



Programs Update

ASHRAE Winter Conference 2019
Atlanta

Conference Meetings (*sponsored or co-sponsored by TC9.9*)

Sunday, January 13, 11:00 am – 12:30pm:

Seminar 16 - The: Best of Engineer's Notebook, 3rd Edition

1. Data Centers, Cooling Towers and Thermal Storage. Sponsored by TC 9.1

Sunday, January 13, 1:30 pm -3:00pm:

Conference Paper Session 5 - Analysis of HVAC Systems for Specific Applications (TC9.9 co-sponsor 2/4 papers)

Conference Meetings (*sponsored or co-sponsored by TC9.9*)

Monday, January 14, 8:00am – 9:00am:

Seminar 24 – ASHRAE Thermal Guidelines Driving Data Center Performance & Innovation (TC9.9 Sponsored)

Tuesday, January 15, 11:00am-12:30pm:

Seminar 59 – Transient Temperature Changes in the Data Center: Should We Be Worried? (TC9.9 Sponsored)

Wednesday, January 16, 11:00am – 12:30pm:

Debate 4 -Intelligent, Efficient and Resilient Data Centers: What is Needed? Rules of Thumb, Science, or Just Technology? (TC9.9 Sponsored)

Conferences Papers:

- 156 conference paper abstracts submitted
- 149 approved
- 70 conference papers presented
- 20 Conference Paper Sessions

- **Technical Papers**

- 16 Technical papers received
- 12 Technical papers presented
- 4 Technical Paper Sessions

- **Seminars:**

- 84 submitted
- 71 presented

1. Systems & Equipment in the Built Environment
2. Fundamentals and Applications
3. Optimization in HVAC&R
4. Commissioning New & Existing Buildings
5. Occupant Health & Safety
6. Modeling Throughout the Building Life Cycle
7. Professional Development
8. Research Summit
9. Radiant Heating & Cooling Mini-Track

NEW:

ASHRAE Announces Extended Abstract Option for 2019 Annual Conference Research Summit Track
[Extended abstract submissions are open here.](#)

For the first time, ASHRAE is making available to authors an extended abstract option for the 2019 Annual Conference Research Summit track only.

“Extended Abstracts accepted for the Research Summit could lead to publication in Science and Technology for the Built Environment, ASHRAE’s research journal,” said Carrie Anne Monplaisir, conference chair. “Authors may receive an invitation to submit a full-length paper for the journal.”

Accepted extended abstracts will be presented orally at the 2019 Annual Conference, published in ASHRAE Transactions and indexed in major search engines.

Extended Abstracts Fast Facts

- Available only for the Research Summit track presented at ASHRAE’s annual conferences beginning with 2019 conference
- Subject matter must be appropriate for the Research Summit track.
- Three pages in length (maximum length, including figures and references)
- Extended abstracts will undergo one round of single blind review with two reviewers.
- Extended abstracts will be due Feb. 8.
- Authors of accepted extended abstracts would bring their latest research for an oral presentation at the conference.

- **Wednesday, January 2, 2019** - Website Opens for Seminar, workshop, Forum, Debate and Panel Proposals
- Friday, February 8, 2019 - Program (Seminar, Forum, Workshop, Debate and Panel) Proposals Due
- Friday, February 8, 2019 - Revised Conference Papers/Final Technical Papers Due
- Friday, February 8, 2019 -- Extended abstracts due
- Tuesday, February 19, 2019 - Conference and Technical Paper Final Accept/Reject Notifications
- March 7, 2019 -- Extended abstracts final accept/reject notifications
- March 8, 2019 -- Extended abstracts scheduled for presentation

- **Conference Paper Sessions-**

- Papers on current applications or procedures, as well as papers reporting on research in process.
- These papers differ from technical papers in that they are shorter in length and undergo a much less stringent peer review.

- **Debates-**

- Debates highlight hot-button issues
- Experts, either on teams or as individuals, present different sides of an issue in debate format.
- Each participant presents evidence for or against a specific statement or question

- **Forums-**

- Forums are “off-the-record” discussions held to promote a free exchange of ideas.
- Reporting of forums is limited to allow individuals to speak confidentially without concern of criticism.
- There are no papers attached to these forums.

- **Panels-**

- Panel discussions can feature a broad range of subjects and explore different perspectives on issues in the industry.
- A panel may feature discussions about integrated project delivery among designers, builders and facility management professionals.

- **Seminars-**
 - Seminars feature presentations on subjects of current interest.
 - Papers are not available from the Society; however, seminar PowerPoint presentations with audio descriptions of the presentations are posted online.
- **Technical Paper Sessions-**
 - These sessions present papers on current applications or procedures, as well as papers resulting from research on fundamental concepts and basic theory.
- **Workshops-**
 - Workshops enable technical committees and other ASHRAE committees to provide a series of short presentations on a topic requiring specific expertise. These short presentations are provided with an increased emphasis on audience participation and training in a specific set of skills.

