

## ASHRAE's MISSION & VISION

### Mission

To serve humanity by advancing the arts and sciences of heating, ventilation, air conditioning, refrigeration and their allied fields.

### Vision

A healthy and sustainable built environment for all.

### Editorial Team

Ir. Leong Siew Meng

Ir. Dr. Khoo Chun Yong

\* \* \* \* \*

### MASHRAE Secretariat:

Unit 518 Block A,  
Kelana Business Centre,  
97, Jalan SS7/2,  
47301 Petaling Jaya,  
Selangor Darul Ehsan.

### Updates:

- > ***ASHRAE Latest Version of Standards & Guidelines Available Online***
- > ***Library & Resources ASHRAE Malaysia Chapter***
- > ***GAC Reports***
- > ***Past Events***

### Special Article:

- > ***War in Ukraine and rising energy costs risk hampering Asia's decarbonization effort***

### Coming Up Events:

- > ***ASHRAE Malaysia Chapter 37<sup>th</sup> Annual General Meeting 2022-2023***
- > ***MP & RP Networking Night***
- > ***Roadshow: Ozone2Climate Technologies in Refrigeration and Air-Conditioning Sector***

# GREETINGS FROM THE PRESIDENT

It has been my honours to serve as the President of ASHRAE Malaysia Chapter since July 2021. We have had great support and voluntary effort from the committees. We managed to organize various activities despite the hard time and constraints experienced during this pandemic era. We have successfully completed our launch of the 36<sup>th</sup> Anniversary E-Book and the E-Exhibition great support from our sponsors and visitors with approximately 100K views on our E-Exhibition lasting from 4<sup>th</sup> January 2022 to 3<sup>rd</sup> March 2022.

As the situation in the country improved recently, we are moving our events from virtual to hybrid and physical modes. We will be having our first physical networking night since the implementation of the first MCO on 18<sup>th</sup> March 2022. The networking night will be held on 20<sup>th</sup> May 2022. This will be followed by our collaboration with the Department of Environment on the DOE Roadshow 2022-2023 – Ozone2Climate Technologies in Refrigeration and Air-Conditioning Sector. This is a series of physical roadshows that will be organized in five different locations starting from the Johor Bahru on 26<sup>th</sup> May 2022.

We will also be organizing our 37<sup>th</sup> Annual General Meeting on 27<sup>th</sup> May 2022 in hybrid mode at our MASHRAE's secretariat office. I would like to take this opportunity to thank again my Board of Governors, Chapter Chairs, and committees for making this term another success. Hope that we shall do better in coming years and look forward to seeing all of you in near future.



**Ts. Dr. King Yeong Jin**  
**President ASHRAE**  
**Malaysia Chapter**  
**2021-2022**

# ASHRAE Malaysia Chapter 37<sup>th</sup> Annual General Meeting 2022-2023

ANNOUNCEMENT



Dear All MASHRAE Members,

This is to announce that the **37<sup>th</sup> Annual General Meeting (AGM)** will be conducted as follows: -

**Date : 27<sup>th</sup> May 2022 (Friday)**

**Time : 5.30 pm (Registration & Pre-AGM Talk start at 4.20pm)**

**Venue : Hybrid (ASHRAE MALAYSIA CHAPTER Secretariat & Platform- ZOOM)**  
(Link will be sent One (1) day before the event upon confirmation)

Members are invited to attend the 37<sup>th</sup> AGM by completing and returning the form via email by 20<sup>th</sup> May 2022 for our action.

[Link to 37th AGM - Letter to Member](#)

Thanks and Regards,

NUR

Secretariat

ASHRAE Malaysia Chapter  
Unit 518,Block A, Kelana Business Centre,  
97 Jalan SS 7/2,47301 Petaling Jaya, Selangor.

Tel/Fax: 03-7887 5886  
Email: mashrae.my@gmail.com



# Roadshow: Ozone2Climate Technologies in Refrigeration and Air-Conditioning Sector

ANNOUNCEMENT



## Roadshow

### OZONE2CLIMATE TECHNOLOGIES IN REFRIGERATION AND AIR-CONDITIONING SECTOR TOPIC HIGHLIGHTS

- » Malaysia's Status in the Montreal Protocol - HPMP Implementation
- » Revolution and Evolution of Refrigerants
- » Low GWP Refrigerants Chiller
- » Natural Refrigerants : Coming Full Circle - Naturally
- » Moving Forward with R32 Refrigerant
- » MS2678:2017 Flammable Refrigerant System Code of Practice - Overview

BEM CPD Point Applied

Registration is FREE!

**EVENT DETAILS**  
**VENUE : RENAISSANCE HOTEL, JB**  
**DATE : 26 MAY 2022**  
**TIME : 9:00AM - 4:30PM**

**Upcoming Roadshow**  
(To be announced)

» Kuala Lumpur  
September 2022

» Kota Kinabalu  
March 2023

» Kuching  
January 2023

» Pulau Pinang  
May 2023

Click [HERE](#) for registration

Available seats are *on first-come, first-served basis*

Contact Us :



Miss Nur +06011 1574 4931



mashrae.my@gmail.com

Organised by :



Supported by :



# Do you know?

RESEARCH  
PROMOTION



ASHRAE funded the ASHRAE RESEARCH PROGRAM which is the backbone of the Handbooks, Journal, Standards & Certification

This program funds more than 80 investigative projects around the world. It is supported by more than 100 member-led Technical Committees (TCs), each with their own specialty and sub-specialty.



We need your support for continuous development of technical information to create standards and guidelines, which serve as the basis for testing and design practices around the world.  
**100%** of all research donations go to Research!

Research Promotion & Membership Promotion Committees are organising **MP&RP Night on 20 May 2022.** Do check out our website, [www.ashrae.org.my](http://www.ashrae.org.my) for further details.

For more information on research promotion & how you can support, contact our local chapter RP Chair at **+6012-6610859** (TS Lim)

Support us at  
[www.ashrae.org/contribute](http://www.ashrae.org/contribute)



# ASHRAE MALAYSIA CHAPTER MP & RP Networking Night

Networking Night

ASHRAE Malaysia chapter

Venue : Secret Of Louisiana at the lake  
(Kelana Jaya)

Time : 6.00 PM to 10.00 PM

Date : 20<sup>th</sup> May 2022

Fee : FOC

[Scan here to register](#)



Organised By:

Contact:

Jeffrey Eng Ee Seong (Membership Chair)  
Alvin Chan (Membership Co-Chair)

016-915 5508  
019-576 8177

Note:

This event is a Private event - by invitation only  
Limited number of seats available.

