

THE SQUIRREL CAGE —ALAMO ASHRAE

ASHRAE - ALAMO CHAPTER #65

SAN ANTONIO, TX

ISSUE: APIRL 2014 VOLUME LIII NO. 04

ALAMO ASHRAE PRESIDENT'S MESSAGE

Alamo ASHRAE,

April has been a very eventful month for Alamo ASHRAE. We had 34 people attend the Rampage Refrigeration Tour and Hockey game, 18 of which were students. Big thanks goes to Advantix for sponsoring a presentation on BEQ to over 70 architects, owners, engineers, contractors, and energy managers attended. We also had a webinar on IEQ and Energy Efficiency at the AIA office with over 30 in attendance, with 20 architects in attendance. We were able to recognize two amazing student chapter advisors Dr. Diana Glawe and Dr. Randy Manteufel at our April Trinity University lunch meeting with over 40 in attendance, 10 students. Thank you to everyone who attended and helped to squeeze all of those great events into April.

Our May lunch meeting, "Overcoming Objections to Energy Efficiency Investments" will be at Oak Hills Country Club on May 20. I highly encourage you to attend.

I'm really looking forward to playing at TPC San Antonio. Dan Seltzer has been hard at work planning quite the event. Please contact Dan Seltzer at Dan.Seltzer@lpl.com with any last minute questions.

Sincerely,

Rey Gutierrez, PE, LEED AP 2013-2014 Alamo ASHRAE President



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Eighteenth Annual Solar Race Car Event

Sponsors: Northside ISD, National Defense Education Program, The MITRE Corporation, Cryptologic and Cyber Systems Division,

Description: Over 200 elementary school teams racing their model

solar cars

Location: Don Hardin Athletic Complex, 7001 Culebra

Date and Time: Saturday, May 10th, 10 am - 3:30

Volunteer Roles: Starting line officials, finishing line officials,

scorekeepers, repair station crew

Contact: Bobby Blount, bb@mitre.org, 210-334-1320

OFFICER'S DIRECTORY—LOCAL CHAPTER

Officers

President
Rey Gutierrez, PE
210-269-4287
rey.gutierrez@imwaller.com

President-Elect Wes Weissgarber, PE 210-650-9005 wesw@mechreps.com

<u>Secretary</u> Raj Kapoor, PE 210-379-5849 raj.rajkapoor@gmail.com

Treasurer
Aaron Caldwell
210-516-1784
Aaron.Caldwell@trane.com

Board of Governors

Chris Garcia, PE 210-567-2919 garciac18@uthscsa.edu

Aaron Caldwell 210-516-1784 Aaron.Caldwell@trane.com

Rocky Ormand 210-499-0004 rockyo@texasairsystems.com

Todd Buck 210-415-9989 tbuck@hvac.mea.com

Committee Chairs

Attendance Rezaur Rahman 210-342-3483

rezaur@esaengineers.net

Honors & Awards Madison Bryer 210-598-7801

madison.bryer@texasairsystems.com

Chapter Technology Transfer Brad Gilbert 210-426-0887 bradg@htseng.com

Historian
Manuel Lizcano, PE
210-732-4440
MFLizcano@lceinc.net

Membership Promotion
Dan Torres
361-676-6805
dant@dxseng.com.

Refrigeration Chair
Fred Gleeson
210-496-3100
Fred.Gleeson@eeiengineers.com

Sustainability Chair Heather Holdridge

210-227-3335

hholdridge@lakeflato.com

Newsletter Editor
Baron Phillips
210-516-1704
baron.phillips@irco.com

Research Promotion
Daniel Seltzer
210-541-9967
daniel.seltzer@lpl.com

Student Activities
Mario Mijangos, PE
210-599-6120
mmijangos@brandteng.com

Website Editor
* Interim *
Matt Koch, PE, PhD
830-446-1839
mattkoch@scitex.us

YEA—Young Engineers
Christopher Delgado PE
210-253-2738
christopher.delgado@siemens.com

Govt Activities Chris Garcia, PE 210-567-2919 garciac18@uthscsa.edu

Meeting Date: March 18, 2014

Topic: Negligent Misrepresentation Claims and How They are Affecting Engineers

Location: Oak Hills Country Club—San Antonio Speaker: Adam J. Richie, P.E., Attorney-at-Law

Previous Meeting Attendance:

