISHRAE will be able to make technical presentations on PHDCCI platforms, and the latter will be able to come on board Urjavarana and other programs. The MoU was signed by Anil Khaitan – PHDCCI President, and Vishal Kapur.



Richie Mittal and Vishal Kapur with Anil Khaitan and PHDCCI office bearers Naveen Seth and Saurabh Sanyal

MoU Signed with GRIHA



Vishal Kapur and Sanjay Seth (CEO of GRIHA) at the signing ceremony

ISHRAE and Green Rating for Integrated Habitat Assessment (GRIHA) signed a Memorandum of Understanding on December 19 during the GRIHA Summit.

ISHRAE Turns 36



December 9 was celebrated as ISHRAE Day. It was on this day 36 years back that a handful of committed HVAC engineers laid the foundation of what is today one of the most vibrant, prestigious and influential professional societies in India.

On this occasion, President Vishal Kapur announced the formal launch of ISHRAE Knowledge Bank on the ISHRAE website. The portal contains articles from all the past issues of *Air Conditioning and Refrigeration Journal*. It also contains technical videos, case studies, and blogs by Youth@ISHRAE and Technical Groups.

Mumbai Mirror Interviews Pankaj Dharkar

In the wake of the fire tragedy at Kamala Mills, Mumbai on December 28, in which 14 persons lost their lives, Mumbai Mirror published an interview of Pankaj Dharkar (Presidential Member, ISHRAE and President, Fire and Safety Association of India) on December 30. Explaining why individuals must educate themselves on what to do when a fire erupts, Pankaj Dharkar said that the subject gets little to no attention in the country. "Most builders see this as just an additional cost and burden, rather than a basic requirement for any design. And, it may surprise you to learn that the academic curriculum for architects contains nothing about fire and safety — we are working with the government to see that this changes. Even when you see ads for new buildings, they highlight large pools and landscaping — where is the emphasis on the fire safety measures available?" He added that restaurants on the ground floors of buildings pose a major fire hazard in this city and that most of them have either no safety devices/protocols in place or have just the very basics.



RACON Celebrated in Kolkata

RACON is Kolkata Chapter's annual flagship event that provides it with an opportunity to gather industry stalwarts from all over India for sharing their knowledge, felicitating their contributions and celebrating their achievements. Its 2017 edition was held on November 15 and 16 at Swissotel, New Town located in Rajarhat close to the city's IT hub. The theme of the Conference was 'Challenges and Opportunities in Building Services'.



Vishal Kapur speaks at the Curtain Raiser

On the eve of RACON 2017, a Curtain Raiser was organized on November 14 at Swissotel. In the absence of Manoj Chakravarti, President Emeritus of Kolkata Chapter, his video message welcoming the delegates was played. National President Vishal Kapur addressed the gathering, highlighting the importance of building services in Indian cities and the critical role that energy efficiency will play in the future. He described the drivers of energy efficiency as star labelling, ECBC, NBC, Green building movement and energy efficiency awards. ISHRAE's current focus is on energy efficiency, and it has launched a research initiative this year to support the focus. He apprised the gathering of ISHRAE's activities in various fields.

Chief Guest Dr. Parasar Bandopadhyay – Director, MCKV Institute of Engineering – also addressed the audience.

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Dr. Parasar Bandopadhyay addresses the audience



Pankaj Dharkar

Pankaj Dharkar took the floor to make an important announcement: a new annual expo exclusively for the refrigeration and cold chain sector. Named RefCold, the first edition of the expo will be held in Ahmedabad from November 22 to 24, 2018. Its launch was held at the RACON Curtain Raiser.



Launch of RefCold

The evening culminated with a panel discussion on 'Challenges and Opportunities in Building Services' moderated by Dr. Himadri Guha. The panellists were Vishal Kapur, K. Ramachandran (Presidential Member, ISHRAE), Vivek Singh Rathore (Studio Principal – Salient), K. D. Virmani (Senior Vice President and Director – Operations, Daikin India) and D. Nirmal Ram (Presidential Member, ISHRAE).



Panel discussion in progress

A presentation by Daikin India, the Curtain Raiser partner, was a part of the evening schedule.

