

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

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February 2008

The

Tumbleweed



<http://www.midcolumbia.ashraechapters.org>

Don't Miss This Month's Event

February 22, 2008

2008 Tri-Cities Engineers Week Banquet

Details on page 3

"Ultra Efficient Chilled Water Plants" - Terry Herron

The Mid-Columbia Chapter of ASHRAE held its January lunch program meeting on January 15th at the Clarion Inn in Richland. Mr. Terry Herron with Mechanical Sales in Spokane, Washington gave a great presentation on ultra efficient chilled water plants.

Mr. Herron started the presentation with a discussion of the option of having an all variable speed plant versus just a variable speed chiller. He then talked about efficiency of typical chilled water plants, which is about 0.75 to 1.25 kW/ton. Chilled water plants with efficiency of 0.45 or less kW/ton are considered ultra efficient. Current typical chilled water plant design and "Best in Class" technology were also discussed during the presentation.

Variable speed motors allow equipment to run more efficiently and helps the entire chilled water plant run at optimal net efficiency. Controls with monitoring and trending capability is a good way to determine how to save energy. The trending program will tell you where all the energy is being used in the system.

Mr. Herron also introduced the skid mounted chilled water plant and sensorless pump technologies to the attendees. The sensorless pump technology, with all of the controls integral to the pump and motor, is an integrated solution to save on control wiring and field time.

ASHRAE News Briefs

ASHRAE to Host Satellite Broadcast on Integrated Building Design

ATLANTA - A free satellite broadcast and Webcast, Integrated Building Design: Bringing the Pieces Together to Unleash the Power of Teamwork, will be held from 1-4 p.m. EDT on April 16. The ASHRAE program focuses on whole-building integrated design.

"The broadcast explains what you and other members of the building team must do to advance high-performance buildings with improved design, construction and operations processes," said Bill Williams, chair of the event. "Buildings that meet the needs of occupants and truly achieve sustainability objectives can only be created if the building community shares its knowledge and experiences."

Online registration opens March 1 for satellite broadcast site coordinators and Webcast participants. Registration for satellite downlink viewers opens March 15. For more information, visit www.ashrae.org/IBDbroadcast. Registration is free.

ASHRAE Seeks Papers on Sustainable Urban Design

ATLANTA - ASHRAE is seeking papers focused on sustainable urban design for its 2009 Winter Meeting, Jan. 24-28, Chicago.

Papers and programs should present the latest developments in sustainability as applied to systems and equipment, application of their use in different types of buildings and, especially, the impact on urban settings. Topics include energy conservation, indoor environmental quality, application of ASHRAE guidance to achieve high-performing sustainable results, and international sustainability efforts.

The deadline for paper submittal is April 4. Submit papers online at mc.manuscriptcentral.com/ashrae or contact Mary McGee, meeting program administrator, at mmcgee@ashrae.org for more information. The deadline for other technical program submissions is Aug. 8.

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Message from the President

By Lois Payne

Here is it February already...Happy Ground-hogs Day! Happy Chinese New Year! Happy Valentines Day! and Happy Presidents Day, too! I think this might also be the most windy month!

What you also know is that February is the month we get to celebrate being Engineers! The Tri-City Engineer's Week Annual Banquet is hosted by IEEE this year and will be held on February 22 at the Red Lion. We would like to reserve a table for ASHRAE members, so please RSVP to Jay Ashbaugh, CTTC to let him know you will join us for this event.

Congratulations go out to Wei Jiang, PNNL, for being selected as one of the nation's top 5 of ASH-

RAE's nominees for "New Face of Engineering 2008." Wei is our Secretary this year and we are all proud of your accomplishments!

We have several programs of interest coming up that you are invited to. The ASHRAE National President is visiting our chapter for a lunch program next month. The Mid-Columbia Chapter Golf Tournament is being planned for June 12th. If you are interested in participating or helping out as a volunteer, please call one of the officers and let us know.

I look forward to seeing you at the banquet and hope you bring your sweetheart with you, too!

Lois

Energy Efficient Buildings Encouraged Through Free Download of Advanced Energy Design Guide Series

ATLANTA – To encourage energy efficient design in a range of building types, ASHRAE and its partnering organizations are making available for free the Advanced Energy Design Guide series.

Electronic versions of the newest book in the series, Advanced Energy Design Guides for K-12 School Buildings, as well as the existing guides on small office and small retail buildings are available for free download at www.ashrae.org/freeaedg. Future guides, including one focused on warehouses to be published this spring, will be available for free electronic download as well.

