THE RESEARCH & TECHNICAL ACTIVITIES

REPORT

Release 1

TBD

Donna Daniel Tara Thomas Steve Hammerling

Assistant Manager Research Technical Services Coordinator Manager Research & Technical Services

FOR TC/TG/MTG/SSPC CHAIRS, VICE CHAIRS & RESEARCH SUBCOMMITTEE CHAIRS

2025 WINTER MEETING

The Winter meetings of the Research Administration Committee (RAC), Technical Activities Committee (TAC), Technology Council, and the Board of Directors were recently completed with the results below. This report also includes information for RAC’s and TAC’s upcoming Spring & Annual meeting.

NEW PROJECTS AWARDED

The following four projects were approved for award in Orlando as follows:

* **0003-WSP,** *“Design Guide for Radiant Heating and Cooling Systems”;*Responsible Committee: **TC 6.5** (Radiant Heating and Cooling), Co-funding: None; Estimated Duration: 24 months; Cost to ASHRAE: $77, 812. Contractor: Technical University of Denmark
* 1919-TRP, “*Evaluation of Standard 103 Transient Components and Thermostat Cycle Times on the Resulting AFUE”);* Responsible Committee: TC 6.03, (Residential and Light Commercial Forced Air Heating and Cooling Systems); Co-funding: None; Estimated Duration: 30 Months; Cost to ASHRAE: $235,000 Contractor: Creative Thermal Solutions.
* 1947-TRP, “*Climate change driven extreme temperature effects for efficiency and resilience map of heat pump technology”);* Responsible Committee: TC 2.05, (Global Climate Change); Co-funding: None; Estimated Duration: 36 Months; Cost to ASHRAE: $138,732 Contractor: University of Alabama.
* 1964-TRP, “*Optimizing Heating System Performance in Warmup and Setback Modes”);* Responsible Committee: TC 1.04, (Control Theory and Application); Co-funding: None; Estimated Duration: 24 Months; Cost to ASHRAE: $195, 301 Contractor: Louisiana State University.

POTENTIAL PROJECTS FOR BID IN SPRING 2025

A portion of the following eleven tentative research projects (TRPs) could potentially be released for bid or re-bid this Spring if ready by May 15th:

Approved Work Statements Available for Possible Bid in Spring 2025 if ready:

