

**Announcements and Reminders for Functional Groups
(FG) [TC/TG/TRG & MTG Chairs]
Winter Meeting 2025**

A. Announcements

1. **Current** Functional Group (FG) Reference Manual - available at www.ashrae.org/TAC
2. **Current** Multi-disciplinary Task Group (MTG) Reference Manual – available at www.ashrae.org/TAC
3. **Current** TAC Manual of Procedures (MOP) & Reference Manual – available at www.ashrae.org/TAC
4. **TAC Sections and FG/MTG Leadership Basecamp – [link](#)**
Basecamp set up to communicate and transfer documents between TAC Section Heads and FG leadership (Chairs, Vice Chairs & Secretary). Contact list will be updated every July 1st. Find the following documents:
 - Breakfast presentations
 - Miscellaneous TC forms
 - [Updated FG Activity Form](#) for Orlando Meeting
 - [FG Evaluation Workbook](#) for Orlando Meeting
 - **Current** Cognizant TC Assignments/Deadlines
 - [Special Publications](#)
 - [Handbook Chapters](#)
 - [Standards and Guidelines](#)
 - [ALI Courses](#)

Send staff (shammerling@ashrae.org) an email if you need access.

5. **ASHRAE Artificial intelligence (AI) policy:**
ASHRAE prohibits the entry of content from any ASHRAE publication or related ASHRAE intellectual property (IP) into any AI tool, including but not limited to ChatGPT. Additionally, creating derivative works of ASHRAE IP using AI is also prohibited without express written permission from ASHRAE.
6. **FGs that have been formed in Current Society Year:**
 - None
7. **FGs that were disbanded in Current Society Year:**
 - MTG.VIC – Ventilation for Infection Control

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8. Roster Rollover

The links for updating the current roster were sent out on Wednesday, February 5, 2025. All updates are due on or before Monday, March 3rd.

Remember, the current 2024-2025 roster for your TC, TG or MTG is in effect until **after** this Annual meeting in Phoenix. The new 25-26 roster, based on all changes submitted on the form goes into effect after the annual meeting.

9. Discuss and confirm that TCs, TGs, TRGs, and MTGs in section will continue in 25-26 Society Year

This will be an annual activity and FG agenda item for **Winter Meeting**. TCs are encouraged to work with Section Head on new [FG Evaluation Workbook](#).

From FG MOP:

1.7. Review

1.7.1. Once a year, preferably at, or prior to, each Winter Society meeting, the FG Chair and Membership shall evaluate their progress in accomplishing the purpose for which they were constituted and recommend one of the following actions to their Section Head:

- a) Continue as a FG
- b) Merge with a FG and submit a revised scope for the merged FG
- c) Dissolve the FG.
- d) If an FG votes to disband, it must establish whether any current responsibilities should be continued and, if so, recommend existing FG(s) to assume the responsibilities and obtain those FG written concurrence.

10. Interim FG meeting listing

TAC encourages FG's to meet in between ASHRAE Meetings. Plan to list interim FG meetings on ASHRAE website, similar to current Standards & Guidelines page listing ([here](#)). TC interim meetings should be posted (by emailing shammerling@ashrae.org) two weeks or more before an online meeting and four weeks before a face-to-face meeting.

The person emailing should also include the meeting call-in info/ link for posting.

11. Updated [meeting sign in sheet](#) - Use QR sign in ([here](#))



12. asktac@ashrae.net

Resource for all TAC/TC related questions, comments, etc. Any questions, please email.

13. TC Meeting schedule and protocols

TC committee meeting schedules posted at

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www.ashrae.org/conferences/2025-winter-conference-orlando. Meetings may be in-person, hybrid or virtual as noted in schedule for each meeting. The meeting access information (where applicable) is included in the program.

Policies and Procedures for FG Winter Conference Meetings are posted [here](#). This document includes a schedule, a checklist, deadlines, links, templates and contacts to help your FG request and schedule a meeting for the Winter Meeting.

Meeting requests for Annual Conference in Phoenix will open shortly and close March 7th. FG subcommittees are encouraged to meet virtually before the Annual meeting.

14. YEA members

FG chairs are encouraged to engage and welcome YEA members and all new attendees to FG meetings.