The first day of RACON 2017 began with the national anthem. A minute's silence was observed in memory of late Nirmal C. Gupta, a senior ISHRAE member who contributed to the Society in various roles over a long period of time. Kolkata Chapter President Gautam Mukherjee welcomed the delegates. The traditional lamp of knowledge was lit by Rakesh Juneja (Johnson Controls-Hitachi), K. D. Virmani, Sundar Krishnamurthy (Blue Star), Vishal Kapur, Utpal Biswas (Regional Director), Jayanta Kumar Das (Program Convenor) and Gautam Mukherjee.



Lighting the lamp to inaugurate RACON

Vishal Kapur took the stage to apprise the audience about the multifarious activities of ISHRAE. He expanded on the new initiatives like Knowledge Bank and other online services.

Two new books published by ISHRAE were launched on the occasion. The Commissioning Guide, prepared jointly by ISHRAE and REHVA for use in India and Europe, was launched by Vishal Kapur, Abid Husain (Past President – Delhi Chapter) and Sushil Choudhury (Presidential Member and Chair – Publications).



Vishal Kapur makes inaugural remarks



Launch of Commissioning Guide

The second book – Safety Guidelines for Refrigerants – was launched by Vishal Kapur and Ashish Rakheja (Presidential Member and Managing Partner – Aeon Consultants).



Launch of Safety Guidelines for Refrigerants

This was followed by felicitation of event partners Daikin, Hitachi, Carrier, ALP, Voltas, Sterling & Wilson, Greenheck, Blue Star, Pidilite, Paharpur, Bry-Air/DRI, Trane, LG and Crystal Air Systems.



Ashish Rakheja

The first session was chaired by Sushil Choudhury. Ashish Rakheja, the first speaker, spoke about 'Performance Based IAQ Design'. Achyut Kulkarni (Manager – Presales, Climate Solutions, India, Ingersoll Rand) presented an update on 'Future Generation Refrigerants'.



Achyut Kulkarni



Troy Goldschmidt

Troy Goldschmidt (Greenheck) took the next session on 'Tunnel Ventilation'.

The post-lunch session was chaired by Abid Husain. Prashant Desai (Director, Elm Enterprises) made a presentation on 'Concepts of Validation in Cleanrooms'.



Prashant Desai



Harshal Surange

Harshal Surange spoke about 'Sustainable Design of Cold Storage'.

The session was interspersed with product presentations by Blue Star, Armacell and Armstrong. D. Nirmal Ram made a presentation on ACREX 2018.

RACON Nite, observed at Café Ekante Banquet in the lush green environs of Eco Park, was an evening of felicitation. The unfortunate passing away of S. N. Raju, National K-12 Chair, earlier in the evening brought a solemn note to the occasion. A two minutes silence was observed in his memory. There were product presentations by Bry-Air/DRI and Kehems. A visiting team from Bangladesh Institute of ICT in Development (BIID) played a video explaining their activities and inviting participation in their expo.

The distinguished industry members felicitated for their contributions to the Society were V. K. Seth for IIE, Ashok Virmani for bringing ISHRAE on the global map of ASHRAE; and Amit Jain (CMD, Airflow), Dr. A. K. Saluja (Educationist) and Ramesh Paranjpey (Consultant) for 50 years of service each to the HVAC industry.

Prominent companies felicitated for their contribution to the growth of the industry in the country were Daikin, Hitachi, Blue Star, Voltas, Paharpur and Carrier.

Sunil Gupta, son of veteran ISHRAE member Nirmal C. Gupta, addressed the audience.

On Day 2 of RACON, the morning session was chaired by Sunil Gupta. Ramesh Paranjpey made a presentation on 'Use of Natural Refrigerants for Air Conditioning'. He predicted that the use of refrigeration for food preservation will overtake its use for air conditioning. The issues faced today include global warming, energy efficiency, environment friendly solutions and alternate technologies. Ammonia is the most environment friendly refrigerant, and is available in plenty. The characteristics of all natural refrigerants are known. After implementation of EPA SNAP Rule 20 in July 2015, very few refrigerants are allowed. Ammonia, which has been used since 1875, is still a popular refrigerant. It has the highest COP at 4.7. Europe is shifting to ammonia for comfort applications because of its lower energy and life cycle costs. The development of low charge ammonia systems is giving an impetus to its wider use. CO₂-ammonia cascade systems are also witnessing widespread use. Among hydrocarbons, R290 is safe for use up to 1.5 TR.

