Shaping Tomorrow's Built Environment Today

Northern Nevada Chapter 126
January 2012 Newsletter

## President Message:
**Chris Little**

I'd like to thank everyone who donated to our annual wine tasting event. We had a smaller turnout than last year, but with all the donations it was still successful and nearly everyone who attended won a prize!

All of the following companies donated and helped us keep this a very fun and successful fundraiser.

Belimo Americas
California Hydronics
ControlCo
Cook Mechanical and Air Systems
DMG Reno
Maltese Environmental
Norman S. Wright
Osborne Company
Trane
Victaulic
Western Nevada Supply
WN Mechanical Systems

Also Dick Lampson decided to cook us some fantastic food and donate that as well.
Thank you all very much!

We had a great speaker last week, but with the fire burning and several members' homes possibly being affected; we had an understandably smaller turnout than usual. I hope all of you, your family, and your friends were spared the destruction of the fires.

We are starting the planning for our annual ASHRAE gun shoot fundraiser in April, please see attached flyer for details on dates and time. We will be contacting a lot of you who shot last year in the coming weeks and seeing if you would like to do another team this year.

Finally we are looking for a site to do a job walk and so far have not come up with one that fits in with our dinner meeting schedule, if any of you have any ideas for a suitable site that can get us in please contact Bryan Tilton @ 775-826-6061 or bryan@aspenreno.com

Thank you and I look forward to seeing you all next month!
-Chris Little

**President Elect / Programs Chair:**
**Bryan Tilton**

## February 2012 Meeting ~ Thursday, February 16th, 2012

The meeting will be held at the Claim Jumper Restaurant
Cocktails at 5:30, Dinner at 6:00

**Claim Jumper Restaurant**
**4905 S. Virginia St. Reno, NV 89502**
**(775) 829-0200**

**Speaker:**
**Kurt Herzog – Acutherm**

**Bio:**
Mr. Herzog graduated from the University of Nevada Reno in 1985 with more than 25 years of interdisciplinary management experience; Kurt has a broad industry perspective which includes capital equipment lease financing, real estate management, and performance HVAC systems. He has been a guest speaker in countries around the world on the topics of building automation trends, sustainable systems integration, and HVAC VAV system performance. Kurt's passion for sustainable innovation is seen throughout the Acutherm product line and is palpable within his presentations.

**Topic Summary:**
To meet the ever increasing pressures to achieve greater energy efficiency without sacrificing HVAC's primary purpose of providing comfort, high efficiency VAV systems should be considered. This presentation will discuss energy efficient VAV design and equipment including an introduction to VAV diffusers. Energy modeling will be used to show how these best practices affect the energy efficiency of the HAVC system.

I look forward to seeing you all at Claim Jumper for dinner!

**Research & Promotions Chair:**
**Sandor Duran**

ASHRAE Members-

We are continuing campaign and need your help to do our Chapters part to help further research in our industry. We have a Chapter goal of $5,000 to be donated for the 2011-2012 Research Promotions Campaign. I'd like to thank those that have contributed in the past, but we will need everyone's help to reach our goal for this year. Please start thinking about what you can do as an individual to help our chapter do its part to support the research projects that help keep our industry moving forward by improving the technology that shapes the systems that we are all involved with.
Please at a minimum take some time request that your company support our chapter with a donation to the ASHRAE RP Campaign!

To make a contribution online please visit the following website: https://xp20.ashrae.org/secure/researchpromotion/rp.html Please send any donations or checks to my office for collection and processing, or bring the checks to a meeting and give it to me there! You will receive receipt that can be used for tax-deduction purposes.

ASHRAE
C/O CR Engineering
5434 Longley Lane
Reno NV 89511
Sandor Duran
RP Chair, ASHRAE N. Nevada

I would like to thank all of you for your contributions and support of Ashrae.

