

Programs for Albuquerque and Beyond

So, do you have an innovative project or an absolute disaster that you have worked on? Do you want to have your ASHRAE conference fees waived? If you give a presentation at the conference, you go for free! Here is how it works...

Technical Program

Preliminary program submissions include energy efficient design and operation of data centers, central chilled water plant innovations, and latest research on refrigeration system and components and design applications for sustainable buildings.

Submission Types

Technical Papers: Require double-blind review, approved by three reviewers, maximum length: 30 pages.

Conference Papers: Abstract undergoes review for acceptance or rejection. Papers due 3 months after notification of abstract acceptance. Require single-blind review, approved by two reviewers, maximum length: 8 pages.

Seminar: Submit abstract for presentation w/ chair and 2-4 speakers, each speak approximately 20 minutes.

Forum: One moderator, no presentation, 60-minute open discussion.

Tracks

Track 1: What Is Sustainable Anyway? This track will discuss Sustainability and its overall affect on our environment as it pertains to all facets of energy consumption in the near term and the long term on new and existing building stock. How do present energy efficient standards compare to the proposed 189 and what is the additional cost? How will this affect us physically and financially? What are the short term and long term goals and benefits of sustainability? Are there simple and low cost intermediate steps as we progress? What can we do as ASHRAE members and how will other professions be affected? What will decisions by other professions (i.e., architects) have on our progress and ability to reach our goals? Case studies? How will IAQ be affected? What can be done to conserve water, sewer and electric uses in buildings?

Track 2: Energy Facts and Simulation Track As building design criteria changes to include sustainability and energy use, it is important that consideration be given to building energy use simulation methods. This track is intended to include topics that address this particular issue including but not limited to: current and future tools for modeling energy use, the importance of building energy simulation, the influence and incorporation of energy models on the design process, the accuracy of energy use models, etc. This track will also explore the use of an energy model as a tool to provide energy savings opportunities.

Track 3: Ventilation Systems Ventilation system design and maintenance is a wide-ranging topic. In this track, the objective is to address topics which are in significant interest at the present time, related to ventilation systems; starting with what's new in ASHRAE Standard 62.1-2010, discussion of what indoor contaminants should be controlled in occupied spaces, operation and maintenance of ventilation systems and specialized ventilation system requirements for applications such as dry climates, hot, humid climates and variable air volume systems.

Track 4: Refrigeration for the Future Track submissions are requested which address the need for cost effective and affordable advanced materials, components, refrigeration cycles, and system designs to improve energy efficiency of future refrigeration systems. In particular, submissions that address the energy consumption of entire systems throughout the entire operating regime to reduce annual energy consumption of the complete refrigeration system are requested. Furthermore, submissions that address the reduction of performance losses in the field due to installation deficiencies, operational effects and long-term degradation are sought.

Track 5: Central Plant Systems This track will highlight presentations and case studies of energy efficient central heating and cooling plants. For this track, the definition of central plant includes plants serving single buildings and plants serving campus style groups of buildings. Plant sizes could range from very small to very large. Submissions should include discussions of both successes and challenges. Case studies of innovative central plant design are encouraged.

Track 6: BIM/CAD/Paper and Pencils

Track 7: Energy Conservation vs. New Generation In the United States, buildings consume over 40% of energy produced and contribute to over a third of our CO₂ emissions. Current projections anticipate U.S. energy demands to increase by more than one-third by 2030, with electricity demand rising by more than 40 percent. As we continue to see a trend toward “net-zero” energy buildings, the debate continues as to what is the most effective method to curtail CO₂ emissions and global climate change. While some experts have stated that improving energy efficiency in our buildings is one of the most constructive, cost-effective ways to address the challenges of high energy prices, energy security and independence, and global climate change, others experts predict that implementing new generations technologies such as solar and wind, in conjunction with smart grid technology, will reduce our dependence on fossil fuels, thus reducing CO₂ emissions, and improving energy security. The series of sessions in this track illustrate the benefits of improved efficiency technologies verses new generation technologies and how the technologies promote net-zero energy buildings and contribute to lower CO₂ emissions.

Track 8: Living with HVAC&R Systems System designs can be advanced and efficient, but they are only as good as the actual operation after installation and start up. Uptime and simplicity often outweigh energy saving operation, even in green buildings. The series of sessions in this track will focus on the maintainability and optimization of installed systems. Potential topics include energy saving retro-fits, continuous commissioning, operations and maintenance and design with operability in mind.

Track 9: High Efficiency HVAC Systems As buildings are required to exceed ASHRAE Standard 90.1 by 30 percent or more and to meet LEED certification requirements, engineers are designing highly efficient HVAC systems. In addition to meeting ASHRAE's sustainability and net-zero energy goals, HVAC systems will have to be more energy efficient than previously designed. The series of sessions in this track illustrate ideas and designs for HVAC systems and their applications to various building types. New high performance building technology will be presented, integration approaches presented, and commissioning and operating strategies recommended.

Track 10: Professional Skills

Track 11: Data Center and High Density Cooling Data centers are very high energy facilities containing significant amounts of equipment gain in the space. What are the “state of the art” conditioning techniques and what is being done to minimize the HVAC energy use in these facilities. This track will explore energy savings opportunities associated with space conditions, cooling scenarios, cooling medium production and delivery.

Track 12: Unassigned

Deadlines

Technical Papers: Due for review on April 9, 2010. Present at Las Vegas (January 2011). See LV tracks below.

Conference Papers: Submit abstract online by April 9, 2010. Present at Las Vegas (January 2011). See LV tracks below.

Seminar: Submit abstract with title for individual presentation by January 30, 2010, to Sarah Maston (smaston@rdkengineers.com). Also submit short biography. I will put submissions together with a chair and multiple speakers. Also email me if you are interested in chairing a presentation.

Forum: Submit forum online.

For Technical or Conference Papers, tracks for the Las Vegas Winter Meeting are below:

- Track 1 Impact of Code Requirements on the work of an ASHRAE Member
- Track 2 Integrated Design Process
- Track 3 Low Energy Hospitality Design
- Track 4 Is that Ammonia in your Refrigeration (or What Else Is New in Low-GWP/ODP)?
- Track 5 “Greening” of the Industrial Base
- Track 6 Real Cost of Zero Energy Buildings
- Track 7 Impact of ASHRAE Standards on the Contractor Industry
- Track 8 Professional Skills

Links

Albuquerque Technical Program Information: <http://www.ashrae.org/events/page/2539>

Papers and Programs Information: <http://www.ashrae.org/events/page/1756>