Participants for this event are advised to perform Covid self-test before attending.  
Self test kit is available for those who have not done any test before coming.



Lucky Draw

RP Recognition

Event Flow

Time	Description
6.00PM-7.00PM	Registration
7.00PM-8.00PM	Networking & Dinner Served
8.00PM-9.00PM	President's speech MP Chair speech RP Chair speech Recognition of RP Donor
9.00PM-9.30PM	Networking (Cont.)
9.30PM-10.00PM	Lucky Draw
10.00PM	End



# BASAM System Integrator Training Course

ANNOUNCEMENT



28, 29 30 June, 9 July 2022 | Tropicana Golf & Country Club

## SPEAKER HIGHLIGHT



Ir. PS Soong  
P Eng, MASHRAE, CPMP,  
GBIF, GBI CxS & Trainer



Ir. TL Chen  
FASHRAE, FIFireE, P Eng, CE



Ir. Dr. Ling Chin Poh  
P Eng, MIEM, MPMI, GBIF  
GBICxS

## PROGRAMME

### **DAY 1: Overview of BAS and its important role to ACMV Systems.**

These sessions will give the audience an overview of the contribution & relationship of BAS with high performance building over the last few decades. Subsequently, the relationship with each potential application of BAS to ACMV system will be discussed in detail.

### **DAY 2: BAS relationship with building Mechanical & Electrical systems.**

Sessions in the second day will focus on the relationship between BAS and Mechanical & Electrical systems. In depth details & illustration will be given. The interfacing concerns between BAS and other services will be highlighted. The ACMV core topics in morning session can be very packed and may spill over to the afternoon session if interest & participation from the floor is intense.

### **Day 3: Fundamentals & Practical Approach to BAS data analysis**

Sessions in the third day will focus on the most valuable tool of BAS – the trend analysis of its acquired raw data. Various constraints will be discussed and clarification are sought from BAS specialists, M&E Consultants & Owner for this rarely used but important implementation. Illustration of the upcoming monitoring based commissioning (MBCx) as a new tool in performance enhancement and diagnosis will be presented together with practical examples in an interactive manner.

### **Day 4 (Half Day): Project Assignment & Presentation**

## REGISTRATION FEE

BASAM & ALIED ORGANISATIONS	RM1200
PUBLIC & Others	RM1500

## VENUE

Ballroom V, Main Wing  
Tropicana Golf & Country Club  
Jalan Kelab Tropicana  
47410 Petaling Jaya  
Selangor Darul Ehsan



**\*\*Certificates of competence will be presented to participants who pass the exam.**

ORGANISED BY:

**BASAM**  
BUILDING ANALYSIS & MONITORING





Selamat  
Hari Raya  
aidilfitri

Best wishes from  
Ts. Dr. King Yeong Jin  
President ASHRAE Malaysia Chapter



# Thank You For Your Support



**E-Exhibition**  
**4 January - 3 March 2022**  
**Hosted by ASHRAE Malaysia Chapter**



## ASHRAE Malaysia Chapter 36<sup>th</sup> Anniversary E-Book

ASHRAE Malaysia Chapter published the second E-book to mark its 36<sup>th</sup> Anniversary celebration.

[Link to ASHRAE Malaysia Chapter 36th Anniversary E-Book](#)





## Another milestone achieved by ASHRAE Malaysia Chapter!

ASHRAE Malaysia Chapter is now the registered training provider under the Human Resources Development Fund (HRDF) Malaysia, the agency under The Ministry of Human Resources Malaysia.

**ASHRAE EPIDEMIC TASK FORCE** is formed to deploy ASHRAE's technical resources to address current pandemic and future epidemics: -

- HVAC System Operation during Building Shutdown
- How to Return the HVAC System to Normal Operation
- Operating of Heating/Cooling System in Home
- Healthcare Facilities, Commercial, Residential, Schools and Universities, Residential, Transportation
- Riding Mass Transit and Airlines
- Upgrading Filters and Use of Air Cleaners
- Ventilation Systems
- Exhaust Systems
- Filtration and Disinfection
- BAS and Access Control Systems
- Elevator Control
- Water Systems
- Air Conditioning and Heating

For more information, visit to [www.ashrae.org/covid19](http://www.ashrae.org/covid19)



# Board of Governors' Meeting No. 7 (Session 2021/22)

On 25<sup>th</sup> January 2022, the Board of Governors' Meeting No. 7 was held via Zoom Platform. A total of 18 committee members and 3 attendees by invitation attended the meeting. The President, Ts. Dr. King Yeong Jin called the meeting to order at 5:30 p.m.

The agenda discussed:

- 1) Financial report
- 2) PAOE 2021-22
- 3) Activities report and Chapter Chairs' updates including Kuching Section and Penang Section
- 4) Chapter operation
- 5) Region XIII matters
  - a. RPM-2 2021/22 updated the venue as National Cheng-Kung University in Tainan, Taiwan on 11<sup>th</sup> June 2022.
  - b. CRC-2022 & RPM-1 2022/23 will be held in Waseda University, Tokyo, Japan on 19<sup>th</sup> ~ 21<sup>th</sup> August 2022.
  - c. 16<sup>th</sup> APCBE (2022 in Macao) - Three papers had been submitted to the conference. Total of 25 submission received to-date.
- 6) E-Exhibition and E-book – Sponsorship matters concluded and E-book publicized on 4<sup>th</sup> January 2022.
- 7) Industry events.

The meeting was adjourned at 6:47 p.m.



# Board of Governors' Meeting No. 8 (Session 2021/22)

On 22<sup>nd</sup> February 2022, the Board of Governors' Meeting No. 8 was held at Unique Seafood Restaurant, Petaling Jaya and with hybrid mood via Zoom Platform. A total of 14 committee members and 5 attendees by invitation attended the meeting. The President, Ts. Dr. King Yeong Jin called the meeting to order at 5:30 p.m.

The agenda discussed:

- 1) Financial report
- 2) PAOE 2021-22
- 3) Activities report and Chapter Chairs' updates including Kuching Section and Penang Section
- 4) Chapter operation
- 5) Malaysia Engineering Convention & Exhibition: confirmed on 16-19 March 2022 and associated matters.
- 6) ASHRAE Malaysia Chapter 36<sup>th</sup> Anniversary: E-book achieved more than 97,000 views.
- 7) Industry events.



The meeting was adjourned at 6:40 p.m.