**Memberships Promotions Chair:**
**Chun Lee**

Following a few years of volatility in the Northern Nevada Construction market in which we have seen some of our colleagues and friends in the HVAC industry leave the area, industry, and/or retire, it is so important that we continue to network with those that are still in the industry. One of the main avenues to network is to participate in ASHRAE, either through the monthly meetings, fund raising events, and/or be part of the ASHRAE board of governors. Personally I don't think there's a better way to network or get a pulse on what's going on with our industry than to participate in ASHRAE.

With a few economic indicators pointing towards this these next few months as a harbinger of things to come for the next few years, I see it as a great time to get back into ASHRAE and at least come to the monthly meetings. As one of my favorite poets Maynard James Keenan says:

*"Something has to change.*
*Un-deniable dilemma.*
*Boredom's not a burden*
*Anyone should bear"*

**Sustainability Chair:**
**Mark Hauenstein**

The State of Nevada is in the process of adopting the 2009 IECC, which has its basis in the 2007 ASHRAE 90.1 standard. It will be our task to educate the community on how to adapt to this new change. Read more about it here: http://energy.state.nv.us/energy-efficiency/programs/energy-related-codes.html

Find out more about how to get involved with the local USGBC chapter at: http://usgbcnv.org/
The U.S. Department of Energy (DOE) recently released the latest version of its building energy modeling software EnergyPlus, which calculates the energy required to heat, cool, ventilate, and light a building. Learn more about it here: http://apps1.eere.energy.gov/news/news_detail.cfm/news_id=17948

As a newbie to the chair position, I would like to follow in Mr. Lee's footsteps with a favorite quote of my own from Napoleon Bonaparte:

*"Never ascribe to malice that which can adequately be explained by incompetence."*

**Shoot Chair:**
**Matt Brennan**

See attached sign up sheet for the ASHRAE Clay Shoot Competition on April 21, 2012.

**Chapter Secretary Chair:**
**Jason Bender / No update this month.**

**2011-2012 Northern Nevada ASHRAE BOG Meeting**
**Meeting Notes by Brian Bassi - Secretary**

*Members attending: Brandon Etchemendy, Chris Little, Bryan Tilton, Chun Lee, and Brian Bassi*

Meeting occurred at 12:00 p.m. at Great Basin Brewing Co., Reno

- We will be looking into adding the ASHRAE logo will be added to the belt buckles for the Shoot Prizes this year
- We need Sponsors for the Shoot this year, please help us recruit them! We are going to plan to have a Golf Tournament this year, and Brandon Etchemendy has volunteered to chair the efforts. Tentative Date 9/7 or 9/14
- ASHRAE Northern Nevada Wine Tasting was a great success. We thank all of those who supported and attended the effort.
- Chris Little will be taking care of the insurance forms for the shoot.

Meeting adjourned at 1:10 p.m.

**Newsletter Editor:**
**Sal Cervantes**

An announcement regarding the rebranding of ASHRAE was made at the Society's 2012 Winter Conference being held in Chicago, IL this month. We also shared an inspirational video with the audience that tells the story of ASHRAE. You can view the video: http://vid.ashrae.browsermedia.com/logo/logo.htm

**CRC & Student Activities Chair:**
**Candice George / No update this month.**

**Treasurer Chair:**
**Brian Bassi / No update this month.**

**Mission**
*To advance the arts and sciences of heating, ventilating, air conditioning and refrigeration, to serve humanity and promote a sustainable world.*

**Vision:**
*ASHRAE will be the global leader, the foremost source of technical and educational information, and The primary provider of opportunity for professional* growth in the arts and sciences of heating, ventilating, air conditioning and refrigerating.

For Release:
Jan. 21, 2012

Contact: Amanda Dean
Public Relations
678-539-1216
adean@ashrae.org

# ASHRAE Recognizes Outstanding HVAC&R Industry Achievements

CHICAGO– Thirty-six people are being recognized by ASHRAE for their contributions to the Society and the building industry at the Society's 2012 Winter Conference held here Jan. 21-25.

The Hall of Fame, honors deceased members of the Society who have made milestone contributions to the growth of HVAC&R technology.

The recipient is Presidential Member Roderick Kirkwood, Fellow ASHRAE, and Life Member.