Aaron Caldwell, Adam Richie, Alison Gregg, Baron Phillips, Bill Wurzbach, Brad Gilbert, Brody Knudtson, Chris Delgado, Chris Garcia, Chuck Leske, Cliff Tilbury, Cowboy McCool, Dan Seltzer, Dick Grant, Gene Raanes, Herbert Odhiambo, Jennifer Schmidt, Jessica Ries, John Faultersack, John Freund, Jon Hermann, Matt Dunn, Mike Lawler, Orlando Palacios, Paul Deltz, Randall Manteufel, Rey Guttierrez, Richard DeLaCruz, Roger Mendez, Scott Moore, Steve Huck, Teny Varghese, Teresa Saldana, Tom Phillips, Walter Gleye, Waylon Sodd, Wes Weissgarber, Zac Morton

BOARD OF GOVERNORS MEETING MINUTES





APLRIL 2014

ALAMO ASHRAE

April MEETING MINUTES

April 3, 2014 - 7:00am-8:30 am - Egg and I

Presiding Officer: Rey Gutierrez

CALL TO ORDER

ROLL CALL: President – Rey Gutierrez, President Elect – Wes Weissgarber, Treasurer – Aaron Caldwell, Governor – Aaron Caldwell, CTTC – Brad Gilbert, MP – Teresa Saldana, RP – Dan Seltzer, Student Activities – Mario Mijangos, YEA – Chris Delgado, Historian – Manuel Lizcano, Newsletter – Baron Phillips, Government Activities Chairs – Rey Gutierrez, Wes Weissgarber and Chris Delgado

OFFICER & CHAIR REPORTS

Treasurer - Aaron Caldwell

Financial Report

CRC

CTTC - Brad Gilbert

NL April meeting

Joint ASPE/ASHRAE Meeting with City Reviewers

Joint AIA COTE meeting at AIA office on April 22nd

Consider alternate location for ethics meeting, possibly Blanco BB

http://directory.usgbc-centraltexas.org/event/

RP – Dan Seltzer

Contact RVC

On track to raise \$20,000+

Plan to set aside more for scholarships and future Alamo activities this year

Golf Tournament Planning

Update

Pledge by CRC?

CPS

MP – Teresa Saldana

Contact RVC

Training

Membership Recruitment ideas, call campaign

Call non-members who have attended our meetings

BOARD OF GOVERNORS MEETING MINUTES





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Student Activities - Mario Mijangos

April Meeting @ Trinity, Student NL

Solar Car Race with NISD May 10th

Approved \$1,000 to support UTSA Design Team

Approved \$3,000 for scholarships this year due to higher anticipated applications than years past

UTSA Engineers Networking Lunch Report

18 Students attend Hockey night and tour!

10 Students and 2 Student Chapter Advisors attended April meeting

Kona social with UTSA students TBD

YEA - Chris Delgado

Joint AIA COTE meeting at AIA office on April 22nd

Assemble expert panel

Approved approximately \$300 for senior sendoff event

Newsletter – Baron Phillips

Golf Tournament, YEA, April Meeting announcement

Website/Constant Contact

NL out by Friday Morning

Historian – Manuel Lizcano

Updates

Display at CRC. Work with Chris D.

Email all photos to Manuel for storage

Need replacement

Grassroots Government Activities – Chris Garcia

Updates

67 building owners, gov't officials, energy managers, engineers and architects attended the bEQ Meeting at the DSD! A big thanks to Advantix for Sponsoring!

GGAC Presentation to BOG

Webmaster - vacant

Legere Graphic Arts proposal

Set up meeting date/presentation for BOG see demonstration

BOARD OF GOVERNORS MEETING MINUTES





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Honors & Awards - Madison Bryer

Chapter Service Award approved for Randy Manteufel UTHSCA Technology Award, coordinate with Chris Approved Advisor Award

Refrigeration – Fred Gleeson

Hockey Night success, 34 attended, 18 students, April 4th bEQ meeting huge success! Over 67 attended!

NEW BUSINESS

Presidential Award of Excellence (PAOE)

Update points (Monthly)

Contact your RVC!