# Board of Governors' Meeting No. 9 (Session 2021/22)

On 15<sup>th</sup> March 2022, the Board of Governors' Meeting No. 9 was held via Zoom Platform. A total of 13 committee members attended the meeting. The President, Ts. Dr. King Yeong Jin called the meeting to order at 5:30 p.m.

The agenda discussed:

- 1) Financial report
- 2) PAOE 2021-22
- 3) Activities report and Chapter Chairs' updates including Kuching Section and Penang Section
- 4) Chapter operation
- 5) Chapter Epidemic Task Force dialogue meeting with DOSH conducted on 21 December 2021.
- 6) Industry events.

The meeting was adjourned at 6:45 p.m.



# War in Ukraine and rising energy costs risk hampering Asia's decarbonization effort

Special Article



By: **Han Phoumin, Ph.D.**

Senior Energy Economist, Economic Research Institute for ASEAN and East Asia (ERIA), Jakarta

*The views expressed here are personal and do not reflect both ASHRAE's and ERIA's position.*

The views expressed here are personal and do not reflect ERIA's position. Even before the Russia–Ukraine war, the COVID-19 pandemic had brought the world economy into recession. Global oil demand also declined by about 8 million barrels per day in 2020 and 2021. OPEC+ agreed to cut output by 10 million barrels per day from May 2020 to April 2022. This led oil prices to rise to around US\$75 per barrel in July 2021, which prompted OPEC+ to raise output again at the end of 2021.

Since Russia invaded Ukraine on 24 February 2022, the fear of rising oil prices has escalated globally. Russia accounts for 10 per cent of global oil supplies. Western-led sanctions removed this supply from the market, putting pressure on the oil supply-demand balance. The price of crude oil soared from US\$95.42 per barrel to US\$127.98 on 8 March 2022 before dropping back down to US\$95.64 on March 16 2022 and jumping back to US\$111.70 on 14 April 2022. The oil price is likely to remain

elevated over US\$100 per barrel throughout 2022. As a result, the gas price — which is indexed to the global oil price — has also experienced wild growth.

In addition to the immediate impact on energy costs, the shortage has implications for global energy security. High energy costs could distract efforts towards long-term decarbonisation, with the short-term agenda dominated by domestic energy security concerns for countries dependent on fossil fuels such as coal, oil and gas.

To stabilise the supply of oil and gas, the United States has led efforts to increase access to OPEC oil, initiated deals with Venezuela and announced the release of 180 million barrels from its Strategic Petroleum Reserve. But energy costs are still high, which affects the phasing out of coal as coal prices remain very competitive compared to natural gas. This is especially the case for hard-to-abate industrial sectors in East Asia and ASEAN countries, where coal is known to provide energy security, affordability, accessibility and reliability.

The Russia–Ukraine war is a wake-up call — not only for Europe, but for all countries needing secure energy sources. Sky-high energy costs have led countries to realise that they can no longer

*(Continued on next page)*



# War in Ukraine and rising energy costs risk hampering Asia's decarbonization efforts

*(Continued from previous page)*

depend on imported fossil fuels, which may drive a shift away from fossil fuels altogether. For example, the International Energy Agency issued 10 measures to reduce the European Union's reliance on Russian natural gas imports, including jumpstarting renewable wind and solar projects and maximising energy generation from existing low-emissions sources such as bioenergy and nuclear power.

It's often said that necessity is the mother of invention, and in this sense the Russia-Ukraine war may have a silver lining by fast-tracking renewable energy enough to drive down costs over the next few years — far quicker than estimated. According to Steve Cohen, author of *The State of the Planet*, breaking dependence on fossil fuels is the only way to secure energy independence since 'no sovereign state owns the sun'.

But fears of supply disruption and energy insecurity could also push some Asian countries to remain coal dependent despite their COP26 commitments. High oil prices could be an incentive to increase exports of traditional fossil fuels, leading to oil rigs being reopened and investment being funnelled into fossil fuels. These 'temporary' reopenings will likely result in rigs remaining

open for years until oil fields are fully depleted, potentially prolonging the phasing-out of fossil fuels.

There is a good reason to be concerned that countries may put climate change mitigation on the back burner while they focus on energy security by securing supplies of fossil fuels. If this is the case, the timeframe of phasing out the use of fossil fuels under the Paris Agreement and the goal of limiting global warming to two degrees Celsius will be impacted. Oil market concerns could last longer if the war continues and there is a lack of immediate alternatives to oil and natural gas. Any new investment in energy projects could take at least a year in the case of solar and wind, and potentially much longer for bioenergy or nuclear.

There have not been signs of countries backing off from climate change commitments yet, but policymakers need to be cautious in designing policies that may deter renewable investment. Countries should redesign energy policy to shift away from fossil fuel dependency over the long-term, beginning as soon as possible with large-scale investment in solar, wind and other clean energy sources. For many developing countries, the path may be slow, but it needs to be steady with actionable strategies to achieve decarbonisation and ultimately carbon neutrality. ■

## Working Group on Smoke and Heat Control System (WG/M/4-2) for Malaysian Standard MS 2586

Date/Time : 28<sup>th</sup> January 2022, 9:30AM~12:00pm

Organizer : Department of Standards Malaysia, Ministry of International Trade and Industry, Malaysia

ASHRAE Malaysia Chapter Representatives :  
Ir. Lam KS and Ir. Tan CB.

Event : WG Meeting No.4 via Zoom

Agenda : Continuation of Deliberation on Project No. 20M006R0: MS 2586-3 Smoke and Heat Control Systems-  
Part 3: Specification for Powered Smoke and Heat Exhaust Ventilator.

### Report:

Working Group Chairman - Ir. Tan Chew  
Deputy Chairman - Ir. Lam KS

The Working Group members comprised of representatives from:

- ASHRAE Malaysia Chapter
- Public Works Department (JKR)
- Malaysia Fire and Rescue Department (JBPM)
- Association of Consulting Engineers (ACEM)
- Pertubuhan Akitek Malaysia (PAM)
- The Institution of Engineers Malaysia (IEM)
- Malaysian Fire Protection Association (MFPA)
- The Institution of Fire Engineers (UK) Malaysia Branch (IFEM)
- Universiti Putra Malaysia (UPM)
- SIRIM QAS International Sdn Bhd (SIRIM)
- Fan manufacturers

Deliberation on MS 2586-3 continued from last meeting. Notable decisions made:

- Notes to state that all references to "snow load" shall not be applicable
- Jet fan testing - SIRIM to advise on the capacity to test large diameter fans
- Clause 6.3 - Factory Production Control: SIRIM and fan manufacturers shall carry out in-depth review separately and feedback at next meeting.