Fellow ASHRAE is a membership grade that recognizes distinction in the arts and sciences of environmental technology and is earned through achievement as a researcher, designer, educator or engineering executive. The Society elevated 13 members to the grade of Fellow ASHRAE:
•Constantinos Balaras is research director, Institute for Environmental Research and Sustainable Development, National Observatory of Athens, Greece.
•Van Baxter is senior research and development engineer, Oak Ridge National Laboratory, Oak Ridge, Tenn.
•Vin Gupta is senior principal engineer, 3M Company, St. Paul, Minn.
•Mark Modera is professor, civil environmental engineering, mechanical and aerospace engineering, and director, Western Cooling Efficiency Center, University of California at Davis.
•Darin Nutter is associate professor of mechanical engineering, University of Arkansas, Fayetteville.
•Tom Phoenix is principal and vice president, Moser Mayer Phoenix Associates, Greensboro, N.C.
•Arshad Sheikh is owner/principal consultant, SES Consulting Engineers, Lahore, Pakistan.
•Edward Vineyard is group leader, building equipment research, Oak Ridge National Laboratory, Oak Ridge, Tenn.
•Iain Walker is scientist, Lawrence Berkeley National Laboratory, Berkeley, Calif.
•Brian Warwicker is consultant, Brian Warwicker Partnership, Ltd., London, U.K.
•Bill Worek is professor and director, Energy Technology Laboratory, University of Illinois-Chicago
•Xudong Yang is Chang-Jiang professor and deputy director, Institute of Built Environment, School of Architecture, Tsinghua University, Beijing, China
•Jianshun Zhang is professor and director, building energy and environmental systems lab, department of mechanical engineering and aerospace engineering, Syracuse University, Syracuse, N.Y.

The ASHRAE Technology Awards recognize outstanding achievements by members who have successfully applied innovative building designs, which incorporate ASHRAE standards for effective energy management and indoor air quality. Six projects received first-place ASHRAE Technology Awards:
•Roland Charneux, P.Eng., ASHRAE Fellow, ASHRAE Certified Healthcare Facility Design Professional, Pageau Morel & Associates, Montreal, Quebec, Canada in the new commercial buildings category for Mountain Equipment Co-op, Longueuil, Quebec, Canada. The building is owned by the co-op
•Ken Sonmor, Ecovision Consulting, Montreal, Quebec, Canada in the existing commercial buildings category for the IKEA Brossard Distribution Center, Quebec, Canada. The building is owned by IKEA Distribution Services.
•René Dansereau, Dessau, Longueuil, Quebec, Canada the new educational facilities category for the Université de Sherbrooke—Campus de Longueuil, Quebec, Canada. The building is owned by the university.
•Paul Marmion, Stantec Consulting, Ltd., Vancouver, British Columbia, Canada in the new health care facilities category for Abbotsford Regional Hospital and Cancer Centre, British Columbia, Canada. The building is sponsored by Laing Investments Management Services and owned by the hospital.
•Blake Ellis, P.E., Burns & McDonnell, Kansas City, Mo. in the new industrial facilities or professes category for thermal energy storage at Texas Meidcal Center, Houston, Texas. The owner is Thermal Energy Corp.
•Luc Simard, Compressor Systems Control (CSC), Inc., Les Coteaux, Quebec, Canada in the existing industrial facilities

or presses category for the Arena Marcel Dutil, St-Gédéon-de-Beauce, Quebec, Canada. The building is owned by the Municipalite St-Gédéon-de-Beauce.

The ASHRAE Student Design Project Competition challenged teams of students to create an integrated sustainable building design as well as select and design HVAC&R systems for the Drake Well Museum located in Titusville, Pa., the site where Edwin L. Drake drilled the world's first oil well in 1859 and launched the modern petroleum industry. First place in HVAC System Design is awarded to Holly Brink, Michael Crabb, James Dougherty, Andrew Gilliam and Gina Halbom of University of Nebraska-Omaha. First place in HVAC System Selection is awarded to Lynn Gualtieri, Evan Oda, Kristin Porter, Navid Saiidnia, Jeffrey Wong and Cameron Young of California Polytechnic State University, San Luis Obispo, Calif. First place in the Integrated Sustainable Building Design is awarded to Qi Te, Zhang Qiqi and Chen Yuanyi of Tianjin University, China.

