Mid-Columbia Chapter of the American Society of Heating, Refrigerating and Air Conditioning

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# Tumbleweed

#### December 2013

#### http://www.midcolumbia.ashraechapters.org

ASHRAE Announces Technology Award Recipients (Excerpted)

**ATLANTA** – A net zero facility, a historic building, a cheese factory, a residence, a college building and an agriscience farm are being recognized by ASHRAE as innovative buildings.

The ASHRAE Technology Awards recognize outstanding achievements by members who have successfully applied innovative building design. Their designs incorporate ASHRAE standards for effective energy management and indoor air quality. The awards communicate innovative systems design to other ASHRAE members and highlight technological achievements of ASHRAE to others around the world. Winning projects are selected from entries earning regional awards. First place awards will be presented at the ASHRAE 2014 Winter Conference in New York, N.Y., Jan. 18-22, New York Hilton.

Following are summaries of the winning projects.

#### Packard Foundation Net Zero Energy Headquarters

Peter Rumsey, P.E., Fellow ASHRAE, chief technology officer, Integral Group, Oakland, Calif., receives first place in the new commercial buildings category for the Packard Foundation Net Zero Energy Headquarters, Los Altos, Calif.

Rumsey also receives the Award of Engineering Excellence, which is given to the most outstanding project receiving a first-place Technology Award. It has only been awarded three other times, in 2000, 2005 and 2012.

The 49,000-square-foot Packard Foundation Headquarters is described as an exemplary ultra-high performance building that is both leading by example and transforming the marketplace. Staying true to the Foundation's prominence in funding conservation, science and environmental causes, the Foundation used its headquarters to demonstrate the full potential of the capabilities of integrated design, innovation in technology and replicable design. In its first year of occupancy it has already served over a thousand visitors in sustainable building education.

Highly efficient systems and an outstanding building envelope provides a reduction in energy demand by 46 percent compared with California Title 24 standards, while the remaining required power is offset with onsite power generation. The project water use goals are to achieve 40 percent water use reduction and implement the capture or infiltration of all rainwater. The project has raised the bar, becoming the largest certified net zero energy building in the world to date. Success was found through a combination of innovative energy saving strategies, including a nighttime cooling tower with storage tank; a high efficiency air source heat pump boiler with storage; induction diffusers with chilled beams; and a low pressure drop design.

#### SIERR Building at McKinstry Station

David Budd, P.E., McKinstry, Seattle, Wash., receives first place in the existing commercial building category for the SIERR Building at McKinstry Station, Spokane, Wash. The owner is McKinstry. Spokane's Inland Empire Railroad (SIERR) Building was built in 1907 as an electric railroad car facility. In the 1950s, the usage shifted to trucking. In October 2010, the facility, which consists of a series of long train car barns with high sloped roofs, was designated a national historical landmark. Today, the 68,000 square foot building serves as a commercial office building. The newly refurbished facility is one of a handful of high-performing historical buildings in the United States. Dean Allen, the current owner, discovered the building while searching for a new office location. He fell in love with the building and was determined to restore it to its former grandeur. He also recognized the opportunity to demonstrate how to effectively preserve the nation's building stock by combining innovation in energy efficiency with historic preservation with the belief that the most sustainable building is the one that you preserve. Through collaboration with the National Park Service, the building is now a model project for many of the new recommended practices described in the recently released Secretary of the Interior's "Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings." Traditional systems design approaches were una-

Traditional systems design approaches were unable to meet historical preservation requirements and still achieve significant energy savings while creating an office space that was comfortable and unique. To meet these needs, the design team used the following innovative building systems: Hydronic ground source loop; office space/radiant floor system; server room heat recovery; dedicated outside air system; and common areas/constant volume heat pump systems.

(Article Continued on ASHRAE.org/news)

Don't Miss This Month's Event

#### December 12th, 2013

"ASHRAE And You"-Regional And Society Updates

By: Kevin Marple

Details on page 3,

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# **Message from the President**

#### **By Jian Zhang**

Thanks to Nate Deibler who travelled from his California office of Mason Engineering, our chapter members enjoyed an excellent presentation on seismic restraint of mechanical systems at our November program meeting. Two members travelled from Yakima that night just to attend the dinner meeting. Thanks for their supports. If you missed it, make sure to check an ASHRAE publication entitled Practical Guide to Seismic Restraint by J. Tauby and R. Lloyd.