Goals for 2014

ASHRAE Region VIII Officers: http://region8.ashraeregions.org/officers.htm

ADJOURN







TREASURER'S FINANCIAL REPORT: APRIL 2014



ASHRAE Balance Sheet (2013-2014)

	Current As Of:	4/8/2014
ASSETS		-10
Current Assets		
Checking/Savings		
Checking		26,843.04
Money Market	_	8,122.30
Total Checking/Savings	_	34,965.34
Other Current Assets		
Petty Cash	P <u>1000</u>	200.00
Total Other Current Assets	_	200.00
Total Current Assets		35,165.34



News

ASHRAE PRESS RELEASE—ANNOUNCEMENT

City of Chicago Approves ASHRAE Certification as Data Verifier Credential

ATLANTA – The City of Chicago now recognizes the ASHRAE-Certified Building Energy Assessment Professional (BEAP) as a data verifier credential under the city's new Energy Benchmarking Ordinance. As a result, BEAP credential holders are eligible to provide professional verification of data for the new benchmarking and transparency ordinance.

"ASHRAE commends the City of Chicago for the commitment to improving building performance demonstrated by adoption of the Energy Benchmarking Ordinance and is very pleased that the Building Energy Assessment Professional certification is one of the first credentials to be recognized for the provision of services it requires," ASHRAE President Bill Bahnfleth said. "BEAPs have demonstrated their ability to audit and analyze residential, commercial and industrial building energy use, including determining project scope, collecting data, analyzing building performance, interpreting results, evaluating alternatives, submitting recommendations for energy conservation measures and assisting with the implementation of these recommendations. Our BEAPS are well-qualified to provide this important service to the citizens of Chicago."

"The Energy Benchmarking Ordinance is focused on the importance of information to unlock energy efficiency opportunities that will bring down costs for buildings, increase competitiveness and reduce environmental impact," Karen Weigert, chief sustainability officer for the city, said. "Data verification advances Chicago's goal of accurate and actionable data on building energy use and helps level the playing field for all buildings."

In September 2013, the city became the ninth in the United States to require that buildings benchmark energy performance and publicly disclose data. The ordinance authorizes the city to disclose building specific information starting in the second year of compliance. Chicago is the only city that requires data to be verified by a licensed professional. Covered buildings are required to have data verified by professionals on the first and every third year after. That information then will be published so building owners can compare their buildings with similar ones.

All buildings over 50,000 square feet, except industrial, are required to comply with the ordinance. Some 3,500 buildings are covered, including multi-family residential. While this is less than 1 percent of all buildings in Chicago, it represents 20 percent of the energy consumed annually by buildings.

Professionals holding the Building Energy Assessment Professional certification also qualify to perform In Operations ratings for ASHRAE's Building Energy Quotient (bEQ) program. This building energy labeling program allows the industry to zero in on opportunities to lower building operating cost and make informed decisions to increase value.

The program is two labels in one: an As Designed label that rates the building's potential energy use under standardized conditions—independent of the building's occupancy and usage—and an In Operation label that rates the building's actual measured energy use as influenced by the building's occupancy and usage.

ASHRAE, founded in 1894, is a building technology society with more than 50,000 members worldwide. The Society and its members focus on building systems, energy efficiency, indoor air quality, refrigeration and sustainability. Through research, standards writing, publishing, certification and continuing education, ASHRAE shapes tomorrow's built environment today.

For Release, April 1, 2014



News

ASHRAE PRESS RELEASE—ANNOUNCEMENT

ASHRAE Proposes to Move All Residential IAQ Requirements to Standard 62.2

ATLANTA – Dwelling units of multifamily buildings of any height would fall under ASHRAE's residential ventilation standard, 62.2, under a proposed change designed to provide consistency of ventilation requirements.

Currently, ANSI/ASHRAE Standard 62.1-2013, *Ventilation for Acceptable Indoor Air Quality*, has responsibility for multifamily residential buildings 4 stories or more, while ANSI/ASHRAE Standard 62.2-2013, *Ventilation and Acceptable Indoor Air Quality in Low-Rise Residential Buildings*, has responsibility for residential buildings 3 stories and less.

"The Standards 62.1 and 62.2 committees are proposing scope changes that would result in the dwelling units of all multifamily buildings being covered by Standard 62.2," Paul Francisco, chair of the Standard 62.2 committee, said. "Common areas would be covered by 62.1. This will provide consistency of ventilation requirements for dwelling units regardless of building height. For new construction, this will result in a change of requirements for dwelling units in 4+ story buildings. For the retrofit market, this change will result in coverage by ASHRAE ventilation standards for the first time in 4+ story buildings."

The proposed changes are being made via addendum *a* to Standard 62.1-2013 and addendum *g* to Standard 62.2-2013, which are open for public review from April 4 to May 4, 2014. For more information or to submit comments, visit www.ashrae.org/publicreviews.

