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

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October 2013

Don't Miss This Month's Event October 8th, 2013 ASHRAE's Building Energy Labeling Program—A First Look By: Ron Jarnagin Details on pages 3.

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The



Tumbleweed

http://www.midcolumbia.ashraechapters.org

Industry Reaps the Benefits of ASHRAE Scholarships

ATLANTA - "The ASHRAE scholarship program is making a difference in the lives of the outstanding students that it touches."That's according to David Meredith, chair of the ASHRAE Scholarship Trustees on awarding \$106,000 in scholarship money for the 2013-2014 academic year. "When I look at the global leadership that past scholarship recipients have demonstrated throughout their professional career, I am proud of what the ASHRAE Scholarship Program has been able to accomplish," Meredith said. "I can't wait to see how this year's recipients help shape our future."The recipients of ASHRAE's scholarship assistance include the following:

- Reuben Trane Scholarship: \$10,000 to be awarded over two years, Richard Melo, Wentworth Institute of Technology, mechanical engineering. The scholarship was established by the Trane Co. in memory of its founder, an innovative engineer, inventor and business executive.
- Willis H. Carrier Scholarships: \$10,000 for one year, Breeann Foran, Montana State University, mechanical engineering: and Nicholas Rekstad, Pennsylvania State University, architectural engineering. The scholarship was established by the Carrier Corp. in memory of its founder, who installed the world's first scientifically designed airconditioning system.
- Lynn G. Bellenger Engineering Scholarship: \$5,000 for one year, Tiffany Williams, North Carolina A&T State University, architectural engineering. The scholarship, which is being awarded for the first time this year, recognizes a female undergraduate engineering student. It is named in memory of the Presidential Member Lynn G. Bellenger, the Society's first female president.
- Frank M. Coda Scholarship: \$5,000 for one year, Travis Norris, East Carolina University, mechanical engineering. The scholarship was created in memory of ASHRAE's former executive vice president, who served from 1981-2004.
- David C.J. Peters Scholarship: \$5,000 for one year, Mei Yung Wong, Oklahoma State University, mechanical engineering. The scholarship is awarded to a third-year student in a four-year undergraduate mechanical engineering program or a fourth-year student in a five-year undergraduate mechanical engineering program at Pennsylvania State University, Virginia Tech, California State University, Oklahoma State University, University of Texas, Clemson University, North Carolina State University, University of Nevada. The scholarship was created by Southland Industries to honor Peters, an advocate of recruiting quality.
- General Scholarships: \$5,000 for one year, Mitchell Hoesing, South Dakota State University, mechanical engineering; and Peter Kohler, University of North Carolina, mechanical engineering.
- Memorial Scholarship: \$5,000 for one year, Nathan Stoltzfus, Ohio State University, agricultural engineering.
 The following awards provide one-year \$3,000 scholarships:
- Lynn G. Bellenger Engineering Technology Scholarship: Sara Piekunka, Rochester Institute of Technology, mechanical engineering technology. The scholarship recognizes female engineering technology students and is named in memory

- of Presidential Member Bellenger. This is the first year that the scholarship is being awarded
- Region III Boggarm S. Setty Scholarship: Hunter Bachman, University of Delaware, mechanical engineering. This scholarship is awarded to an undergraduate engineering student attending an institution within ASHRAE Region III, which covers Delaware, Maryland, Pennsylvania, Virginia and Washington, D.C., and is named after Boggram Setty, Fellow ASHRAE. Life Member.
- Duane Hanson Scholarship: Kim Rogers, Kettering University, mechanical engineering. The scholarship was established by Gayner Engineers and is named for the company's former president.
- Alwin B. Newton Scholarship: Man Sze Chan, The University of Hong Kong, building services engineering. The scholarship is named for an industry pioneer and ASHRAE Fellow who was granted 219 patents.
- Henry Adams Scholarship: Mahmoud Mohammed, University of Illinois, mechanical engineering. The scholarship was established by Henry Adams, Inc. in memory of its founder, a Charter Member and sixth president of ASHRAE'S predecessor society, ASHVE, established in 1899.
- Region VIII Scholarship: Gaizka Lasa, University of Oklahoma, industrial engineering. The scholarship is awarded to students attending schools within the geographic boundaries of ASHRAE Region VIII, which includes Arkansas, Oklahoma, Mexico and parts of Louisiana and Texas.
- Donald E. Nichols Scholarship: Anthony Taylor, Tennessee Technological University, mechanical engineering. The scholarship is awarded to an undergraduate engineering student attending Tennessee Technological University. It is named for a former ASHRAE vice president and graduate of Tennessee Technological University.
- Bachelor of Engineering Technology Scholarship: Yoginder Rana, Ferris State University, HVAC&R technology.
- Associate of Engineering Technology Scholarship: Cody Bomers, Grand Rapids Community College, HVAC&R Technology.
- High School Senior Scholarships: Elizabeth Lynch, Iowa State University, engineering: Jacquelyn Sommers, Kansas State University, architectural engineering; Joshua Roper, University of Wisconsin, mechanical engineering; and Kali Rosendo, Massachusetts Institute of Technology, environmental engineering. The scholarships were established in 2010 for high school seniors entering their freshman year of college in an engineering or engineering technology program.

Over the course of 24 years ASHRAE has awarded over \$1.3 million to approximately 275 deserving undergraduate and graduate students. For more information on ASHRAE scholarships, visit www.ashrae.org/scholarships. Applications are now being accepted for the 2014-15 undergraduate, regional/chapter and university-specific scholarships. The deadline is Dec. 1, 2013.