Subrata Bhattacharya made a presentation on 'Concept of Smart Cities and Their Design Features'. He focused on energy, water and waste management, urban mobility, security, surveillance and e-governance. He was followed by Rishi Kapoor from York (Johnson Controls), who spoke on the topic 'Central Plant System Selection in Tropical Climates'.

The session was interspersed with product presentations by Johnson Controls-Hitachi, Danfoss, M. M. Group and Voltas. Jayanta Kumar Das, Program Convenor, introduced the RACON team members.

The post-lunch session was devoted to student members participating in HVAC Design Challenge. In all it was a well-organized and well-attended conference.



Ramesh Paranjpey



Subrata Bhattacharya



Rishi Kapoor



The team behind RACON poses for the camera

Leadership Weekend for Youth @ ISHRAE

For the first time ever, a residential non-technical workshop was organized for leadership coaching and networking among young engineers at ISHRAE (Y@I). Amidst the sylvan environs of Taj Aguada in Goa, 49 young members of ISHRAE attended the Leadership Program from November 17 to 19. Gaurav Shorey was the lead faculty. National President Vishal Kapur was there to motivate the youngsters. Success stories of ISHRAE members Ashu Gupta, Nilanjana Mukherjee and Mihir Sanghavi were shared with the participants as case studies.

Exciting Finalé to ICL

ISHRAE Cricket League (ICL), in which 28 chapters and sub-chapters participated in addition to HQ, drew to an exciting close at Jaipur on November 4 as Thane and Bangalore chapters battled it out for the top honours. At the end of the day, it was Team Thane that walked away with the trophy.

CCSI Announces International Seminar on Cleanrooms

Contamination Control Society of India has planned an International Seminar on Cleanrooms at Hotel Kenilworth Resort & Spa, Goa on February 3. The seminar is supported by ISHRAE and ASHRAE.

There will be sessions on Correct Implementation of ISO 14644-1 & 2: 2015 and ISO/DIS 14644-3: 2016; Cleanroom Operations: Behaviour, Gowning, Transfer of Goods, Cleaning, Disinfection; Continuous Monitoring of Pharma and Electronics Cleanrooms to revised ISO 14644-2: 2015; Airflow Visualisation Studies; FAQs; and HEPA Filter Leak Testing and Standards. The International and Indian faculty will consist of Koos Agricola and Andre Van Tongeren (Netherlands), Hasim Solmaz (Turkey), and Sheesh Gulati and Sant Advani (India).

Details are available at <http://www.ccsiindia.com/>

Chiller Conclave in Pune

Pune Chapter organised a Chiller Conclave on November 15 at Sheraton Grand. It was supported by FSAI, ASHRAE Pune Chapter, RATA, Awesome, IAR, IGBC, IAEMP and MEPA, and was partnered by Johnson Controls-Hitachi, Kirloskar, Kehems Technologies and Vertiv.

The Chief Guest was Kiran Gitte, Metropolitan Commissioner and CED, Pune Municipal Development Authority. The Guest of Honour was Shriram Bapat, Vice President, Flagship Infrastructure Pvt. Ltd.

After the welcome address by Chapter President Kedar Patki, and addresses by the Chief Guest and Guest of Honour, there was a presentation by Shailesh Pathak (Director – Albus Engineering Consultants) on Co-Generation Installation. Another presentation was made by Prashant Joshi (Vice President – Kirloskar Chillers) on Magnetic Bearing Compressor Chillers.

There were partner presentations by Sandeep Gupta (National Sales Head – Johnson Controls-Hitachi), Cdr.

(Retd.) Pramod Palsule (Sagaraika Marine), Kshama Jain (Kehems), Gaurang Dabholkar (Associate Vice President – Kirloskar Chillers) and Santosh Puranik (Director, Sales – Vertiv Energy). ACREX partners Voltas and Delta Controls also made their presentations, and the ACREX audiovisual was played.

The Conclave ended with an interesting panel discussion on 'Future of Chillers' by a team of eminent panellists.



Lighting the lamp at Chiller Conclave



Arvind Surange and Ramesh Paranjpey addressing the Chiller Conclave



Gaurang Dabholkar

ACR TrendZ 2017

Pune Chapter hosted its annual flagship event ACR TrendZ on November 16 and 17 at Sheraton Grand.