The ventilation rates for dwelling units in Standard 62.1 are different from the rates in Standard 62.2, and this inconsistency has caused concern for some, according to 62.1 committee chair Roger Hedrick. Additionally, Standard 62.1 does not address modest retrofits whereas Standard 62.2 does.

"The retrofit market is a major user of ASHRAE ventilation standards," he said. "This will allow for consistency across dwelling units and also allow application of ASHRAE ventilation standards to the multifamily retrofit market."

Francisco agreed, saying, "Given the growth of the retrofit industry in multifamily dwellings it is important to ensure that these situations are covered in ASHRAE's ventilation standards."

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For Release: April 4, 2014





Supply Water Temperature Classification New Addition to Updated Guidance on Cooling Data Centers

ATLANTA— Data center rack heat loads are steadily climbing, creating a need for liquid cooling solutions to reduce the volume of airflow needed, as well as lower processor temperatures for better computer performance. "Liquid Cooling Guidelines for Datacom Equipment Centers," second edition, recently published by ASHRAE, provides best practice guidance for implementing liquid cooling systems in data centers.

"There is an increasing interest in liquid cooled IT equipment at the rack, equipment and component levels," Don Beaty, publication chair of Technical Committee 9.9., Mission Critical Facilities, Data Centers, Technology Spaces and Electronic Equipment, said. "There is also increased interest in reuse of the heat rejected from IT equipment. One of the more important changes to the second edition is the addition of supply water temperature classification."

Beaty claims that the addition of liquid classes can have a similar effect on the industry as the creation of supply air temperature classes did—which was the critical enabler to the use of economizers in data centers.

"There are five water temperature classes with the highest temperature class being >45 C (113 F), which opens up possibilities for using the rejected heat for building heating systems," he said.

The guide bridges the liquid cooling systems by providing guidelines on interface requirements between the chilledwater system and the technology cooling system and on the requirements of liquid-cooled systems that attach to a datacom electronics rack to aid in data center thermal management.

Also included are updated references and further information on approach temperatures and liquid immersion cooling, plus guidance on water quality problems and wetted material requirements.

Additionally, the guide covers definitions for liquid and air cooling as they apply to IT equipment, along with an overview of chilled-water and condenser water systems and other datacom equipment cooling options.

This book is the fourth in the ASHRAE Datacom Series, authored by ASHRAE TC 9.9.

The cost of "Liquid Cooling Guidelines for Datacom Equipment Centers," second edition, is \$54 (\$46 ASHRAE members). To order, contact ASHRAE Customer Contact Center at 1-800-527-4723 (United States and Canada) or 404-636-8400 (worldwide), fax 678-539-2129, or visit www.ashrae.org/bookstore.

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For Release: April 10, 2014





ASHRAE 2014 Annual Conference Announced for Seattle

ATLANTA— While abundant rain and thriving evergreens keep the city of Seattle green and lush, the city has taken the concept of "green" to a whole different level. Sustainability is promoted in all aspects of life, which makes Seattle the perfect location for ASHRAE's 2014 Annual Conference.

The Conference takes place June 28-July 2.For more information or to register, visit www.ashrae.org/seattle.

The Technical Program kicks off June 29, with interactive programs and a networking coffee break, and concludes July 2. The program addresses broad topics in the application of technology to practice, specific applications in ground source heat pumps, operations and maintenance and indoor environmental quality, as well as new reports on research taking place worldwide.

Featured is a track on Ground Source Heat Pumps State of the Art: Design, Performance and Research, which addresses all aspects of design that lead to optimally performing systems in addition to avoiding common pit-falls that lead to poorly performing systems.

The Conference also features the second annual ASHRAE Research Summit, which presents innovations in HVAC&R research with particular emphasis on high performance building design and its role in a clean energy economy, and brings together researchers to present and discuss the latest research. Researchers present papers, seminars and forums or participate in panel discussions. Also, highlights on ongoing ASHRAE funded research are presented.

Attendees also can take part in courses offered by the ASHRAE Learning Institute, including two full-day professional development seminars and seven half-day short courses. New is a course on building demand response and the coming smart grid.

ASHRAE also offers its Building Energy Assessment Professional (BEAP) and Building Energy Modeling Professional (BEMP) exams on July 1.

The keynote speaker is Robert Bryce, one of America's most prominent energy journalists and a senior fellow at the Manhattan Institute. He serves as the keynote speaker at the opening Plenary Session, held Saturday, June 28. Registration is not required to attend the session, which also features the Honors and Awards program.