* **0001 WSP**, *“Update of ASHRAE Publication: Application of Manufacturers’ Sound Date @1998”;* Responsible Committee: TC 2.06 (Sound and Vibration); Co-Sponsors: None. Co-funding: None; Recommended Contractor:TBD; Estimated Duration: 18 months; Cost to ASHRAE: $150k Status: **Clear RAC Approval conditions with RL so project can bid.**
* **1811-TRP**, *“Determining Occupancy Patterns in Clusters of Buildings with Data Drawn from Web Based Social Media and Mobile Positions”;* Responsible Committee: **TC 1.05** (Emerging Computing Applications); Co-Sponsors: TC 7.10, Occupant Behavior in Building Design and Operation; Co-funding: None; Recommended Contractor:TBD; Estimated Duration: 24 months; Cost to ASHRAE: $220k Status: **Clear RAC Approval conditions with RL so project can bid.**
* **1825-TRP-C**, *“Effects of Locally Provided Makeup Air”;* Responsible Committee: **TC 5.10 (**Gaseous Air Contaminants and Gas Contaminant Removal Equipment); Co-Sponsors: TC 5.3, Room Air Distribution, TC 2.1, Physiology and Human Environment; Co-funding: None; Recommended Contractor:TBD; Estimated Duration: 18 months; Cost to ASHRAE: $287k Status: **Clear RAC Approval conditions with RL so project can bid.**
* **1873-TRP-C**, *“Upper-Air Ultraviolet Germicidal Irradiation (UVGI) for Tall Spaces”;* Responsible Committee: **TC 2.09, (**Ultraviolet Air and Surface Treatment); Co-Sponsors: TC 9.6, Healthcare Spaces, Co-funding: None; Recommended Contractor:TBD; Estimated Duration: 18 months; Cost to ASHRAE: $210k Status:: **Expand bidders list and clear RAC Approval conditions with RL so project can bid.**
* **1882-TRP**, *“Procedure for Estimating Occupied Space Sound Levels in the Application of UFAD Air Terminals and Air Outlets”* Responsible Committee: **TC 2.06,** Sound and Vibration, Co-Sponsors: TC 5.03, Room Air Distribution; Co-funding: None; Recommended Contractor:TBD; Estimated Duration: 18 months; Cost to ASHRAE: $190k Status: **Clear RAC Approval conditions with RL so project can bid.**
* **1895-TRP-C**, *“Effect of penetration through particle pre-filters on the performance of gas filters”;* Responsible Committee: **TC 2.03 (**Gaseous Air Contaminants and Gas Contaminant Removal Equipment); Co-Sponsors: TC 2.04 Particulate Air Contaminants and Particulate Contaminant Removal Equipment , GPC 35 Method for Determining the Energy Consumption Caused by Air-Cleaning and Filtration Devices; Co-funding: None; Recommended Contractor:TBD; Estimated Duration: 24 months; Cost to ASHRAE: $210k Status: **Clear RAC Approval conditions with RL so project can bid.**
* **1918-TRP-R**, *“The verification of openings, the limitations fo openings, air distribution and humidity conditions in naturally ventilation spaces to complement section 6.4 of ASHRAE Standard 62.1”;* Responsible Committee: **TC 4.03 (**Ventilation and Infiltration Requirements); Co-Sponsors: None; Co-funding: None; Recommended Contractor:TBD; Estimated Duration: 12 months; Cost to ASHRAE: $106k Status: **Clear RAC Approval conditions with RL so project can bid.**
* **1925-TRP-C**, *“Development of view clarity metrics for fenestration systems”;* Responsible Committee: TC 4.05 (Fenestration); Co-Sponsors: None; Co-funding: None; Recommended Contractor: TBD; Estimated Duration: 24 months; Cost to ASHRAE: $200k **Status: Clear RAC Approval conditions with RL so project can bid.**
* **1936-TRP-C**, *“Evaluation of relative impact of air change rate (ACR) and airflow patterns on the ventilation performance of indoor spaces”;* Responsible Committee: **MTG.ACR** (Air Change Rate); Co-Sponsors: None; Co-funding: Price Industries $60k, Phoenix Control $25k; Recommended Contractor:TBD; Estimated Duration: 36 months; Cost to ASHRAE: $315k Status: **Clear RAC Approval conditions with RL so project can bid.**
* **1950-C-TRP**, *“Effect of residential exhaust terminations on jet mechanics and resulting required intake separation”;* Responsible Committee: **TC 4.03** Ventilation Requirements & Infiltration;**),** Co-Sponsors: SSPC 62.1, Ventilation and Acceptable Indoor Air Quality; None; Co-funding: None; Recommended Contractor:TBD; Estimated Duration: 24 months; Cost to ASHRAE: $250k Status: **Clear RAC Approval conditions with RL so project can bid.**
* **1970-TRP-C**, *“Study of Grout Heat Exchangers”;* Responsible Committee: **TC 6.08 (**Geothermal Heat Pump and Energy Recovery Applications); Co-Sponsors: None; Co-funding: None; Recommended Contractor:TBD; Estimated Duration: 12 months; Cost to ASHRAE: $100k Status: **Clear RAC Approval conditions with RL so project can bid.**

WORK STATEMENTS REVIEWED AND APPROVED OR RETURNED WITH COMMENTS

A total of five work statements and one work statement publication were submitted by the TCs for review at the RAC winter meeting. None were accepted-is, three were conditionally accepted, and two were returned with comments. See below for the status of each project after this review.

Conditionally Approved Work Statements:

0001-WSP,

1811-WS,

1882-WS,

Work Statements Returned with Comments:

1955-WS,

1977-WS

**A revised work statement for any of the returned projects listed above can be submitted to the MORTS on or before March 15, 2025 to be considered at RAC’s Spring meeting or on or before May 15, 2025 in order to be considered at RAC’s Annual meeting. If a work statement can’t be revised that quickly, the next scheduled deadline for RAC consideration is August 15, 2025.**

WORK STATEMENTS PREVIOUSLY RETURNED TO TCs

TC/TGs should work with their Research Liaison to respond to written comments on the work statement provided by RAC via letter and revise the work statement appropriately. Please note that topics will be dropped from this plan if the work statement is not approved for bid after four years on the Research Implementation plan.