The theme of the first day was 'Trending Towards Sustainable Excellence in HVAC, IEQ, BMS and Project Management'. Chapter President Kedar Patki welcomed the delegates. The keynote address was delivered by Chief Guest Gauranga Das (Director, Govardhan Eco-Village and Divisional Director, ISKCON), who spoke on 'Climate Change Adaption – a Vedic Perspective'.

There were technical presentations by B. Ravindranath (Voltas), Somasundaram Balasubramaniam (ZF Windpower), Jagdeep Singh (Aeon Ecotech) and Dr. Avinash Kulkarni (Aeropure and Arklite Speciality Lamps).

Partner presentations were made by Voltas, Sterling Duro, Vertiv Energy, Desiccant Rotors International and Bajaj Electricals. ACREX partner presentations were made by Hitachi and Kelly. Toro Cooling Systems made an Innovation Centre presentation.

The high point of the first day was a panel discussion on 'HVAC Futurology (Impact of Environment, Project Management, Industry 4.0 and IoT)', moderated by Mihir Sanghavi.

The second day was devoted to refrigeration, with the theme 'Industrial Refrigeration – Delivering the Values through Technology'. Chief Guest Pradeep Rawat – Chairman, National Shipping Board and a former MP, delivered the keynote address. He was bestowed an



Lighting the lamp to inaugurate ACR TrendZ

Honorary Membership of ISHRAE Pune Chapter.

There were technical presentations by Avinash Shaligram (Pillai College of Engineering, New Panvel), Pradeep Wani (DCE Refrigeration), Sunil Gogate (MD – Ecochill) and Manish Kulkarni (Founder Member – Trust Corporation). Partner presentations were made by Emerson Climate and Bajaj Electricals. Ecozen Solutions made an Innovation Centre presentation.



Kedar Patki and Pradeep Rawat felicitate Dr. Vijay Bhatkar

Dr. Vijay Bhatkar, a member of Pune Chapter, was felicitated by Pradeep Rawat and Kedar Patki for completing his PhD.



Manish Kulkarni conducts the panel discussion

The day ended with a panel discussion on 'Challenges in Refrigeration Industries', moderated by Manish Kulkarni. The panellists were Sandeep Shrikanti (Emerson), Pradeep Rawat, Jayant Doshi (Consultant) and Sharang Natu (Consultant).

News in Brief

Deccan Chapter conducted BIZQUIZ 2017, a quiz program on December 2. The questions were primarily on air conditioning, heat transfer, thermal engineering, A.C. equipment, refrigeration system electrical, project management, energy efficiency, safety and health. N.S. Chandrasekar and Dr. R.V.S.S Prasad were the Quizmasters. C. Subramaniam, National President-Elect, was the Chief Guest. The first winner was Deccan Chapter.

Deccan Chapter conducted aQuest, an online quiz program, on December 19 at Sreyas Institute of Engineering & Technology, Hyderabad. A large number of students participated. Certificates were awarded to the winners.

Deccan Chapter conducted an ASHRAE DL Program on Building Design – Performance Approach at Osmania University in association with the Department of Mechanical Engineering on November 8. The faculty was Dr. Lawrence, Mechanical Engineering Program Lead at the University of Georgia (USA).

Deccan Chapter has signed an MoU with IT Facility & Administration Managers Network in the presence of C.V. Kumar, COO, Barghest Building Performance Pte. Ltd., Singapore. The objectives are joint programs, education and training, membership promotion and networking, information exchange, participation in events and representation and use of logos.

ISHRAE Nashik Sub-Chapter, along with ISHRAE Mumbai Chapter, RATA, AAR and ASHRAE Mumbai Chapter, conducted their flagship event Colloquium 2017 – a full day technical seminar on the theme of 'Energy Conservation in HVAC Systems' on December 15 at Hotel Grand Rio, Nashik, to observe World Energy Conservation Day, which is celebrated on December 14 globally to highlight the importance of energy and its use in our day-to-day life, its scarcity and its impact on sustainability of global eco systems.