YEA Mentorship Program is being revamped and more information will be available in 2025. Please direct any questions you have to youngengineers@ashrae.org.

15. Open Mic Policy

Technical Activities Committee (TAC) Open Mike Policy

Purpose: Allow the ASHRAE membership to have a voice to express their concerns and offer improvements.

When: TAC traditionally meets during in-person conferences the Saturday before the summer and winter conferences and the Wednesday at the conclusion of the conference. Likewise, during a virtual conference, the TAC meetings are conducted prior to the start and after the conclusion of the conference.

You need to check the conference schedule for the correct date/time of the meetings.

TAC also conducts virtual meetings between the formal conferences. If you want “open mike” time just send your request using ASKTAC@ASHRAE.net.

How: It would be appreciated if you would send a written request to ASKTAC@ASHRAE.net with the topic, however, this is not required.

It is the prerogative of the chair to advise how much time is available and when you can be heard. A 3-minute time limit is preferred. It would be preferable to be present at the beginning of the meeting so that you may be heard and not have to wait a prolong period of time.

Please make sure your presence is recognized by the chair upon your arrival.

When in doubt email: ASKTAC.ASHRAE.net

16. FG Motions

New format to submit motion to TAC for consideration. Intent to give FGs a method to require TAC response, report ideas, etc. Will be added to www.ashrae.org/TCs and Basecamp:

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MOTION TYPE: TAC / Society

If a motion impacts only TAC, it will stay a TAC Motion and will be completed at the TAC level. Indicate only one here. **If you are using this as a template, erase all red text.**

MOTION:

Write your motion here.

- This should be short and to the point. It should state exact action you are requesting, by whom, and by when.
- This is the ONLY part of your motion that is voted on. Any change to this portion must be submitted as a motion in of itself to amend this motion (unlike the background and fiscal impact portions)
- Do not include/repeat background and fiscal impact here.
- Dates of implementation are important.
- Work with your Section Head, if necessary, where dollar amounts that vary year to year
- Try to be as specific as possible and not use words like "recommend", "investigate", "look in to", or "try".
- Do not include background or fiscal impact portions.
- The rest of the information (background and fiscal impact) are for information only.
- If you don't know how to work something, ask, your Section Head can help you with this.

FISCAL IMPACT

Fiscal impact should not exceed \$ ____ annually.

-or-

Fiscal impact is expected to be negligible.

- Estimate what the total cost impact of the motion is to society. Leadership understands this is the framers best guess.
- "Fiscal impact is zero" is not well received by some members. Better to say "minimal" or "negligible".
- If you don't know, it is ok so admit it, like "Fiscal impact is unknown." But it is better to indicate to some degree whether the impact is minimal, large, etc. Leadership should have an idea if the framer appreciated the large potential fiscal impacts when they are significant, or where the framer's believed the potential impacts to be negligible.
- It is best practice to use some sort of justification and the broad impacts. If your motion impacts all members of society, it is best to extrapolate the impact of one person to 50,000 members. If it is travel-related work to get an average cost that Society uses to estimate expenses.
- Your Section Heads can help you with this.

BACKGROUND:

Write background here.

- This area is where you provide your anecdotes necessitating change.
- You can provide historical context, precedents set, etc.
- You can also use this area to explain your logic or experiences that led your committee to believe this will make the overall Society better because of your motion.
- It is best to appeal to the greater good of Society (as opposed to requesting Society change to fit the goals of one or two committees only)

17. How to Import Your TC Roster Information into MS-Outlook

Detailed instructions on how to import your TC roster information into MS-Outlook has been created and an e-mail announcement will be issued to all TC chairs, vice chairs, and secretaries once these instructions and the restructured TC MOP are posted to the TC page of the website (www.ashrae.org/TCs)

B. Winter MEETING

1. Free Wi-Fi Access at this Society meeting Hilton Orlando Wi-Fi

Access:

Network Name: ASHRAE25, PWD: Orlando2025

2. Training Options

i. TC/TG/TRG/MTG Chair's Training Topic

A set of training blocks (ASHRAE Leadership Development Auto-Tutorial) related to leadership training are complete and posted at TAC website (www.ashrae.org/tac), TC website