The John F. James International Award is given to an ASHRAE member who has done the most to enhance the Society's international presence. The recipient is Edward Ka Cheung Tsui, managing director, Intelligent Technologies, Ltd., Hong Kong, Hong Kong.

The E.K. Campbell Award honors outstanding achievements by engineering educators and is presented by the ASHRAE Life Members Club. The recipient is Wayne Helmer, Ph.D., P.E., professor of mechanical engineering, Arkansas Tech University, Russellville, Ark.

ASHRAE, founded in 1894, is a building technology society with 52,000 members worldwide. The Society and its members focus on building systems, energy efficiency, indoor air quality and sustainability within the industry. Through research, standards writing, publishing and continuing education, ASHRAE shapes tomorrow's built environment today.

---

For Release:
Jan. 26, 2012

Contact: Jodi Scott
Public Relations
678-539-1140
jscott@ashrae.org

ASHRAE, IAPMO Sign MOU to Advance Built Environment Codes and Standards

ATLANTA – ASHRAE and the International Association of Plumbing and Mechanical Officials (IAPMO) have entered into a Memorandum of Understanding (MOU) specifically detailing ways in which the two organizations can work together to advance and promote mutual interests in built environment codes and standards.

The MOU was signed during ASHRAE's 2012 Winter Conference held this week in Chicago.

"With ASHRAE's expertise in HVAC&R engineering, and IAPMO's expertise in plumbing and mechanical codes, our joint efforts will ensure that the design, construction, reconstruction and operation of buildings meet the built environment needs in codes and standards," ASHRAE President Ron Jarnagin said.

"IAPMO and ASHRAE enjoy a long history of working together in the interests of promoting health, safety and sustainability through the codes and standards that govern mechanical systems," said IAPMO President Dan Daniels. "I am pleased that this MOU will ensure our two organizations continue to strengthen each other and subsequently strengthen our industry."

"IAPMO is delighted to be working more closely with ASHRAE in our efforts to promote our standards and services throughout the world," said IAPMO CEO GP Russ Chaney. "This MOU provides both organizations with the basis to expand our already close and mutually beneficial relationship as we continue to collaborate together."

The MOU outlines several areas in which ASHRAE and IAPMO will work together, including:

- Collaborating on common public affairs goals, such as joint promotion of codes and standards at the local, state and federal levels; and promotion of mutually beneficial positions during the development and passage of state and federal legislation.

- Exploring opportunities to co-develop new courses or other training programs that take advantage of overlapping and complementary expertise.
- Fostering technical cooperation in areas of common interest by providing opportunities to participate in and comment on proposed standards, guidelines, policies and position statements developed on technical subjects as they relate to buildings and community developments; exploring ways to use ASHRAE standards in IAPMO codes, including derivative documents developed for use outside the U.S.; and investigating the feasibility of creating a coalition of U.S. codes and standard organizations to promote the international use of standards and codes developed by coalition participants.
- Promoting research in areas where research results will add to the body of knowledge in codes and standards.
- Disseminating research results quickly, focusing on high-impact findings.
- Identifying opportunities for research funding from other sources

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 and sustainability within the industry. Through research, standards writing, publishing and continuing education, ASHRAE shapes tomorrow's built environment today.

Founded in Los Angeles in 1926, IAPMO has grown to be recognized the world over for its Uniform Codes. With offices in 12 U.S. states and 13 countries, IAPMO has assisted with code development in such diverse places as Saudi Arabia, China, India, Jordan, Egypt, Israel, Vietnam, Indonesia, Philippines, Venezuela, Colombia, and the United Arab Emirates. For more information, visit IAPMO.org.