Message from the PresidentBy Jian Zhang

September was a busy month for closing off the governmental fiscal year. We had an excellent program meeting topic on Active Chilled Beams and a great speaker Mr. Chris Lawrence VP Sales & Marketing at DADANCO. We appreciate Mr. Lawrence's visiting and simplifying the technology discussions to easy-to-follow design guidance. If you need a copy of the presentation slides, please contact me.

Congratulations to our Secretary and RP Chair David Atkinson! David is moving out of Tri-cities area for his new job. Many thanks to David for his contribution and professionalism when serving the BOG and 2014 CRC organizing committee in the past year. David helped us exceed our 2012-2013 research promotion goal and developed good rela-

tionship with our RP sponsors and donors. Let's hope Dave all the best and stay active in ASHRAE.

I didn't receive any application for the \$1000 YEA member award. However, Miss Yunzhi (Lucy) Huang, a YEA member, volunteered to help our chapter and the 2014 CRC. At the September BOG meeting, our BOG approved to recruit her to be our chapter YEA chair. Welcome Lucy!

Our chapter BOG now has vacant positions. For volunteering, please contact me at i.zhang@pnnl.gov. See information on our October program meeting. Tuesday, October 8th at 12:00 noon, Former ASHRAE Society President Ron Jarnagin will present us "ASHRAE's Building Energy Labeling Program". See you there!

ASHRAE/IES Publish First Standard Focused on Commissioning Process

ATLANTA – A newly published standard focused on the commissioning process will help ensure a fully functional, fine-tuned facility.

ANSI/ASHRAE/IES Standard 202, Commissioning Process for Buildings and Systems, identifies the minimum acceptable commissioning process for buildings and systems as described in ASHRAE's Guideline 0-2005, The Commissioning Process. Standard 202 is ASHRAE's first standard focused on the commissioning process. The commissioning process as detailed in Standard 202 applies to all construction projects and systems and is an industry consensus document.

"Given the integration and interdependency of facility systems, a performance deficiency in one system can result in less than optimal performance by other systems," Gerald Kettler, P.E., chair of the committee that wrote the standard, said. "Implementing the Commissioning Process is intended to reduce the project capital cost through the warranty period and also reduce the life-cycle cost of the facility. Using this integrated process results in a fully functional, fine-tuned facility, with complete documentation of its systems and assemblies and trained operations and maintenance personnel."

The commissioning process assumes that owners, programmers, designers, contractors and operations and maintenance entities are fully accountable for the quality of their work. The process begins at project inception and continues for the life of a facility.

The process includes specific tasks to be conducted to verify that design, construction, verification, testing, documentation and training meet the owner's project requirements, according to Kettler.

The standard defines the commissioning process through 13 functional steps, each of which contains deliverables. The commissioning activities and deliverable are as follows:

- Initiate the Commissioning Process, including defining roles and responsibilities
- Define the project requirements, which results in the Owner's Project Requirements (OPR) document
- Develop commissioning plan produces a written Commissioning Process Plan
- Plan design approach to Owners Project Requirements defines the basis of design
- Set contractor commissioning requirement, which are included in the commissioning specifications
- Design review by the commissioning authority provides feedback and a design review report
- Submittals review verifies compliance with the OPR in a submittal review report
- Observation & Testing verifies system performance with results documented in construction checklists and reports
- Issues resolution coordination is done with an issues and resolution log
- Systems manual assembly results in a systems manual for building operation
- Conduct training for building operations with training plans and records
- Post occupancy operation commissioning provides an end of warranty commissioning report
- Assembly of a commissioning report captures all the project commissioning documentation

Other commissioning guidance from ASHRAE includes Guideline 0-2005, The Commissioning Process; Guideline 1.1-2007, HVAC&R Technical Requirements for the Commissioning Process; and Guideline 1.5-2012, The Commissioning Process for Smoke Control Systems.

This Month's Event

Ron Jarnagin

Ron Jarnagin is a well known name within ASHRAE, thanks to his many years of contributions at both the Mid-Columbia Chapter and Society levels. In addition to being ASHRAE Society President in the 2011-2012 year, Mr. Jarnagin has also chaired several ASHRAE councils and committees. Including the Standard 90.1 Commercial Building Energy Standard committee, the Building Energy Labeling committee, several sustainability committees, and others as well. He was also chosen as Tri-Cities Engineer of the Year in 2004. We look forward to Ron's presentation and hope you will join us.

<u>Title:</u> ASHRAE's Building Energy Labeling Program-A First Look

Building Energy Quotient (bEQ) is a building energy labeling program that lets commercial building owners zero in on opportunities to lower building operating cost and make informed decisions to increase value. The bEQ label is actually two labels in one: an In Operation label that rates a building's energy performance by using actual measured energy use , and an As Designed label that rates the asbuilt conditions of the building by using modeled energy use under standardized conditions. What makes bEQ unique is the depth of the analysis upon which the rating is based. Ron will give us a look at the program itself, its applications, and its future.

WHEN: Tuesday October 8th, 2013

TIME: Noon to 1 PM

Cost: \$5—For Pizza and Soda

WHERE: Meier Architecture-Engineering Offices

8697 Gage Boulevard Kennewick, WA 99336

RSVP to Derek Archer dlarcher@meierinc.com



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: James
Tauby, PE—Seismic Restraint
of Mechanical Systems

December 10, 2013: TBD

January 14, 2014: : TBD

February 2014: Engineers
Week Banquet

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

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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.

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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