(www.ashrae.org/communities/committees/technical-committees) and TAC/TC basecamp

(<https://3.basecamp.com/3106353/buckets/15520814/vaults/4576849288>):

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ASHRAE Leadership Development Auto-Tutorial

Block A: Five E's – Envision, Equip, Empower, Edify, Evaluate

- (A) Intro to Block A
- (B) A.1.a - Envision
- (C) A.1.b - Equip
- (D) A.1.c - Empower
- (E) A.2.d - Edify
- (F) A.2.e - Evaluate
- Block A Introspections

Block B: Three C's – Change, Communication, Character

- (G) Intro Block B
- (H) B.1.a - Leadership and Change
- (I) B.1.b.i - Communication
- (J) B.1.b.ii - Communication Applied
- (K) B.1.c - Leadership and Character
- Block B Introspections

Block C: Committee Dynamics; Consensus; Decision Making

- (L) Bridge to Block C
- (M) C.1.a.i - Typical or Atypical Meetings
- (N) C.1.a.ii - Flow
- (O) C.1.b - Consensus
- (P) C.1.c - Decision Making
- Block C Introspections

Block D: Creativity; Ideation; Problem Solving; Planning

- (Q) Bridge to Block D
- (R) D.1.a.i - Creativity
- (S) D.1.b - Ideation
- (T) D.1.c.i - Problem Solving Intro
- (U) D.1.c.ii - Problem Solving Blocks
- (V) D.1.c.iii Part 1 - Thinking Like an Engineer
- (W) D.1.c.iii Part 2 - Failure to Think
- (X) D.1.d - Strategic Planning
- (Y) E.1.a - Think Like a Leader
- Block D Introspections

ii. TC Program Subcommittee Chair Training

(<https://events.rdmobile.com/Sessions/Details/2551827>)

TC Program Subcommittee Training

Tuesday, February 11 11:15 AM – 12:00 PM EST

Hilton Orlando, Clear Lake (Lobby Level)

Session Type: Standing Committee

Meeting Format: In Person

iii. RAC's TC Research Subcommittee Chair's Breakfast

(<https://events.rdmobile.com/Sessions/Details/2551497>)

RESEARCH CHAIR'S BREAKFAST

Monday, February 10 7:30 AM – 9:00 AM EST

Hilton Orlando, Florida 5&6 (Lower Level)

Session Type: Standing Committee

Meeting Format: In Person

iv. TC Handbook Subcommittee Training

(<https://events.rdmobile.com/Sessions/Details/2551441>)

Handbook Training for TCs

Sunday, February 9 9:00 AM – 10:00 AM EST

Hilton Orlando, Lake Nona A (Lobby Level)

Session Type: Standing Committee

Meeting Format: Hybrid

Location: Hilton Orlando, Lake Nona A (Lobby Level)

This meeting will take place in Orlando. Virtual attendees can click "Enter Meeting" under Resources below to join the meeting on the noted date and time. All times are listed in Eastern Time (ET).

C. UPCOMING DEADLINES

1. TC Activity Forms for the 2025 Winter Meeting are due to Your Section Head before Tuesday February 11, 2025

TC/TG/TRG Activity Feedback Form (Excel) were sent by Section Heads and posted to TAC/TC Leadership basecamp -
(<https://3.basecamp.com/3106353/buckets/15520814/vaults/7671017564>).

2. ASHRAE is meeting next in Phoenix, AZ, USA, June 21-25, 2025. Seminar and Forum proposals are due by Wednesday, February 26, 2025.

Please visit the following site to submit your proposal: For more information, go to: www.ashrae.org/conferences/2025-annual-conference-phoenix/2025-annual-conference-technical-program. Here's the deadlines:

- **Wednesday, February 26, 2025** | Debate, Panel, Seminar, Forum, Workshop, and Debate Proposals Due
- **Wednesday, March 5, 2025** | Conference Papers and Extended Abstracts Due
- **Wednesday, April 2, 2025** | Conference Paper Accept/Revise/Reject Notifications
- **Wednesday, April 2, 2025** | Extended Abstract Accept/Reject Notifications
- **Wednesday, April 9, 2024** | Revised Conference Papers Due
- **Friday, April 11, 2025** | Debate, Panel, Seminar, Forum, Workshop Scheduling Notifications
- **Wednesday, April 23, 2025** | Conference Paper Final Accept/Reject Notifications

3. 2025-2026 Hightower Award Nominations by Friday, September 5th.