## DOSH Ventilation & IAQ Endemic Guidelines Review Committee Meeting

Date : 8<sup>th</sup> March 2022

Organizer : Department of Occupational Safety and Health (DOSH), Ministry of Human Resources, Malaysia

ASHRAE Malaysia Chapter Representative :

Ts. Dr. King Yeong Jin, Ir. Ng Yong Kong, Ir. Leong Siew Meng and Mr. Poh Kai Sin.

Event : Review of DOSH guidance notes on ventilation and IAQ during COVID-19 pandemic and development of a new endemic guideline

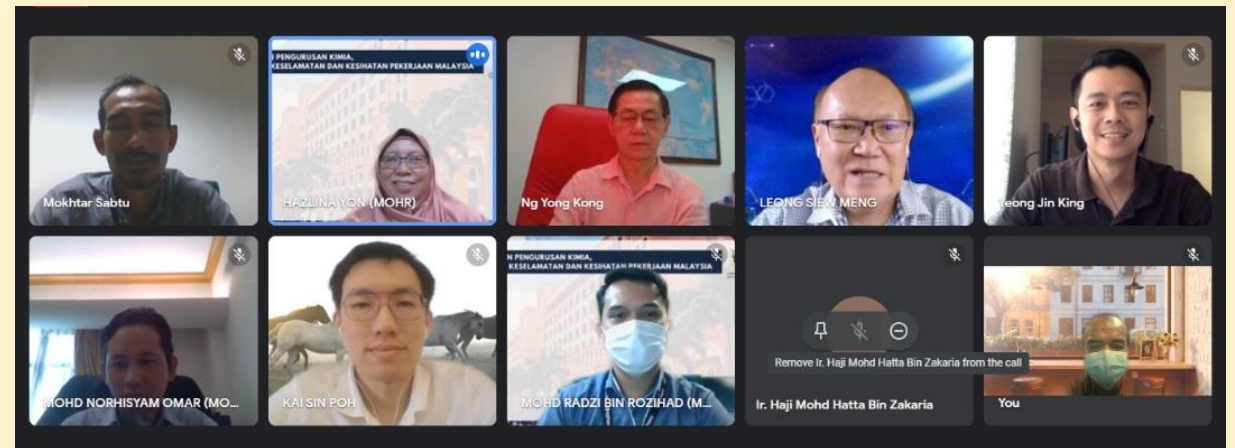
Agenda : Review the Guidance Note on Ventilation and IAQ for 4 settings during COVID-19 Pandemic published in July 2021, and establish new Guidelines on Ventilation and IAQ during endemic.

### Report:

ASHRAE Malaysia Chapter (AMC) was the only NGOs invited to participate in reviewing and developing a new guideline.

The opening remarks were made by the Deputy Director General (Occupational Health Division), Ir. Hj. Mohd Hatta Bin Zakaria. The meeting was chaired by Pn. Hazlina Binti Yon, Bahagian Pengerusan Kimia.

*(Continued on next page)*





*(Continued from previous page)*

1. The Chairperson explained that the published DOSH Guidance Notes are due for a review. However, in view of the anticipated declaration by the Government of endemic era, the guidance notes will be renamed. The meeting discussed and explored various potential titles, and decided that the following title will be proposed to KKM:
  - a) Guidelines on Ventilation and IAQ during endemic for 4 settings, namely, Healthcare Facilities, Residential, Non-residential and Public Area.
2. Reference documents will be the related documents from WHO, CDC, ASHRAE, EPA, Singapore, and others to be suggested. In addition, reference will be made to the endemic SOP.
3. The meeting discussed the timeline; targeted completion of the 1st draft is 1 month.
4. The format will be based on the published guidance notes. The introduction will be common for all settings; the contents will be reviewed and updated.
5. Respective working groups (WGs) will be formed; previous WG members will be invited to join.

*(End of Report)*

## 10 SOP dikuatkuasakan dalam Fasa 'Peralihan ke Endemik'

- 01 Pemakaian pelitup muka di tempat awam
- 02 Pemilik premis wajib pastikan sistem pengudaraan (ventilasi) yang baik di dalam premis
- 03 Sentiasa menjaga kebersihan tangan
- 04 Ujian pengesanan COVID-19 mengikut tatacara *National Testing Strategy*
- 05 Had waktu beroperasi bagi premis perniagaan dimansuhkan
  - Pelaksanaan waktu operasi premis mengikut syarat lesen operasi premis
- 06 Pendaftaran kemasukan menggunakan MySejahtera masih diwajibkan
  - Hanya dikecualikan untuk kawasan terbuka, tidak sesak dan tiada perhimpunan
  - MYSJTrace diwajibkan untuk tempat tertutup yang dipenuhi tetamu/pengunjung
- 07 Aktiviti solat jemaah di masjid/surau atau upacara sembahyang di rumah ibadat selain Islam boleh dilaksanakan tanpa penjarakan fizikal
  - \* tertakluk kepada ketetapan Pihak Berkuasa Agama Negeri dan Kementerian Perpaduan Malaysia/Unit Hal Ehwal Agama-Agama Lain (UNIFOR)
- 08 Keperluan vaksinasi:
  - Had kapasiti pekerja yang bergantung kepada liputan vaksinasi dimansuhkan
  - Rentas negeri dibenarkan tanpa mengira status vaksinasi
- 09 Kekerapan dan cara melakukan pembersihan premis diseragamkan bagi setiap Kementerian
- 10 Individu yang disyaki atau disahkan positif COVID-19 wajib mematuhi setiap garis panduan yang ditetapkan KKM
  - Ujian pengesanan COVID-19 dan tatacara kuarantin

#ReopeningSafely

# ENGINEER 2022 – IEM Convention and MARVEX Engineering and ACMV&R Exhibition and Conference

EVENT



## ENGINEER 2022 – IEM Convention and MARVEX Engineering and ACMV&R Exhibition and Conference

Date : 16-19 March 2022

Organizer : The Institution of Engineers, Malaysia (IEM)

Venue : KL Convention Centre (KLCC)

ASHRAE Malaysia Chapter Representative :

Ts. Dr. King Yeong Jin,  
Ir. Ong Ching Loon (IEM President),

Ir. Lam Kim Seong,  
Ir. Leong Siew Meng,  
Mr. Chea Suei Keong,  
Ir. Tony Cheng,  
Mr. Martin Hen

### Report:

ASHRAE Malaysia Chapter participated in the 1<sup>st</sup> ENGINEER 2022 – IEM Convention and MARVEX Engineering and ACMV&R Exhibition and Conference. This event was held on 16-19 March 2022 at Kuala Lumpur Convention Centre (KLCC) after having been postponed from September 2021 due to pandemic constraints.