Technical Papers:

- Technical Papers are presented by authors at ASHRAE Winter and Annual Conferences.
- Technical Papers submitted for review must be both technically accurate and clearly written.
- Technical Papers undergo a rigorous double-blind review and must be approved by three reviewers knowledgeable in the subject matter.
- Presentation is by poster or orally, if grouped into a session with related papers.
- Technical Papers can be up to 30 double-spaced manuscript pages in length, including tables and charts, and a maximum of 12 figures (not counted in the page count).
- Accepted Technical Papers are available as hard-copy preprints in the bookstore during the conference.
- The Technical Papers must be presented at the conference in order to be published in *ASHRAE Transactions*, where they will be included with questions and answers (if any)

Conference Papers:

- Conference Papers are shorter than Technical Papers, undergo a less stringent review and can be prepared closer to the conferences.
- Unlike Technical Papers, abstracts of Conference Papers are submitted first for review.
- Upon acceptance, papers are due three months after abstract acceptance, undergo a single-blind review (the author(s) names are included in the paper; however, reviewer's remain anonymous), and must be approved by two reviewers.
- Upon approval, papers are scheduled for oral presentation.
- Conference Papers can be no more than 8 single-spaced pages in length total (includes text, tables, figures, etc.).

1. HVAC&R Fundamentals and Applications
2. Systems and Equipment
3. Refrigeration and Refrigerants
4. Cutting Edge Approaches
5. High Efficiency Design and Operation
6. Big Data and Smart Controls
7. Ventilation, IAQ and Air Distribution Systems
8. Standards, Guidelines and Codes

Nick Gangemi, Program Chair

585-721-8795

nick.gangemi6@gmail.com

- 1. Systems & Equipment in the Built Environment:** Selection of equipment and systems is paramount to HVAC&R design. Papers and programs in this track will assist designers, engineers, and operators in the design, selection, and operation of HVAC&R systems and equipment.
Track Chair: Kimberly Pierson
kdpwildcat@gmail.com
- 2. Fundamentals and Applications:** Fundamentals are the foundation for understanding applications in engineering. Key components of ASHRAE fundamentals include thermodynamics, psychometrics, 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: Gary Debes
gary.debes@comcast.net
- 3. Optimization in HVAC&R:** The application of systematic optimization techniques is gaining ground in the field of HVAC&R, resulting in significant cost and performance benefits. This track seeks programs focused on using models to inform decision-making for design and operation of HVAC&R and High-Performance Buildings. Topics of interest include but are not limited to: novel optimization techniques and their application to HVAC&R, optimization of heat transfer surfaces, component optimization, system optimization, optimization of high performance buildings, model-predictive control and other methods focusing on minimizing first and operating costs of these systems.
Track Chair: Vikrant Aute
vikrant@umd.edu

4. **Commissioning New & Existing Buildings:** With low energy and zero energy buildings becoming more prevalent, there are many issues that arise with installation, startup, commissioning and O&M. Making sure that the design intent of these more complicated HVAC systems is understood by all team members and building operators is key to the building's success. This track will address an array of topics including lessons learned, improvement of process and team communications and effort to improve the installation, startup, O&M and commissioning of HVAC systems.
Track Chair: Raul Simonetti
raul.simonetti@carel.com
5. **Occupant Health & Safety:** Indoor air quality has become a vital consideration during all phases of a building's life as it is closely linked to comfort, occupant satisfaction, productivity and health. Proper design of fire and smoke control is another crucial method in protecting building occupants. This track seeks presentations and papers that explore these links, particularly in ways that make the case for high levels of indoor air quality compelling to building owners. Topics including (but not limited to): filtration, change-overs, best practices for maintainability, fire ratings/dampers, detection and ventilation for toxic gases, operator safety in equipment rooms, OSHA requirements, industrial and hazardous spaces, and many other design aspects directly related to occupant health & safety.
Track Chair: Christine Reinders
christinereinders@gmail.com
6. **Modeling Throughout the Building Life Cycle:** Modeling was originally concerned primarily with building and system design specifications. The demands of energy efficient operation brought about the need for modeling of part-load operation for a variety of off-design conditions. The explosion of computational capacity and data collection capability is rapidly expanding the scope, complexity and practical applications of modeling both during design, but even more so for fault detection, diagnostics and operational optimization. Presentations and papers are solicited related to all aspects of building modeling, with a particular interest in successful applications that have extended modeling into operational phases of the building life cycle.
Track Chair: Nivedita Jadhav
nivi2307@gmail.com

7. **Professional Development:** As members of a professional organization, we not only participate for the great value of technical exchange, but also the interpersonal exchange. 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 Professional Development Track will cover all aspects of business outside of engineering/technical applications and lends itself to interactive session types such as workshops and forums.
Track Chair: Rupesh Iyengar
rupesh_iyengar@yahoo.com
8. **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 seventh 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, 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: Bing Liu
bliu@neea.org
9. **Radiant Heating & Cooling Mini-Track:** As more and more jurisdictions and building owners are answering the call to establish higher energy-use standards for their construction projects, design teams are looking beyond traditional HVAC solutions to provide energy efficiency while maintaining occupant comfort and safety. A system that continues to gain momentum in North America is radiant heating and cooling. A radiant design strategy embodies the integration of architectural design and HVAC systems design with overall energy efficiency and comfort in mind. The papers and presentations in this track will explore the fundamental concepts of how different radiant systems work (high mass vs. low mass), how they are designed, constructed and optimally controlled, and where they have been used in the past, with lessons learned and documented performance data.
Track Chair: Devin Abellon
devin.abellon@yahoo.com