REVIEW OF RESEARCH TOPIC ACCEPTANCE REQUESTS (RTARs)

RAC reviewed zero RTARs at the Winter 2025 meeting. The current RTAR form can be found on the “Research” page of the ASHRAE website at [www.ashrae.org/research](http://www.ashrae.org/research).

The next submission date for RTARs and WSs is May 15, 2025. The standing RAC submission dates for new and revised RTARs and WSs are as follows each year:

March 15 – RAC Spring meeting consideration in April

May 15 – RAC Annual meeting consideration in June

August 15 – RAC Fall meeting consideration in Sept. or Oct.

December 15 – RAC Winter meeting consideration in January/February

SOCIETY RESEARCH IMPLEMENTATION PLAN

The Society Research Implementation Plan is now being updated following the winter meeting of RAC. New RTARs will be added, and tentative research project RFPs will be added or dropped depending upon their bid status. This change to the way the implementation plan is updated necessitated that time limits be placed on how long a topic can remain on the plan without being approved for bid. The winter updates to the plan should be in place by April 1, 2025 or sooner and placed on [www.ashrae.org/research](http://www.ashrae.org/research).

DEADLINES

The following deadlines apply for the next several months. Please recognize that they are not arbitrarily set but are set to meet subsequent events. So, if you miss them, your input may be delayed for six months or in some cases, for a year. All research submissions should be sent to the Manager of Research and Technical Services (MORTS), Steve Hammerling, (morts@ashrae.net).

**March 1, 2025** Phoenix Registration Opens

**March 5, 2025** Conference Papers and Extended Abstracts due

**March 7, 2025                   Completed TC/TG/TRG Meeting room request web forms for 2025** meeting are due at [www.ailogistics.com/ashrae](http://www.ailogistics.com/ashrae). A link to the form and Annual Conference Policies & Procedures is TC web page of the ASHRAE website - [www.ashrae.org/technical-resources/technical-committees](http://www.ashrae.org/technical-resources/technical-committees).
Meeting requests must be submitted for the following reasons:

* Main/Full Committee plans to meet in-person in Phoenix
* Subcommittee(s) plans to meet virtually in advance of the Conference prior to June 20. We recommend that all subcommittees meet virtually in advance of the 2025 Annual Conference.
* Pre-determined 2-hour time blocks for committee meetings.

Lastly, **ASHRAE does NOT provide projectors**, but ASHRAE will provide a screen, table, and power for a **members’ projector**, if requested on the Meeting room request web form.

**March 15, 2025 New or revised Work Statements and RTARs with TC vote are due to MORTS** **for RAC consideration at the 2025 RAC Spring meeting**. Also on this date, TRPs that will bid in the spring are posted for bid on this date.

**April 2, 2025** Conference Paper Accept/Revise/Reject Notifications.

 Extended Abstract Accept/Reject Notifications.

**April 9, 2025** Revised Conference Papers Due

**April 11, 2025** Debate, Panel, Seminar, Forum, Workshop Scheduling Notifications

**April 14, 2025** TC/TG/TRG meeting minutes from the Orlando meeting are posted on TC website and distributed to membership by this date or sooner. Please make a special effort to meet this deadline. We have received complaints that many TC minutes are typically released just prior to the next Society meeting. Members outside of your committee are interested in your committee’s work.

**April 23, 2025** Conference Paper Final Accept/Reject Notifications

**May 15, 2025 New or revised Work Statements and RTARs with TC vote are due to MORTS for RAC consideration at the 2025 RAC Annual meeting**.

**May 15, 2025** Bids are due for all TRPs released for bid in spring 2025.

**May 21, 2025** TC/TG/TRG meeting agenda for the Phoenix meeting are posted on TC website and distributed to membership. Please make a special effort to meet this deadline. We have received complaints that many TC agendas are released just prior to the TC’s meeting.

**May 28, 2025** Conference Paper Abstracts and Paper Session Requests Due for 2026 Winter meeting in Las Vegas, NV.

**June 1, 2025** Website opens for Seminar, Forum, Debate, Workshop, and Panel Discussion Proposals for Winter meeting in Last Vegas.

**June 1, 2025** All PowerPoint presentations for the Phoenix meeting program must be uploaded to ASHRAE website by this date for review.