Once again, congratulations to IEM for having successfully organized this event during this challenging time.





# ASHRAE Hike 2022

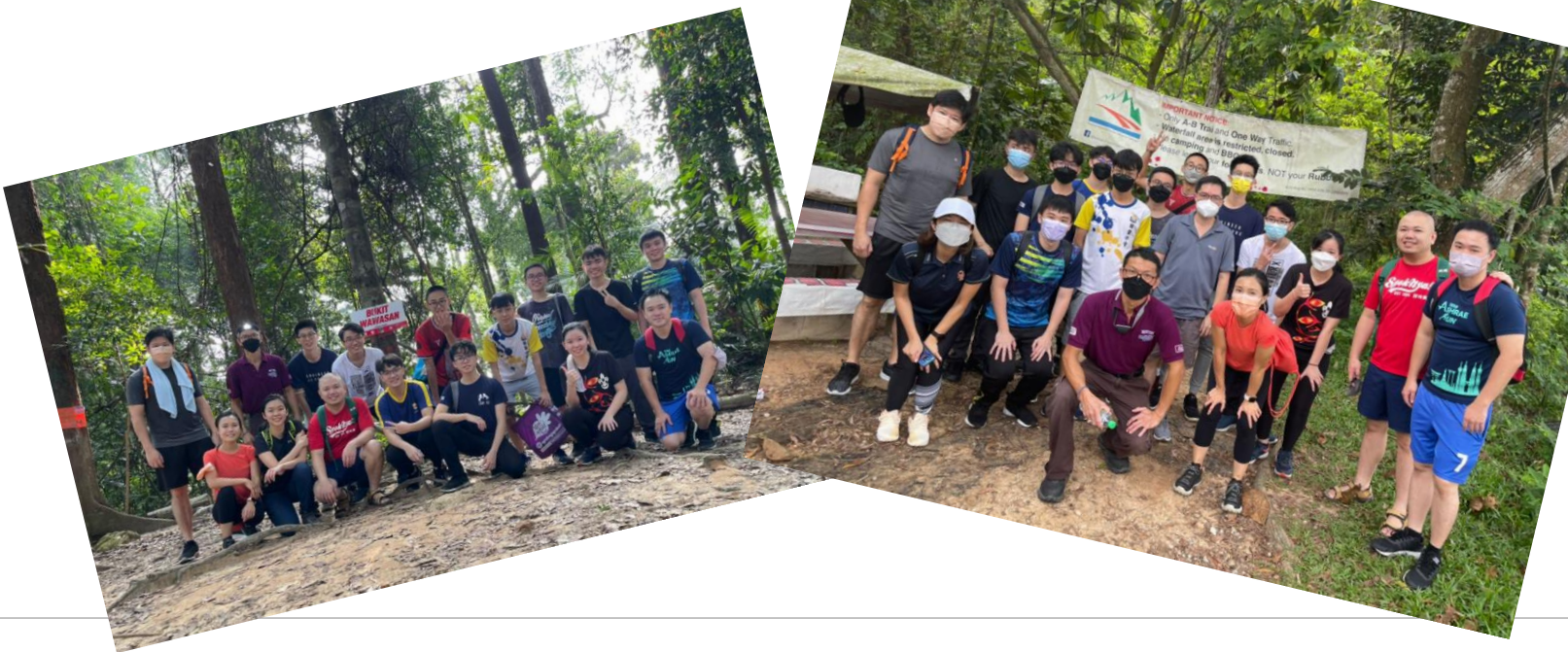
MEMBERSHIP PROMOTION  
STUDENT ACTIVITY & YEA



## ASHRAE Hike 2022

Since the outbreak of COVID-19 pandemic, we finally had our first physical meet-up, ASHRAE Hike 2022. ASHRAE Malaysia Chapter MP has collaborated with YEA and SA to organise a hiking event at Wawasan Hill Puchong on 16<sup>th</sup> April 2022.

We had a total of 18 participants gathered at 8.30am at the entrance of Wawasan Hill Puchong. The participants consist of MASHRAE Committee Chairs, members of MASHRAE YEA and university students. The two-hour hike ended with a short breakfast catch-up and briefing about ASHRAE at a nearby café. If you missed our hike this round, come and join us for our next ASHRAE activity to sweat it out!





# List of Webinars/Seminars/Courses To Date

## Webinars/Seminars/Courses completed between 1st July 2021 to end of March 2022:

1. Acson Webinar 4th Module on 23 July 2021 by Ts. Ng Wen Bin
2. Sponsor Webinar (Belimo) on 7 July 2021.
3. Acson Webinar 5th Module on 28 July 2021 by Ng Wen Bin
4. Sponsor Webinar (Belimo) on 28 July 2021.
5. ENGINEER Power Talk: Managing High Efficiency Building Towards Sustainability Approach on 17 August 2021 at 3pm. Speakers are Ir. Cheng Yew Leong, Ts. Dr. Hui Kar Hoou, and Ts. Ir. Siow Jat Shern. Total of 200 participants has participated in the talk.
6. Webinar on Covid-19 & Beyond IAQ Ventilation Airborne & Non-Airborne Solution on 18 & 19 August 2021.
7. Sponsored Webinar (Daikin) on 23rd September 2021 - COP vs. NPLV/MPLV Webinar (as per to date 108 total participants)
8. Sponsored Webinar by (Johnson Control) will be held on 5th October 2021 (Previously scheduled on 14 September 2021) - The Design Choice Of Today Webinar (as per to date 60 participants registered)
9. Acson Webinar Wednesday, 29th September 2021 from 10am - 12pm by Mr. Chang CK - Duct Design, Air Flow, and Its Distribution
10. Module 7 – Refrigeration and Future Refrigerants 27 Oct. 2021.
11. Super 8: 1st November 2021, Theme: Building Readiness, by ASHRAE DL Om Taneja, Ir. Lam Kim Seong, Ir. Ng Yong Kong. (This was the joint webinar with ASHRAE Singapore Chapter).
12. Webinar on Refrigerant Regulatory by CTT & Refrigeration Committee will be held on Wednesday, 3rd November 2021 from 3pm to 4pm. The Sponsors for this webinar are NRS Process Systems Sdn Bhd and Aurora Chemicals Sdn Bhd. Special invited Speakers: Mdm. Mashitah Binti Darus from Department Of Environment; Ts. Ng Wen Bin; Mr. Chew Soon Jin and Mr. Lawrence Kam.
13. Sponsored Webinar (ADF) - Generation of Wireless Network, Cloud & AI Technologies in Smart Management System, by Mr David Glover & Ms. Samaneh Nadali.
14. Acson Webinar Wednesday, 24th November 2021 from 10am - 12pm by Ts. Dr. King Yeong Jin - Design Guidelines for Noise and Vibration Control related to HVAC Systems
15. 4<sup>th</sup> SEDA ACMV Training, 1 & 2 December 2021
16. 5<sup>th</sup> SEDA ACMV Training, 5 & 6 January 2022
17. ASHRAE Malaysia Chapter Epidemic Task Force: Second Webinar on Ventilation and IAQ on COVID-19, 20 January 2022
18. Integrating Smart IoT Gateway and EMS for Energy Efficient Buildings, by Ir Tony Cheng, 17 March 2022, Power Talk, Engineer.