---

For Release:
Jan. 30, 2012

Contact: Jodi Scott
Public Relations
678-539-1140
jscott@ashrae.org

Standard Features Energy Savings
2011 version of the Green Standard Now Available from ASHRAE, USGBC, IES

ATLANTA – Changes to help make buildings and systems more sustainable are part of the newly published version of the high performance green building standard from ASHRAE, the U.S. Green Building Council (USGBC) and the Illuminating Engineering Society (IES)

ANSI/ASHRAE/USGBC/IES Standard 189.1-2011, Standard for the Design of High-Performance, Green Buildings Except Low-Rise Residential Buildings, provides a green building foundation for those who strive to design, build and operate high performance buildings. It covers key topic areas of site sustainability, water-use efficiency, energy efficiency, indoor environmental quality and the building's impact on the atmosphere, materials and resources. When first introduced in 2009, the standard was the first code-intended commercial green building standard in the United States.

"Since Standard 189.1 was first published, we have received much input from the industry offering suggestions on how to strengthen it in all areas," chair Dennis Stanke said. "This 2011 version incorporates much of that input. More importantly, the 2011 version incorporates updated connections to its referenced standards – primarily ANSI/ASHRAE/IES 90.1-2010 and ANSI/ASHRAE 62.1-2010. Compliance with these updated provisions will result in further improvements to indoor environmental quality, while further reducing energy use and environmental impact through high-performance building design, construction and operation."

The most significant change in energy-related provisions results from new requirements in ANSI/ASHRAE/IES Standard 90.1-2010, Energy Standard for Buildings Except Low-Rise Residential Buildings, adding to and superseding requirements in the 2007 version. In October 2011, the U.S. Department of Energy found that the 2010 version of Standard 90.1 contains significant energy savings over the 2007 standard. The energy savings in the Standard 90.1-2010 provisions also result in energy savings for building projects complying with Standard 189.1, according to Stanke.

In addition, mandatory and prescriptive renewable energy requirements were clarified to reduce confusion and simplify calculations; now both mandatory provisions to prepare for on-site renewable energy and provisions to produce prescribed levels of renewable energy must be met. Additionally, buildings that meet the prescriptive requirement for

renewable energy production are now deemed to comply with the mandatory requirement for renewable energy site-preparation.

The standard also updates the performance option for energy efficiency (Appendix D) so that it refers to Appendix G of Standard 90.1-2010, which is now a normative appendix. Appendix G of 90.1 applies to projects seeking to reduce annual energy cost more than would be possible by merely meeting the requirements of that standard. Appendix D in Standard 189.1, on the other hand, provides a performance option for compliance as an alternative to the less-complex prescriptive option; it must show that the project design results in annual energy cost equal to or less than would be possible by meeting the mandatory plus prescriptive requirements of the standard, according to Stanke.

Additional changes to the 2011 standard include:

- More stringent Lighting Power Density allowances due to the change in reference to Standard 90.1-2010. Both interior and exterior values are now set as a percentage of the Standard 90.1 allowances, based on building, space or area type.
- Automatic controls are now required for lighted signs visible during daytime hours; controls must reduce the lighting power to 35 percent of full power. For other outdoor signs, automatic controls must now turn off lighting during daytime hours and reduce the lighting power to 70 percent of full power after midnight.
- Open-graded (uniformed size) aggregate and porous pavers (e.g., open-grid pavers) qualify as a hardscape surface for heat island mitigation with no further testing. Permeable pavement and permeable pavers must meet a minimum percolation rate rather than a minimum solar reflectance index (SRI).

Standard 189.1 is currently a jurisdictional compliance option in the International Green Construction Code developed by the International Code Council, ASTM International and the American Institute of Architects.

The cost of ANSI/ASHRAE/USGBC/IES Standard 189.1-2011, Standard for the Design of High-Performance, Green Buildings Except Low-Rise Residential Buildings, $119 ($99 ASHRAE members).

To order, contact ASHRAE Customer Contact Center at 1-800-527-4723 (United States and Canada) or 404-636-8400 (worldwide), fax 404-321-5478, or visit www.ashrae.org/bookstore.

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 and sustainability within the industry. Through research, standards writing, publishing and continuing education, ASHRAE shapes tomorrow's built environment today.