There were four nominations for this year's award. Thanks to all TCs that nominated! All that did not win are encouraged to resubmit. For the first time, the 2024-2025 Hightower Award will be presented at the ASHRAE Plenary Session at the 2025 Annual Meeting in Phoenix, AZ

TAC wishes to encourage TCs to make nominations for the 2025-2026 George B. Hightower Technical Achievement Award. Nominations are due to Section Heads by September 5, 2025 or sooner. The award

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recognizes outstanding technical leadership and contributions on a TC/TG/TRG during the past four years, excluding research and standards activities. Please go to the Technical Committee page of the ASHRAE website at the following link under the “Procedures, Forms...” heading: www.ashrae.org/tcs.

D. **REMINDERS**

1. **25-26 Roster Rollover**

The links for updating the current roster were sent out on Wednesday, February 5, 2025. All updates are due on or before Monday, March 3rd. The current 2024-2025 roster for your TC, TG or MTG is in effect until **after** this Annual meeting in Phoenix.

2. **Useful TC/TG/TRG/MTG Chair Information and forms on ASHRAE website**

Information for TC/TG/TRG and MTG chairs can be found on the Technical Committee page of the ASHRAE website at the following link:
www.ashrae.org/tcs

3. **Request for each TC to briefly review ASHRAE Value Statement at start of meeting**

ASHRAE Value Statement – *In ASHRAE meetings, we will act with honesty, fairness, courtesy, competence, inclusiveness and respect for others, which exemplify our core values of excellence, commitment, integrity, collaboration, volunteerism and diversity, and shall avoid all real or perceived conflicts of interest. Our culture is one of inclusiveness, acknowledging the inherent value and dignity of each individual. We celebrate diverse and inclusive communities, understanding that doing so fuels better, more creative and more thoughtful ideas, solutions and strategies for the Society and the communities our Society serves. We respect and welcome all.*

[Code of Ethics](#)

[Core Values](#)

[Diversity Statement](#)

4. **Make a Special Effort to welcome new Members, and Visitors to TC meeting**

Potential new members for your committee have been encouraged to drop-by your meeting. As a result, please make a special effort to recognize and warmly welcome all visitors to your meeting – A TC can never have too many willing and able volunteers.

5. **Option for FG Subcommittee Meetings via Conference Calls and Web Meetings**

FGs and FG subcommittees are encouraged to use Interim Meeting procedures described above for subcommittee meetings as well. Contact staff (shammerling@ashrae.org) if you need assistance creating a meeting link.

6. Is Your Committee Website up to Date?

If not, please ask your webmaster to at least post the latest minutes and the Winter/Annual meeting times and agenda. Please note that the webmaster indicated on the roster will automatically have access to make edits. Contact tthomas@ashrae.org if you need help getting access.

If your website has been neglected, add an action item for this meeting to appoint a responsible member of the TC/TG/TRG who will bring it back to life. The new TC website template has greatly simplified the duties of the TC webmaster and this form of communication is critical to the efficient operation of your committee, and for attracting new members. Please note a listserv is available to TCs to communicate with rostered members and all interested in keeping track of TC activities.

The conversion to a new TC website platform highlighted a couple areas where a refresher of the ASHRAE rules on website maintenance is warranted. First be aware that ASHRAE Products (i.e., handbook chapters, journal articles, final reports from research projects, etc.) cannot be published on your TC's website. It is very appropriate to post the title and scope of the product and then link the reader to the ASHRAE bookstore or other location on the ASHRAE site where the product may be purchased. Any possible exceptions to this rule must be sent through Mark Owen for review and approval (mowen@ashrae.org). The second issue involves timely posting of the draft minutes. Draft minutes (and final, approved minutes from the prior meeting) should be posted to your website (or otherwise distributed to the members) within 60 days after the meeting. Please ensure that your secretary and webmaster are aware of this deadline. To assist your secretary in understanding the procedures for taking and reporting minutes, a video has been developed and posted on the Technical Committees' Training page <http://www.ashrae.org/tcs>). On the same page, a video has also been posted for use by webmasters to learn about the procedures and schedule to maintain the new websites.