# SmartStart Program for Graduate Member

MEMBERSHIP PROMOTION

& YEA



## What is the SmartStart program?

Simply put, it's the best way for ASHRAE student members to receive the many benefits of Associate grade membership after finishing college. SmartStart is a 3 year program that allows Student members to transfer to Associate grade membership at a rate that is recent-graduate friendly.

**Prices as of July 1, 2020:** SmartStart participants who join or renew after this date will be part of the new dues structure. Participants who only paid for one year upon transferring their membership will renew based on this new dues structure. New program prices are (for 3 years respectively): \$25 (+) \$85 (+) \$115= \$225 for 3 years.

The Developing Economies pricing (\$15 + \$45 + \$60 = \$120) is open to those residing in countries considered to be "Low Income" & "Lower Middle Income" by the World Bank. [Visit the World Bank's Web site for a list of low income /lower middle income countries.](#)

By submitting this application you are agreeing to abide by the ASHRAE Code of Ethics, found at [ashrae.org/codeofethics](http://ashrae.org/codeofethics).

**Please note that the SmartStart program is for current ASHRAE Student members who have been a Student member for at least one year.**

## Why Transfer to Associate Membership?

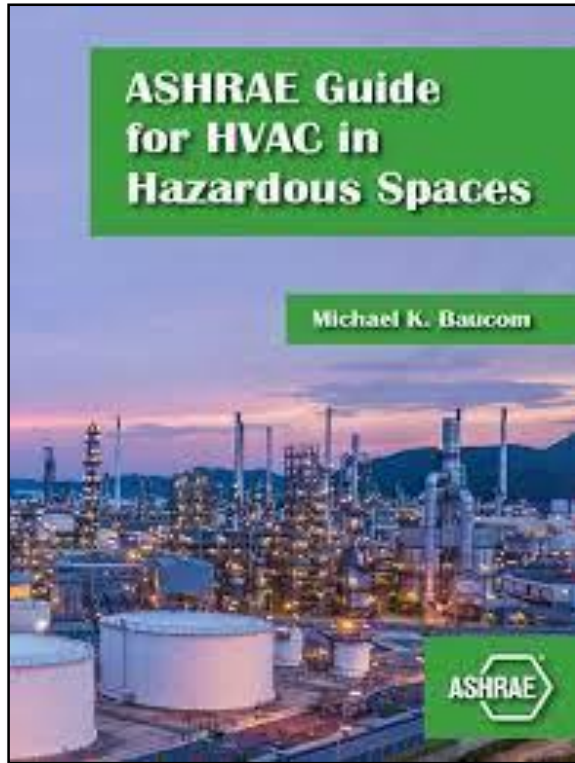
List of Associate Membership Benefits: -

- **Dedicated events and resources** for young professionals are offered at the chapter and Society level through the Young Engineers in ASHRAE (YEA) program.
- Tremendous **networking opportunities** through chapter events, committee participation, volunteering, attending conferences, and more.
- **The ASHRAExChange** – participate in the online forum that brings together members from across the world to discuss design, construction, operation, and support of the built environment.
- **The ASHRAE Handbook** — the indispensable, industry-wide resource for all HVAC&R professionals.
- **ASHRAE Journal** — this monthly resource is the most trusted technical magazine in the HVAC&R community.
- **High Performing Buildings** — the quarterly magazine for innovation in building technology design and operation.
- **HVAC Industry News** — a weekly news resource keeping ASHRAE members abreast of the latest industry news.
- **Bookstore** — Access to, and discounts on, more than 300 of the industry's **leading technical publications**.

# What do we have in our library collections?

## ASHRAE GUIDE FOR HVAC IN HAZARDOUS SPACES

Published: 2021



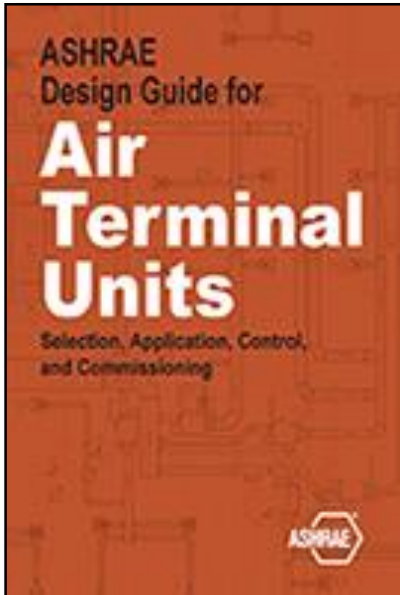
- Ensuring Safety and Health in Hazardous Spaces
- Covers the proper design, engineering, installation, operation, and maintenance of safe and effective heating, ventilation, pressurization, dilution, filtration, and air-conditioning systems for hazardous spaces.
- Emphasis on toxic chemicals, asphyxiants, flammable gases, and combustible dusts; it does not touch on radioactive or pathogenic substances.
- Presents various techniques and methods developed and refined over time by countless experts within specific fields of interest.
- Readers will gain insight into the best possible means to ensure that a space is effectively ventilated and conditioned for various levels of occupancy while preserving all aspects of the safety and health of the occupants as well as the protection of surrounding facilities.
- It also serves as a reference to critical standards, recommended practices, and related publications.