News

ASHRAE PRESS RELEASE—ANNOUNCEMENT

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Denis Hayes, president and CEO, Bullitt Center, serves as keynote speaker at the Technical Plenary, Sunday, June 29. Conference registration is required to attend. In his remarks, Hayes discusses the problems and opportunities associated with "net positive" commercial construction, using the Bullitt Center as an illustration of what is currently possible.

Technical tours at the Conference include Federal Center South Building 1202; The Fred Hutchinson Cancer Research Center 1100 Eastlake Facility; The Bullitt Center; the Bill and Melinda Gates Foundation Headquarters; the University of Washington Molecular Engineering & Sciences Building; and the University of Washington Power Plant.

General tours include Tillicum Village; Show Me Seattle; Aircrafts, Airpark and Aviation Artifacts; Leisurely Lakes Cruise; Going Boeing; Cascades, Cabernets and Chocolates; and Museum of History and Industry (MOHAI).

The Conference takes place at the Sheraton Seattle and the Washington State Convention Center. To register or more information, visit www.ashrae.org/seattle.

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For Release: April 16, 2014





Ground Source Heat Pumps Focus of Technical Program Track at ASHRAE 2014 Annual Conference

ATLANTA—A new track added to the Technical Program at ASHRAE's 2014 Annual Conference speaks to the challenges engineers face when designing ground source heat pumps as compared to more traditional systems.

The Conference takes place June 28-July 2, Seattle, Wash. For more information or to register, visit www.ashrae.org/seattle.

The Technical Program kicks off June 29, with interactive programs and a networking coffee break, and concludes July 2. The program addresses broad topics in the application of technology to practice, specific applications in ground source heat pumps, operations and maintenance and indoor environmental quality, as well as new reports on research taking place worldwide.

New to the Technical Program is a track on Ground Source Heat Pumps (GSHP) State of the Art: Design, Performance and Research, which addresses all aspects of design that lead to optimally performing systems in addition to avoiding common pitfalls that lead to poorly performing systems.

The track was organized by ASHRAE, the National Ground Water Association (NGWA), the International Ground Source Heat Pump Association (IGSHPA) and the Geothermal Exchange Organization (GEO).

"There are a number of challenges that engineers face that are different from conventional HVAC systems, such as ground coupling, working with drillers, the importance of annual heating and cooling loads to ground heat exchanger design," Jeff Spitler, an ASHRAE member who helped create the track, said. "This track addresses the entire design and installation process from site evaluation to commissioning and system operation. In addition, GSHP systems are inherently energy efficient, but poor choices in the design can compromise this inherent efficiency. 'What not to do' is also addressed in the track."

Spitler said organizers have drawn in researchers from around the world to discuss new advances in the field so attendees have the opportunity to hear about both the latest research and state-of-the-art design practice.

"We want to help practicing engineers understand where the industry began, where it stands currently (what tools and design guides are available), and where it is headed (through the programs showcasing current research)," Lisa Meline, recent chair of ASHRAE's technical committee 6.8, Geothermal Heat Pump and Energy Recovery Applications, said. "We also hope to impart guidance to the practicing engineers on the ground heat exchanger portion of a ground-source design. Many engineers shy away from this type of design because they don't understand it. We want to change that and reinforce the need to provide single-point-of responsibility for all different types of HVAC system designs, including this one."





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Sessions in the track are:

Sunday, June 29

- Step 1: Assessing a Project Site for Geothermal Heat Pump Applications
- Ground Source Heat Pump System Performance Case Studies in Different Climates Around the World
- GEO 2.0: From the Ground Up, an Overview of the Updated ASHRAE GSHP 'Blue Book'
- Ground Source Heat Pump System Case Studies

Monday, June 30

- Geothermal Heat Pump Track Keynote Presentation
- Documentation and Contract Administration in Tendered and Design/Build Ground-Coupled Heat Pump Projects
- Ground Source Heat Pumps: Historical Perspective and Track Overview

Tuesday, July 1

- Monitoring of Ground Source Heat Pump Systems
- What the Well?
- New Developments in Simulation and Modeling of Ground Heat Exchangers

Wednesday, July 2

- Ground Source Systems Commissioning and Closeout: Unique Issues, Avoiding Fatal Flaws and Ensuring Client Satisfaction
- Central Plant GCHP Systems
- Optimization of Ground Coupled Heat Exchangers and Heat Pumps

The Conference takes place at the Sheraton Seattle and the Washington State Convention Center. To register or more information, visit www.ashrae.org/seattle.

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For Release: April 23, 2014