**June 18, 2025** Conference Paper Abstract Accept/Reject Notifications for 2026 Winter meeting in Las Vegas, NV sent by CEC

**June 21, 2025** ASHRAE 2025 Annual conference begins in Phoenix, AZ

**June 19, 2025** Website Opens for Extended Abstracts and Seminar, Workshop, Forum, Debate, and Panel Proposals for 2026 Winter meeting in Las Vegas, NV

**June 24th, 2025** Contractor recommendations are due to MORTS for all TRPs bid in spring 2025. E-mail to ddaniel@ashrae.org

**August 1, 2025** Debate, Panel, Seminar, Forum, Workshop, and Debate Proposals due for Las Vegas meeting.

**August 15, 2025 New or revised Work Statements and RTARs with TC vote are due to MORTS for RAC consideration at the 2025 RAC Fall meeting**.

**September 3, 2025** Las Vegas meeting Conference Papers Due

**September 24, 2025** Conference Paper Accept/Revise/Reject Notifications for 2026 Winter meeting in Las Vegas, NV sent by CEC

**October 3, 2025** Las Vegas meeting Debate, Panel, Seminar, Forum, Workshop Scheduling notifications sent by CEC

**October 8, 2025** Revised Las Vegas meeting Conference Papers Due.

**October 27, 2025** Las Vegas meeting Conference Paper Final Accept/Reject notifications sent by CEC.

**December 14, 2025** All PowerPoint presentations for the Las Vegas meeting must be uploaded to ASHRAE website by this date for review.

**January 31, 2026** ASHRAE 2026 winter conference begins in Las Vegas, NV

**OTHER NEWS:**

1. **ANNOUNCEMENTS**
2. **2024-2025 Homer Addams Award**

The Homer Addams Award is intended for a graduate student that worked on an ASHRAE research project in the past 2 years and lead authored a technical paper on the project results. This year’s award recipient is Dr. Cary Faulkner of the University of Colorado - Boulder for their work on RP-1661, *Development of Near-Optimal Control Sequence for Chiller Plants with Water Side Economizer Using Dynamic Models*. The award includes a $5,000 honorarium payment and the submission deadline for nominations each year is December 15th. For more information on this award, please go to the research page of the ASHRAE Website at [www.ashrae/research](file:///C%3A%5CUsers%5Cshammerling%5CAppData%5CLocal%5CMicrosoft%5CWindows%5CINetCache%5CContent.Outlook%5CTX8T3ZJC%5Cwww.ashrae%5Cresearch) .

1. **2025 Service to ASHRAE Research Award Recipient – Paul Turnbull**

Paul Turnbull was presented to the Service to ASHRAE Research Award at the 2025 Winter Meeting in Orlando. He was nominated by TC 5.6.

RAC approved changes to the award criteria to allow multiple awards per year if candidates get 20 points. Information is available at [www.ashrae.org/technical-resources/research/research-grants-awards](http://www.ashrae.org/technical-resources/research/research-grants-awards). The deadline for nominations is September 1st.

1. **2024-2025 George Hightower Award Recipient – Phil Naughton for work on TC 9.11**

The award recognizes contributions to the activities of ASHRAE Technical Committee including contributions to the handbook and program during the past four years. Naughton will be invited to receive this award at the Plenary Awards session in Phoenix.

1. **2024-2025 New Investigator Award Recipient – Yunyang Ye**

Dr. Yunyang Ye with the University of Alabama won the award. The ASHRAE New Investigator Award (NIA) assists new university faculty members to develop research capabilities in HVAC&R related fields. The award includes a $125,000 award payment and the submission deadline for nominations each year is December 1st. For more information on this award, please go to the research page of the ASHRAE Website at [www.ashrae.org/technical-resources/research/new-investigator-award](http://www.ashrae.org/technical-resources/research/new-investigator-award).

1. **Scope Change Approved for TC 9.7**

TAC approved the following title change for TC 9.7:

TC 9.7 is concerned with the application of ventilating, air-conditioning, refrigeration, life safety, and energy conservation systems ~~to educational (secondary school, college) facilities.~~ for educational facilities, including early childhood education through higher education facilities.

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 and 2026 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 meetings.