# What do we have in our library collections?

## ASHRAE DESIGN GUIDE FOR AIR TERMINAL UNITS: SELECTION, APPLICATION, CONTROL, AND COMMISSIONING

Published: 2017



- The Definitive Guide on Air Terminal Units
- Provides detailed guidance for selection, application, control, and commissioning of a common element in all-air HVAC systems and the air terminal unit (ATU). It was written with a view toward current codes, standards, and design practices and is intended to aid design engineers in sizing units while maximizing occupant comfort and energy efficiency.
- This guide can be used as a complete, comprehensive in-house training program for new designers, and experienced engineers and designers can navigate directly to chapters of interest. New design paradigms are introduced throughout.
- Includes detailed discussion on the criteria the design engineer needs to properly schedule and specify ATUs; with proper selection, the engineer can design a better system, resulting in acceptable sound levels, improved flow volume control, proper ATU sizing, and optimized energy consumption.
- Covers the history and types of ATUs as well as ATU construction types, insulation options, installation methods and suggestions, and accessories.
- Included are in-depth treatises on HVAC acoustics, the control options and recommended sequences of operations for various ATUs and systems, comparing manufacturers' ratings, building energy modeling, and life-cycle cost analysis. ASHRAE, AHRI, and AABC standards applicable to ATUs; testing, balancing, and commissioning for ATUs; and ATU applications are also covered in this comprehensive resource.
- This design guide is accompanied by supplemental materials online for ongoing guidance.

# Online Reading-Only-Version of Latest ASHRAE Publications is Available ! (1/2)

LIBRARY &  
RESOURCES



[Click this link to access to the online "Read-Only-Versions" of ASHRAE Standards & Guidelines](#)

## **Guidelines Available:**

- Guideline 1.4-2019, Preparing Systems Manuals for Facilities
- Guideline 11-2021, Field Testing of HVAC Control Components [Latest Version]
- Guideline 12-2020, Managing the Risk of Legionellosis Associated with Building Water Systems
- Guideline 28-2021, Air Quality within Commercial Aircraft [Latest Version]
- Guideline 29-2019, Guideline for the Risk Management of Public Health and Safety in Buildings
- Guideline 36-2021, High-Performance Sequences of Operation for HVAC Systems [Latest Version]

## **Standards Available:**

- Standard 15-2019, Safety Standard for Refrigeration Systems
- Standard 34-2019, Designation and Safety Classification of Refrigerants
- Standard 52.2-2017, Method of Testing General Ventilation Air-Cleaning Devices for Removal Efficiency by Particle Size [Recently Added]
- Standard 55-2020, Thermal Environmental Conditions for Human Occupancy (ANSI Approved)
- Standard 62.1-2019, Ventilation for Acceptable Indoor Air Quality
- Standard 62.2-2019, Ventilation and Acceptable Indoor Air Quality in Residential Buildings
- ANSI/ASHRAE Standard 84-2020, Method of Testing Air-to-Air Heat/Energy Exchangers (ANSI Approved)

# Online Reading-Only-Version of Latest ASHRAE Publications is Available ! (2/2)

LIBRARY &  
RESOURCES



[Click this link to access to the online "Read-Only-Versions" of ASHRAE Standards & Guidelines](#)

## **Standards Available:**

- Standard 90.1-2019, Energy Standard for Buildings Except Low-Rise Residential Buildings
- Standard 90.2-2018, Energy Efficient Design of Low-Rise Residential Buildings
- Standard 100-2018, Energy Efficiency in Existing Buildings
- Standard 111-2008 (RA 2017)-- Testing, Adjusting, and Balancing of Building HVAC Systems
- Standard 154-2016, Ventilation for Commercial Cooking Operations
- Standard 161-2018, Air Quality within Commercial Aircraft
- Standard 170-2021, Ventilation of Health Care Facilities [Latest Version]
- Standard 180-2018, Standard Practice for Inspection and Maintenance of Commercial Building HVAC Systems (ACCA Co-sponsored)
- Standard 183-2007 (RA 2020), Peak Cooling and Heating Load Calculations in Buildings Except Low-Rise Residential Buildings (ACCA Co-sponsored)
- Standard 185.2-2020, Method of Testing Ultraviolet Lamps for Use in HVAC&R Units or Air Ducts to Inactivate Microorganisms on Irradiated Surfaces
- Standard 188-2021, Legionellosis: Risk Management for Building Water Systems [Latest Version]
- Standard 189.1-2020, Standard for the Design of High-Performance Green Buildings
- Standard 211-2018, Standard for Commercial Building Energy Audits



# From ASHRAE: Upcoming ASHRAE Publications

## **Coming Soon - Special Publications**

- Advanced Energy Design Guide for Multifamily Residential Buildings: Achieving Zero Energy (Q2 2022)
- Designing for Operational Excellence Guide (Q2 2022)
- Design Guide for Combustion Turbine Inlet Air Cooling Systems, 2nd ed. (Q2 2022)
- ASHRAE Design Guide for Cold-Climate Buildings, 2nd ed. (Q2 2022)
- Pocket Guide, 10th ed. (I-P and SI editions) (Q2 2022)
- Healthier Homes During Epidemics (Q2 2022)
- ASHRAE GreenGuide, 6th ed. (Q3 2022)
- Nearly ZEB Hospitals Guide Book (co-published w/REHVA) (Q4 2022)
- HVAC Design Guide for DOE Nuclear Facilities, 2nd ed. (Q4 2022)
- Handbook of Smoke Control Engineering, 2nd ed. (Q1 2023)
- ASHRAE Design Guide for Commercial Kitchen Ventilation (Q1 2023)
- ASHRAE Design Guide for Dedicated Outdoor Air Systems, 2nd ed. (Q1 2023)
- Practical Guide to Seismic Restraint, 3rd ed. (Q2 2023)
- HVAC Fast Facts (SI) (Q2 2023)
- Design Considerations for Datacom Equipment Centers, 3rd ed. (Datacom Series Book 3) (Q2 2023)
- RAC Plant Assessment Guide Sustainable Operations and Maintenance of Refrigeration and Air Conditioning Plants (Q2 2023)
- Procedures for Commercial Building Energy Audits, 3rd ed. (Q3 2023)
- Liquid Cooling Guidelines, 3rd ed. (Datacom Series Book 4) (Q3 2023)
- Classification of Laboratory Ventilation Design Levels, 2nd ed. (Q3 2023)
- Fuel Cells for Building Applications, 2nd ed. (Q4 2023)