7. TC Master Calendar – Now Available through Google - The Technical Committee Master Calendar is available through Google. In order to access this calendaryou need to have a Google account.

Once you log into your Google account, follow the instructions below: To add a friend's calendar, just follow these steps:

- At the bottom of the calendar list on the left, click Add and select Add a friend's calendar.
- Enter the appropriate email address (techservices1791@gmail.com) in the field provided, then click Add.

This calendar is public and will appear under 'Other Calendars' in the left column. To set up Google Calendar Sync to your Outlook:

- Make sure you're using a supported operating system and Outlookversion.
- Download Google Calendar Sync (version 4.3.53.0) at <https://google-calendar-sync.en.softonic.com/>
- Once a dialog box appears, click Save File. The downloaded file should open automatically. If it doesn't, manually open it from your browser's download window.

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- Click OK to confirm that you're aware this is an executable file.
- Read through the Google Calendar Sync Terms of Service, and click I Agree.
- Follow through the Installation Options and click Install to finish the set-up process.

Once Google Calendar Sync is installed on your computer, the Google Calendar Sync Settings window will appear:

In the Settings window, enter your email address and password and select the Sync Option you prefer. Read about each Sync Option.

You'll also be able to set the time interval for syncing to occur. Please keep in mind that 10 minutes is the minimum time interval allowed.

After the initial set-up, you can access the Google Calendar Sync Settings window again by double-clicking the calendar icon in your Windows System Tray.

8. Updated TAC Presentation Template Available for TC members to use with local Chapter
TAC recently updated the standard presentation and presentation notes that TC members can use, without a lot of effort, to explain what TCs do for the Society and how that work benefits members in your local ASHRAE Chapter.

The new presentation and presentation notes files are posted now at the following link www.ashrae.org/tcs under the heading *General TC Information* at the top of the page in case you prefer to direct others to these files posted online. The presentation material is now also available in both English and Spanish.

9. Basecamp and Virtual Meeting Information from Communications Committee
More and more TCs and standing committees are making use of ASHRAE's subscription to Basecamp3 to better organize, store, and distribute on-line committee files that are needed for their meetings through a dedicated committee Basecamp site. If you would like to learn more about Basecamp and how to request a site for your particular committee, please go to the Communications Committee (CC) web page: (www.ashrae.org/communities/committees/standing-committees/electronic-communications-committee) and scroll down to the section titled *Basecamp Guidance*

E. **RECENT ANNOUNCEMENT**

1. **CEC's Standing Request for Future Society Meeting Program Track Suggestions** The Conferences and Expositions Committee (CEC) oversees ASHRAE's annual and winter conferences and other specialty conferences and expositions globally. The CEC continually works to improve the conference experience for all attendees. To help keep a "pulse" on the technical issues facing

professionals in the HVAC&R marketplace, and to create meetings that reach all of ASHRAE's constituencies, the CEC seeks ideas for tracks for the 2025 meeting conferences as well as topics for specialty conferences from TC members.

Please submit your suggestions to ASHRAE Staff member Tony Giometti (Giometti@ashrae.org). You can also add your track suggestion in the "Comment" section of the TC Activity form for the Orlando meeting.

2. CEC Always Seeks TC Volunteers willing to Support Content Development and Quality Control for Society Technical Program at Society Meetings

Provide to your Section Head after each Society meeting a list of qualified volunteers from your TC that are potential Technical Session chairs and reviewers of session papers that are related to TC's scope for use by the Conferences & Expositions Committee (CEC) in developing technical content for future technical programs.

3. The Professional Development Committee (PDC) is seeking ideas for new ASHRAE Learning Institute (ALI) courses.

The Professional Development Committee (PDC) is actively seeking ideas for new ASHRAE Learning Institute (ALI) courses. We need practical courses of broad interest to be presented as face-to-face seminars or short courses, instructor-led online courses and self-paced courses. Examples include courses with a focus on new technologies that need to be shared, fundamentals for engineers new to the discipline, standard applications that need explanation, and courses based on new design guides. Does your TC have a potential course idea?