The Board of Governors and the CRC Organizing Committee met again on Nov. 25, and a lot of exciting activities are going on. Here are some highlights:

- Each of the BOG officers made a personal donation of \$100 or more to ASHRAE Research Promotion, which nails down this year's chapter full circle award.
- Our BOG donated \$150 to ASHRAE scholarship on behalf of our chapter members.
- Our Webmaster Rahul Athalye is ready to update our chapter website and he is also working with the CRC committee to put the CRC information on our

chapter website.

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- Our CTTC Chair Derek Archer invited our Regional Chair Kevin Marple to speak at our December program dinner meeting on Dec 12 at Richland Red Lion hotel.
- Our Student Member Chair Greg Jordon plans to take several student members from Wenatchee Valley College to the ASHRAE's 2014 Winter Conference in New York City.
- The CRC Publicity Chair Weimin Wang is finalizing the CRC technical session agenda, which will likely cover subjects on the new ASHRAE Standard 90.1-2013, building retuning, and hospital building design.
- The CRC budget and agenda are being finalized by Sriram, Steve, and Derek.

Again, thanks for the support from the volunteers and members. Wish you all have a happy holiday season and a great 2014 ahead. Hope to see you at our December meeting.

#### ASHRAE Joins Effort to Promote Better Prepared Workforce

**ATLANTA** – ASHRAE has accepted an invitation from the U.S. Department of Energy (DOE) to join an effort that will improve building performance through a better prepared workforce. The goal is to advance the skill sets of engineers and other professionals involved in building design, operation and commissioning.

Under DOE leadership, a Board of Advisors has been created for the Commercial Workforce Credentialing Council (CWCC). This Board will be led by the National Institute of Building Sciences (NIBS) with the participation of ASHRAE and other credentialing and professional development organizations. They will work to establish a set of voluntary national guidelines to improve the quality and consistency of commercial building workforce credentials.

The Better Buildings Workforce Guidelines will reduce the confusion and uncertainty around workforce credentialing; lower costs; and support better credentials, better workers and better buildings. The *Guidelines* will set an industry-validated Job Task Analysis (JTA) for each job title, as well as certification schemes (blueprints) and learning objectives for training programs.

Initially the *Guidelines* will address commercial building workforce training and certification programs for five key energyrelated jobs: energy auditor, commissioning professional, building/operations professional, facility manager and energy manager.

Three of ASHRAE's certification programs are part of this ini-

tial development:

- Commissioning Process Management Professional
- Building Energy Assessment Professional

• Operations & Performance Management Professional Once implemented, industry certification programs must then receive accreditation from the American National Standards Institute (ANSI) in order to be recognized by DOE as meeting voluntary guidelines for the Better Buildings Workforce. This accreditation provides independent verification that the certifications are developed, maintained and administered according to the highest standards of the testing industry. ASHRAE has already begun the process of seeking ANSI accreditation in anticipation of this requirement.

"ASHRAE's involvement in this process is very important," William "Bill" Bahnfleth, ASHRAE president, said. "Participating in the development of the Guidelines gives us a voice in how the workforce of our industry will be developed. These Guidelines will ensure that quality services are provided by professionals with recognized certifications to increase consumer confidence in the service provided and ultimately to ensure the quality of our future building stock."

 ASHRAE representatives recently attended an initial workshop to bring together industry stakeholders; explain the purpose of the newly created CWCC; discuss highlevel questions; and provide input into the composition of the subject matter expert committees.

### This Month's Event

<u>Kevin Marple</u> - President of Benz Air Engineering Co., Inc. Benz Co. is responsible for the design and installation of 100's of Air Pollution Control projects around the world. Benz Air Engineering's primary business is in Oregon and Washington State. They have been in the manufactures representative business for over 60 years. They clean the air for many clients from fire stations to industrial foundries – and everything in between. The products they represent do the work of cleaning and conditioning the air. They also provide energy efficient Geothermal Heat Pump systems for the commercial market. Their expertise is applying those engineered products for each unique customer need.