## **Coming Soon - Standards and Guidelines**

- ANSI/ASHRAE Standard 15-2022, Safety Standard for Refrigeration Systems (Q3)
- ANSI/ASHRAE Standard 15.2-2022, Safety Standard for Refrigeration Systems in Residential Applications (Q2)
- ANSI/ASHRAE Standard 34-2022, Designation and Safety Classification of Refrigerants (Q3)
- ANSI/ASHRAE Standard 62.1-2022, Ventilation for Acceptable Indoor Air Quality (late Q2/early Q3)
- ANSI/ASHRAE Standard 62.2-2022, Ventilation and Acceptable Indoor Air Quality in Residential Buildings (late Q2/early Q3)
- ANSI/ASHRAE/IES Standard 90.1-2022, Energy Standard for Buildings Except Low-Rise Residential Buildings (Q4)
- ANSI/ASHRAE Standard 90.4-2022, Energy Standard for Data Centers (Q4)
- ANSI/ASHRAE Standard 154-2022, Ventilation for Commercial Cooking Operations (Q3/Q4)

# New ASHRAE Membership Benefits Information

MEMBERSHIP  
PROMOTION



ASHRAE is offering an **exciting new selection of member benefits for the 2021-2022 Society Year**. The expanded member benefit options are a direct result of member feedback and volunteer effort. They have been created to provide the best possible service to ASHRAE members and the industry.

## 2021-2022 New Member Benefit Selections

### WHAT?

- **New member benefit options** will be presented during the join and renewal process for qualifying members entering the Society Year 2021-22. These members will be asked to select one of the following as their annual membership benefit:
  1. Society Year's ASHRAE Handbook as a PDF;
  2. An ASHRAE Standard of the member's choosing, as a PDF
  3. A one-year subscription to an eLearning Course of the member's choosing
- Members will also be presented with the **option to add on additional benefits** for a small fee during the join or renewing process:
  1. Add a printed ASHRAE Handbook that will be shipped in June 2022, at a discounted rate of \$65 for US members, and \$84 for international members (shipping included in price).
  2. Add a Handbook Online Subscription at the discounted rate of \$49. This option is presented to renewing members only, as new members receive a complimentary subscription during their first year.

*(Continued to next page)*

# New ASHRAE Membership Benefits Information (1/3)

MEMBERSHIP  
PROMOTION



ASHRAE is offering an **exciting new selection of member benefits for the 2021-2022 Society Year**. The expanded member benefit options are a direct result of member feedback and volunteer effort. They have been created to provide the best possible service to ASHRAE members and the industry.

## 2021-2022 New Member Benefit Selections

### WHAT?

- **New member benefit options** will be presented during the join and renewal process for qualifying members entering the Society Year 2021-22. These members will be asked to select one of the following as their annual membership benefit:
  1. Society Year's ASHRAE Handbook as a PDF;
  2. An ASHRAE Standard of the member's choosing, as a PDF
  3. A one-year subscription to an eLearning Course of the member's choosing
- Members will also be presented with the **option to add on additional benefits** for a small fee during the join or renewing process:
  1. Add a printed ASHRAE Handbook that will be shipped in June 2022, at a discounted rate of \$65 for US members, and \$84 for international members (shipping included in price).
  2. Add a Handbook Online Subscription at the discounted rate of \$49. This option is presented to renewing members only, as new members receive a complimentary subscription during their first year.

*(Continued to next page)*



# New ASHRAE Membership Benefits Information (2/3)

MEMBERSHIP  
PROMOTION



(Continued from  
previous page)

## 2021-2022 New Member Benefit Selections

### WHO?

- **Full Dues paying Member and Associate grades** who are renewing or joining for Society Year 2021-2022.
- These changes do not apply to members participating in the Developing Economies program, students, or Affiliate members

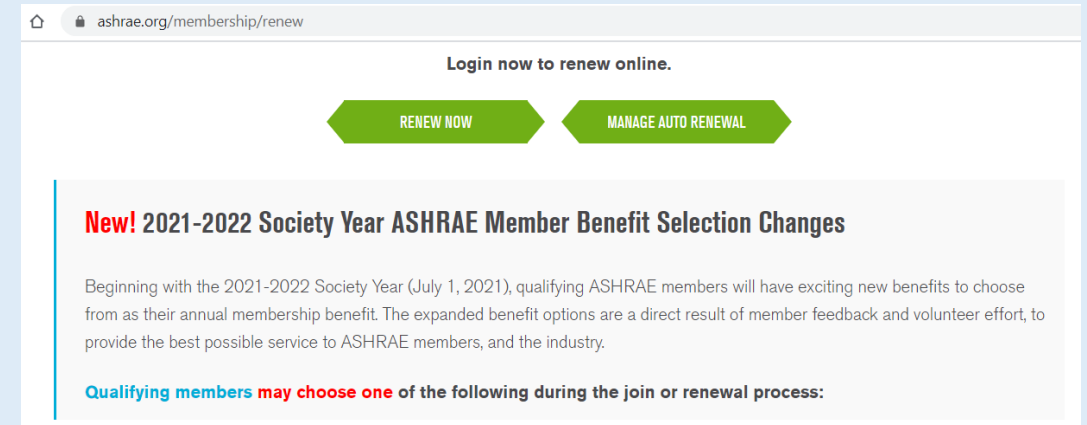
### WHEN?

- Members who begin **renewing** for the new Society Year **as early as 1<sup>st</sup> April 2021**, and this group will be presented with the new benefit options during their renewal process.
- Additionally, **new members who join after 1<sup>st</sup> June 2021** will be presented with the new benefit selection.

### WHERE?

- More information is available at <https://www.ashrae.org/membership/renew>.
- Additional questions can be directed to [membership@ashrae.org](mailto:membership@ashrae.org)

(Continued to next page)



*(Continued from previous page)*

## ASHRAE Membership Automatic Renewal Program

- You can cancel or edit your automatic renewal payment method at any time by visiting [autorenew.ashrae.org](https://autorenew.ashrae.org), or by calling ASHRAE Customer Service at 404-636-8400, or by updating your member profile through logging into [ashrae.org](https://ashrae.org).

## Get Your Membership Back

- If your membership was cancelled and you'd like to re-join simply fill out the online application. If you wish to keep your years of tenure by reinstating your membership...please contact ASHRAE staff. Each former member's situation is different, so we want to offer the most suitable reinstatement option. Contact the Member Contact Center at 800-527-4723 (US/Canada) or 404-636-8400 (International) and ask a representative about reinstating your membership. You can also send an email to [membership@ashrae.org](mailto:membership@ashrae.org), with the subject line of 'Membership Reinstatement.' If possible, include your former membership number.