Contact Karen Murray (ASHRAE staff) kmurray@ashrae.org or PDCchair@ashrae.net with your course ideas.

4. ASHRAE Certification Committee seeking ideas from TCs for possible professional certification programs

Certification Committee seeking ideas from TCs for possible professional certification programs related to 1) support adaptability, resilience and recovery of buildings and communities, 2) promote understanding of indoor environmental quality (IEQ) among practitioners). Representatives from the Certification Committee will meet with TCs in Orlando that expressed an interest or had ideas.

F. CURRENT & UPCOMING ASHRAE CONFERENCE PROGRAMS

1. Orlando Winter – Feb 8-12, 2025

Conference Website: www.ashrae.org/conferences/2025-winter-conference-orlando/2025-winter-conference-technical-program.

Program Focus at Orlando Winter Conference

Track 1. Fundamentals and Applications

Fundamentals are the foundation for understanding applications in engineering. Key components of ASHRAE fundamentals include thermodynamics, psychrometrics, fluid and mass flow. This track provides opportunities for papers and presentations of varying levels across a large topic base. Concepts, design elements and shared experiences for theoretical and applied concepts of HVAC&R design are included.

Track Chair: Erik Sanchez | esanchez@prmech.com

Track 2. HVAC&R Systems and Equipment

HVAC&R systems and equipment are constantly evolving to address the changing requirements of the built environment. Papers and programs in this track focus on the development of new systems and equipment, improvements to existing systems and equipment and the proper application and operation of systems and equipment.

Track Chair: Li Song | lsong@ou.edu

Track 3. Refrigerants & Refrigerants

Refrigeration is a critical element of modern life, from preserving food and medicine to maintaining comfort. With significant changes on the horizon for refrigerant regulations, along with new applications for refrigeration systems, understanding both the fundamental and advanced concepts and issues related to refrigeration is more important than ever before. Papers and programs in this track focus on refrigerants and their regulations, refrigeration cycles and applications.

Track Chair: Jon Cohen | jonjcohen1@gmail.com

Track 4. Energy Storage and Grid Resiliency

Thermal and electrical energy storage can alleviate the mismatch between renewable energy availability and peak building energy demands, enabling the incorporation of more renewable energy into the grid. Integration of thermal energy storage (TES) with residential and commercial building envelopes or HVAC systems would reduce buildings' heating and cooling loads, level out peak energy demand, reduce HVAC size, increase energy savings, improve occupants' thermal comfort and allow flexibility for shedding and shifting building loads. These benefits will improve grid resiliency, thereby enabling more cost-effective electrification of buildings. Papers and programs in this track focus on advances in cost-effective TES materials and systems, integration of thermal TES in building envelopes or HVAC systems and grid resiliency.

Track Chair: Robin Bryant | RBryant@bandiflorida.com

Track 5. Pathways to Building Decarbonization

Decarbonization is urgently needed to slow climate change that is affecting the planet. Approximately 10% of global CO₂ emissions is attributable to embodied

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carbon in building materials and construction processes. Energy use in buildings accounts for about 40% of energy-related carbon emissions. Therefore, to accomplish building decarbonization goals, accounting for embodied carbon and carbon emissions from operational energy use is essential. ASHRAE and its members are leading the advancement of carbon neutral, net zero energy and decarbonization strategies in new construction, renovation and HVAC&R design for residential and commercial buildings.

This track highlights case studies and research across the globe on the methods being developed and policies being evolved to reduce carbon impacts on the global environment; tools and resources to make zero energy design and operation more easily achievable; innovative low-carbon materials and state-of-the-art technologies and strategies to achieve zero energy communities and campuses; and policies, regulations, codes, standards and utility and government programs for adoption and scale up of net zero (or net positive) energy building and community initiatives.

Track Chair: Joe Chow | joe.ashrae@gmail.com

Track 6. Artificial Intelligence

Artificial intelligence (AI) is being adopted by many aspects in our life. As sensor systems, internet connectivity, building management software and data collection become more sophisticated and ubiquitous, substantial opportunities exist to make buildings and HVAC systems and equipment “smarter.” Implementation of AI in building automation and control systems enables using data from Internet of Things devices and occupant behavior to improve operational energy efficiency, occupant comfort, security and maintenance, and to enhance utilization of renewable energy resources (e.g., wind, solar) and energy storage. Submissions in this track focus on applications for AI and machine learning technology in building automation and controls to enhance energy efficiency and comfort, cyber security, fault detection and diagnosis, operation of HVAC systems and equipment for load flexibility, and benefit from time-of-day energy prices.