Kevin has been an active volunteer, serving ASHRAE, since becoming involved in Technical Committee work in the early 1990's. He joined ASHRAE in 1983. He has also served on the grassroots side of ASHRAE as Membership Promotion RVC in Region XI; then Vice Chair and Chair of the Membership Promotion Committee. He has served on the Society Nominating Committee and is currently serving as Region XI Director and Regional Chair.

### Title: "ASHRAE And You"-Regional And Society Updates

Kevin Marple, our current Region XI Director and Regional Chair will be providing us updates on various Regional and Society level efforts in the recent past, present, and future.

This meeting will also serve as a sort of preview for the CRC. We will be having this meeting at our 2014 CRC Hotel, the Red Lion Hanford House in Richland.

WHEN: Thursday December 12th, 2013

TIME: 6:00pm Social, 6:30pm Dinner and Presentation

Cost: \$25 Buffet Dinner. No-Host Cocktails. (Spouse or Significant Other free if the member attended the November program meeting.)

WHERE: Red Lion Hanford House

802 George Washington Way Richland, WA 99336



### Program Calendar (2013—2014)

*September 17, 2013*: Chris Lawrence - Active Chilled Beams

October 8, 2013: Ron Jarnagin ASHRAE's Building Energy Labeling Program—A First Look

November 12, 2013: Nate Deibler, PE—Seismic Restraint of Mechanical Systems

December 10, 2013: Kevin Marple-"ASHRAE and You"-Regional and Society Updates

January 14, 2014: : TBD

*February 2014:* Engineers Week Banquet. No Program Meeting.

*March 11, 2014:* Steve Kinkel, Data Center HVAC Design Standards

April 9, 2013: TBD

May 2013: ASHRAE Region XI Chapter Regional Conference. Richland, WA. Details To Be Announced.

June 2014: Mid-Columbia ASHRAE Golf Tournament to benefit ASHRAE Research, Location and date TBD

# **Mid-Columbia ASHRAE Chapter**

2013-2014 Officers/ BOG

President	Jian Zhang j.zhang@pnnl.gov						
President-Elect	Derek Archer <u>dlarcher@meierinc.com</u>						
Secretary	David Atkinson dcatkinson@meierinc.com						
Treasurer	Rahul Athayle Rahul.Athalye@pnnl.gov						
BOG Member at Large	Weimin Wang Weimin.wang@pnl.gov						
BOG Member at Large jpashba	Jay Ashbaugh ugh@energy-northwest.com						
BOG Member at Large	Position Vacant						
Committee Chairs							
Membership	Weimin Wang <u>Weimin.wang@pnl.gov</u>						
Research Promotion jpashba	Jay Ashbaugh ugh@energy-northwest.com						
СТТС	Derek Archer dlarcher@meierinc.com						
Honors & Awards jpashba	Jay Ashbaugh ugh@energy-northwest.com						
Newsletter jpashba	Jay Ashbaugh ugh@energy-northwest.com						
Historian	Steve Strecker slstrecker@charter.net						
Web Page	Rahul Athalye Rahul.Athalye@pnnl.gov						





The Mid-Columbia Chapter of the American Society of Heating, Refrigerating and Air Conditioning Engineers was chartered in 1981 in Richland, Washington. We are part of ASHRAE Region XI and represent ASHRAE members in Eastern Washington State.

#### Help Sponsor our Website with

#### a Business Card Ad

How would you like to place your business card in front of more than seventy eastern Washington ASHRAE members? For a low \$10 an issue, we can place your business card with company logo in a prominent location in our newsletter.

Interested??? Contact

Derek Archer at (509) 737-6982

dlarcher@meierinc.com

## **Important Notice About Future Meeting Dates**

Registration is now open for ASHRAE's 2014 Winter Conference in New York, NY, January 18-22, 2014 at the New York Hilton.

2014 Region XI CRC coming up May 1st –3rd located at the Red Lion Hotel in Richland, WA. Details to be announced.

Mid Columbia ASHRAE Golf Tournament June 2014. Details to be announced