1. **REMINDERS & REQUESTS**
2. **Rosters Access & Distribution**

Remember, the current 2024-2025 roster for your TC, TG or MTG is in effect until after the June meeting this year. 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.  In addition, each member can view all of the rosters of their committees on the ASHRAE Website by logging into the member’s only section at [https://eweb.ashrae.org/eweb/dynamicpage.aspx?webcode=ASHRAECommitteeInfo&Site=ASHRAE](https://urldefense.com/v3/__https%3A/eweb.ashrae.org/eweb/dynamicpage.aspx?webcode=ASHRAECommitteeInfo&Site=ASHRAE__;!!GNRGdu3_!z6ChW7KQ03ex69EoFL_3Joj8vH4ASKYvunW4sBV88UAm62QXMmaFq1IprXgKOOA$). Click on the "blue" roster text at the left-hand side of a committee to reveal the roster with linked contact information.

The new committee rosters for Society year 2025-2026 will be created based upon the update information that each TC, TG or MTG chair provides to their Section Head and staff using the Online roster update form.

1. **Option for TC Subcommittee Meetings via Conference Calls and Web Meetings**

More and more TCs are taking advantage of a new Society service that allows TCs to hold subcommittee meetings by phone and/or web prior to a Society meeting. Many TCs are finding this to be a more efficient way for them to conduct subcommittee business and it also allows TC members that can’t travel to meetings on a regular basis a way to still contribute to the TC. Such a change can also eliminate potential conflicts with the TC’s program sessions at Society meetings. Please pass your conference call/web meeting/webinar requests on to the Manager of Research & Technical Services, Steve Hammerling, at shammerling@ashrae.org.

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

The on-going need is for 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 would include courses with a focus on new technologies that need to be shared, fundamentals that may have been forgotten, standard applications that need explanation, and courses based on new design guides.

The objective of the ASHRAE Learning Institute (ALI) is to provide quality, authoritative and practical technical information of broad interest.

Contact Karen Murray (ASHRAE staff) at kmurray@ashrae.org with new course ideas.

1. **TAC Presentation template Available for TC members to use with local Chapter**

The presentation template allows TC members, without a lot of effort, to give a presentation to their local chapter on TAC and the TCs in general and to also customize a few slides with information specific to their own TC or TCs. The template is posted now on the Technical Committee page of the ASHRAE website for download - <http://www.ashrae.org/tcs>

1. **ASKTAC**

An email has been set up for members to ask TAC any TAC/TC related questions, comments, etc. Any questions or comments, please email - asktac@ashrae.net.

1. **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.

1. **New TC websites administration**

Chairs and webmasters were recently sent instructions on how to access and edit TC website information. The changes are intended to make things easier to edit and administer content. Please email staff (shammerling@ashrae.org) if you have questions.

1. **UPCOMING WORKSHOPS, CONFERENCES AND EVENTS**

**2025**

* + **Third International Conference on Energy and Indoor Environment for Hot Climates,** April 23-24, 2025, Doha, Qatar [www.ashrae.org/hotclimates2025](http://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/](http://www.climaworldcongress.org/)
	+ **ASHRAE Annual Meeting -** June 21-25, 2025 – Phoenix, AZ - [www.ashrae.org/conferences/2025-annual-conference-phoenix](http://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](http://www.ashrae.org/conferences/topical-conferences/2025-ashrae-conference-for-integrated-design-construction-operations)
	+ **IEQ 2025 Conference, Co-Organized by ASHRAE and AIVC**, September 24-26, 2025, Montreal, Quebec, Canada [www.ashrae.org/ieq2025](http://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](http://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](http://www.ashrae.org/conferences/topical-conferences/2025-building-xvi-conference)

**2026**

* + ASHRAE Winter Meeting - Jan. 31-Feb. 4, 2026 – Las Vegas, NV
	+ ASHRAE Annual Meeting - June 27-July 1, 2026 – Austin, TX
1. **UPCOMING TC AWARD NOMINATION SUBMISSION DEADLINES**

**2025-2026 Hightower Award Nomination Process and Deadline**

Nominations for the 2025-2026 George B. Hightower Technical Achievement Award are due to your Section Head by September 1, 2025. The award 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 and Forms…” heading: <http://www.ashrae.org/tcs>

**2025-2026 Service to ASHRAE Research Award Nomination Process and Deadline**

RAC approved changes to the award criteria to allow multiple awards per year if candidates get 20 points. Information is available at [www.ashrae.org/technical-resources/research/research-grants-awards](http://www.ashrae.org/technical-resources/research/research-grants-awards). The deadline for nominations is September 1st.

Please let me know if I can be of any other assistance.

Sincerely,

Steve Hammerling