Track Chair: Suzanne LeViseur | sleviseur@haddadeng.com

Track 7. Industrialized Construction: Opportunities and Challenges

Development and adoption of industrialized technologies and methodologies can accelerate construction speed, scale and quality. Whereas most other industries have

capitalized on digitization and process improvements, building construction practices have experienced slow, incremental changes. Industrialized construction can address shortages in skilled labor while increasing throughput, safety, quality and affordability. Examples include prefabricated mechanical pods, prefab panelized components for building envelopes and modular construction, although more innovation is needed to increase the cost-effectiveness of these approaches. This track disseminates advancements in building construction practices and workforce development and discusses opportunities and challenges associated with conventional and industrialized construction.

Track Chair: Stephanie Mages | s_mages@yahoo.com

Track 8. Ventilation and Indoor Environmental Quality

Indoor environmental quality (IEQ) is a vital consideration during all phases of a building's life because the indoor environment is closely linked to occupant comfort, satisfaction, productivity and health. Proper fire and smoke control design is also crucial for protecting building occupants. This track explores the design, operation and studies of ventilation, air distribution systems, and all IEQ aspects, including noise, vibration and lighting in residential and commercial buildings. Topics include aspects of ventilation and IEQ, such as filtration, changeovers, best practices for maintainability, fire ratings/dampers, detection and ventilation for toxic gases, operator safety in equipment rooms, OSHA requirements, industrial and hazardous spaces, additional occupant health and safety considerations and new building materials.

Track Chair: Ehab Mamdouh | ehab.mamdouh@ipec-eg.net

Track 9. Future Proofing the Built Environment:

In the face of climate change, weather extremes and energy supply disruptions and shortages, methods for designing, constructing and operating buildings and HVAC&R systems must be resilient and sustainable. In fact, resilience is a highlighted aspect of the current ASHRAE strategic plan. This track highlights innovative technologies and strategies that are evolving across the globe that reimagine our relationship with the built environment now and into the future, including design strategies for extreme climates and weather, appropriate responses to energy supply disruptions, and how all these factors are tied to resilience and energy conservation efforts.

Track Chair: Joshua Vasudevan | joshuavasudevan2011@gmail.com

2. Phoenix Annual – June 21-25, 2025

Conference Website: www.ashrae.org/conferences/2025-annual-conference-phoenix/2025-annual-conference-technical-program.

Program Focus at Phoenix Annual Conference

Track 1. Fundamentals and Applications

Fundamentals are the foundation for understanding applications in engineering. Key components of ASHRAE fundamentals include thermodynamics, psychometrics, fluid flow, and heat and mass transfer. This track provides opportunities for papers and presentations of varying levels across a large topic base. Concepts, design elements and shared experiences for theoretical and applied concepts of HVAC&R design are included.

Track Chair: Atilla Biyikoglu | abiyik@gazi.edu.tr

Track 2. HVAC&R Systems and Equipment

HVAC&R systems and equipment are constantly evolving to address the changing requirements of the built environment. Papers and programs in this track focus on the development of new systems and equipment, improvements to existing systems and equipment and the proper application and operation of systems and equipment.

Track Chair: Ng Yong Kong | nyk@nyk.com.my

Track 3. Research Summit

Active research, and the exchange of those research findings, are critical to the development of our HVAC&R industry and built environment. The 9th annual research summit invites researchers to share those results, including ASHRAE-sponsored research and research of interest to the ASHRAE community. Researchers are invited to present papers, extended abstracts, seminars, forums or participate in panel discussions. The Research Summit includes a partnership with ASHRAE's archival journal, Science and Technology for the Built Environment.