Ranchi Chapter carried out the installation of BITT student chapter on December 9. Rajesh Kumar Singh (Chapter IPP) introduced ISHRAE, its activities, student activities completed during the current Society Year and activities planned during the coming months. He administered the oath to the office bearers, and handed over the Charter. A technical talk was delivered by Shashi Bhushan Kumar on 'Mega Piped Rural Water Supply'. The talk was attended by 21 new student members.

Ranchi Chapter organized a full day workshop on 'Best Installation Practices in VRV and VRF Technology' on November 11 at Engineer Bhawan, Ranchi. There were 35 participants. The topics covered were basics of air conditioning, good installation and myths of air conditioners, and VRV and VRF technology.

Ranchi Chapter, jointly with Institution of Engineers (I), organized Urjavarán 2017-18 on the theme 'Emerging Cities: Steps Towards Rising India' at Engineer Bhawan, Ranchi on November 25. Eminent speakers from HVAC industry consisting of manufacturers, consultants and users shared their experiences and research findings. The Convener was Nikhil Ray, GM (MECON) and Past President, ISHRAE Ranchi Chapter.

Ranchi Chapter organized a product presentation by Voltas at Engineer Bhawan on November 25.

Mumbai Chapter arranged a Tech Talk on flushing and chemical cleaning of chilled water and condenser water systems on December 22. The speaker was N. M. Dambe, General Manager – Technical at Chembond Water Technologies Limited, Navi Mumbai.

ISHRAE Mumbai Chapter, ASHRAE Mumbai Chapter and RATA organized a Tech Talk on Basics of Fire Alarm Systems on December 12. It covered basics of fire alarm systems, introduction to different type of fire alarm systems, functionality and application of different components, and introduction to special fire alarm systems/components. The speaker was Sandip Vardam, Partner in MSD Controls LLP, an authorized channel partner for Siemens Ltd. for their range of fire products.

Mumbai Chapter held a Tech Talk on 'Two Stage Evaporative Cooling Systems' on November 28. The main speaker was Vinod Ramnani, Business Head – Arctic Evaporative Cooling of Desiccant Rotors International Pvt. Ltd. (DRI).

Mumbai Chapter and RATA conducted a Tech Talk on November 14 on Dedicated Outdoor Air Systems (DOAS). There was a presentation on Integration of DOAS by Rahul Aeron, National Sales Manager – Energy Recovery at Desiccant Rotors International Pvt. Ltd. (DRI).

Mumbai Chapter and RATA organized a Tech Talk on November 17 on 'Awareness of Safe use of Scaffolding on Project Sites'. The speaker was Devendra Jadhav, General Manager – Coatsman Offshore Services Pvt. Ltd.

ISHRAE Mumbai Chapter, ASHRAE Mumbai Chapter and RATA held a Tech Talk on December 15 on Pumps and Pressurized Systems for HVAC Systems by Dilip Datey.

ISHRAE Mumbai Chapter supported EDGE 2017, a joint technical seminar organized with ASHRAE Mumbai Chapter on December 8 at The Orchid. The theme was 'Adaptive Comfort & Retro Commissioning'. After the welcome speech by ASHRAE Mumbai President Viresh Ruhel and the Chairman's address by Wimala Goonaratne, there were technical presentations by Sanjay Seth – TERI (keynote address), Dr. Peter Simmonds – ASHRAE DL, Prof. Rajan Rawal and Yash Shukla (CEPT University), and Rakesh Sahay.

ISHRAE Thane Chapter, along with FSAI and ASHRAE Mumbai Chapter, organised the 7th edition of its flagship event 'Fire and Life Safety' on November 11 at Hotel Four Points by Sheraton, Vashi, Navi Mumbai. This year's theme was 'Fire & Life Safety – Codes, Trends, Challenges'. After the keynote address by Santosh Warrick – CFO & Adviser, MIDC, there were technical presentations by G. Karthik, UL India Pvt. Ltd. (NBC 2016 Chapter 4: Code, New Update and Essentials), Rajesh Shirke (Evacuation Hurdles and Challenges – Elphinston Case Study), Abhay Purandare, Fire Trainer (Performance Based Design for Smoke Controls) and Arvind Mandke, CFO – CIDCO (Case Study of Industrial Fire Incidents). Around 130 delegates attended the program.

Thane Chapter organised a full day seminar, Urjavarán 2017, on December 15.

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 28.
- 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 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.