Track Chair: Haotian Liu | situlht@hotmail.com

Track 4. Workforce Development

As members of a professional organization, we recognize that the single greatest strength of our organization is its membership. This track is designed to allow those professionals an opportunity to develop in the areas of presentation skills, leadership, team-building, understanding various business operations, interpersonal skills, etc. In short, the Workforce Development Track will cover all aspects of business and career development outside of engineering/technical applications and lends itself to interactive session types such as workshops and forums.

Track Chair: Anuj Gupta | anuj@design2occupancy.com

Track 5. Industrial Ventilation, Refrigeration, Air-Conditioning and Energy Utilization

The industry sector accounts for roughly one third of the energy use in the US. Increasing efficiency demands are creating the impetus for new technology, targeted at industrial facilities. This track will explore these technologies and regulatory pressures facilitating them. This includes ventilation, refrigeration, and air conditioning for industrial facilities and strategies that can improve energy utilization such as, waste-heat recovery, high-temperature heat pumps, and ventilation techniques/strategies..

Track Chair: Vinod Venugopal | vinodpvgopal@gmail.com

Track 6. Heat Pumps, Refrigerants, and Decarbonization

Decarbonization is omnipresent and encapsulates many different elements. This track will focus on the development of heat pumps supporting decarbonization efforts. This

includes improvements to legacy technologies, the refrigerant transition and component development. Additionally, this track will further explore more novel approaches that includes not in-kind technologies and less popular heat pump solutions such as ground-source heat pumps.

Track Chair: Money Khanna | khannamoney@gmail.com

Track 7. Onsite Energy Storage

Thermal and electrical energy storage can alleviate the mismatch between renewable energy availability and peak building energy demands, enabling the incorporation of more renewable energy into the grid. Integration of onsite storage (either thermal or electrical) with residential and commercial building envelopes or HVAC systems would reduce buildings' heating and cooling loads, level out peak energy demand, reduce HVAC size, increase energy savings, improve occupants' thermal comfort and allow flexibility for shedding and shifting building loads. These benefits will improve grid resiliency, thereby enabling more cost-effective electrification of buildings. Papers and programs in this track focus on advances in cost-effective materials and systems, design, optimization and control as well as the integration of onsite storage in building envelopes or HVAC systems and grid resiliency.

Track Chair: Kevin Brown | kevin@kbsquared.net

G. OTHER UPCOMING WORKSHOPS, CONFERENCES AND EVENTS

1. 2025

- **ASHRAE Winter Meeting** - Feb. 8-12, 2025 – Orlando, FL - www.ashrae.org/conferences/2025-winter-conference-orlando
- **IGSHPA 2025 Annual Conference** March 11 – 13 | Champaign, IL Contact the International Ground Source Heat Pump Association at info@igshpa.org or <https://igshpa.org>
- **Third International Conference on Energy and Indoor Environment for Hot Climates**, April 23-24, 2025, Doha, Qatar www.ashrae.org/hotclimates2025
- **CLIMA 2025** | June 4-6 | Milan, Italy, Politecnico Di Milano - Campus Bovisa | Contact the organizers at info@climaworldcongress.org <https://www.climaworldcongress.org/>
- **ASHRAE Annual Meeting** - June 21-25, 2025 – Phoenix, AZ - www.ashrae.org/conferences/2025-annual-conference-phoenix
- **ASHRAE Conference for Integrated Design, Construction & Operations**, August 13-15-2025 – Denver, CO - www.ashrae.org/conferences/topical-conferences/2025-ashrae-conference-for-integrated-design-construction-operations

Announcements & Reminders for FG (TC/TG/TRG & MTG) Chairs Annual Meeting

- **IEQ 2025 Conference, Co-Organized by ASHRAE and AIVC**, September 24-26, 2025, Montreal, Quebec, Canada www.ashrae.org/ieq2025
- **2025 ASHRAE Building Decarbonization Conference**, October 22-24, 2025, Chicago IL - www.ashrae.org/conferences/topical-conferences/2025-ashrae-building-decarbonization-conference
- **2025 Buildings XVI Conference**, December 8-11, 2025, Clearwater Beach, FL, www.ashrae.org/conferences/topical-conferences/2025-building-xvi-conference

2. 2026

- ASHRAE Winter Meeting - Jan. 31-Feb. 4, 2026 – Las Vegas, NV
- ASHRAE Annual Meeting - June 27-July 1, 2026 – Austin, TX