"Energy efficiency is still a vast and underutilized energy resource that is essential to the long-term survival of our world," says ASHRAE President Kent Peterson. "Buildings consume approximately 40 percent of the primary energy in the United States. As part of our energy efficiency market deployment strategy, we want to get this valuable building guidance into the marketplace and into the hands of owners, contractors and design teams. The technology is available today to construct substantially more efficient buildings. Free distribution of the Advanced Energy Design Guide series will help educate the marketplace on how to build energy efficient buildings that use significantly less energy than those built to the minimum code requirements.

"The Illuminating Engineering Society of North America (IESNA) supports the electronic distribution of the Advanced Energy Design Guide series to ensure widespread availability of these voluntary recommendations," said Rita Harrold, IESNA member of the AEDG Steering Committee. "Offering these important Guides for free download to a large audience of users will help further the partnering organizations' efforts to create a more secure energy future."

In addition, the K-12 guide was sent to nearly 14,000 school systems around the country to assist with the design of energy-efficient schools that create safe

and comfortable environments conducive to learning.

Partnering organizations include the American Institute of Architects, the Illuminating Engineering Society of North America, the U.S. Green Building Council and the U.S. Department of Energy.

"Addressing energy use in our buildings is one of the most important measures we can take in our efforts to protect the health of our environment," said Brendan Owens, vice president of LEED Technical Development, U.S. Green Building Council. "The Advanced Energy Design Guide series are critical publications for the building industry. Every percentage point reduction in buildings' energy use brings us that much closer to our goal of mitigating climate change."

"The importance for all design and construction professionals to move toward carbon neutral, sustainable buildings is of paramount importance to the American Institute of Architects," said Christine McEntee, executive vice president and CEO of the AIA. "The Advanced Energy Design Guides are an approachable, important tool to help achieve that goal."

The guides provide a sensible, hands-on approach to design through use of products that are practical and commercially available as "off-the-shelf" technology. They offer designers and contractors the tools needed for achieving a 30% energy savings compared to buildings that meet the minimum energy efficiency requirements of Standard 90.1-1999.

Hard copies of all of the guides are available for purchase. For more information, visit www.ashrae.org/freeaedg.

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



This Month's Event

**ENGINEERS
WEEK® 2008**
February 17-23

ENGINEERS MAKE A WORLD OF DIFFERENCE®

2008 Tri-Cities Engineers Week Banquet

Featuring Mr. Paul Kostek

IEEE-USA VP Communications and Public Awareness

presenting

If The World Is Flat, What Happens If You Fall Off?
The impact of Outsourcing on
US Innovation and the Engineering Profession

Friday, 22 February 2008
Red Lion Hotel Hanford House, Richland

Social: 5:30 PM

Dinner: 6:15 PM

Program: 7:00 PM

Ticket Price: \$35/person or \$240/ table (seats 8 people, advanced purchase only)

For Information or Tickets, Contact

Amy Qiao

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Yan.Shi@pnl.gov

509-375-6858

Hosted by the Tri-Cities Chapter of the Washington Society of Professional Engineers

National EWeek Chairs for 2008: IBM Corporation and the Chinese Institute of Engineers (CIE)-USA

Learn more at www.eweek.org

Dinner Menu -- Buffet-A Taste of Tuscany

Shrimp and bacon penne pasta in lemon caper cream

Baked cheese ravioli with fresh spinach and rich roasted tomato sauce

Sautéed Marsala chicken

Mushroom and sweet onion Risotto

Grilled Italian squash, roasted peppers and eggplant

Caesar salad with roasted garlic dressing and freshly grated parmesan

Antipasto platter of olives, roasted peppers, artichoke hearts and marinated mushrooms

Artisan garlic bread with olive oil and balsamic

Dessert: Assorted decadent dessert bars

RSVP:

Jay Ashbaugh at (509) 735-1589 jpashbaugh@meierinc.com

Please RSVP by February 18, 2008 to see if there is enough people to reserve a full table for ASHRAE (\$5 per ticket discount).

**Program Calendar
(2007–2008)**

September 11, 2007: *Low NOx Burners 101, Don Williams*

October 16, 2007: *Data Center Design, David Toralez*

November 13, 2007: *All-Climate Air-to-Air Heat Pumps, Greg Jordan*

December 11, 2007: *Controlling Contaminants with Pressure Differentials, Bert Phillips, ASHRAE DL*

January 15, 2008: *Ultra Efficient Chilled Water Plants, Terry Herron*

February 22, 2008: *Engineers Week Banquet*

March 7, 2008: *TBD, Kent Peterson, ASHRAE President*

April 16, 2008: *Characteristics and Competencies of Outstanding Leaders, Barry Benator, ASHRAE DL*

May 13, 2008: *TBD*

June 12, 2008: *Mid-Columbia ASHRAE Golf Tournament to benefit ASHRAE/Research.*

Mid-Columbia ASHRAE Chapter

2007-2008 Officers/ BOG

President (509) 438-9561	Lois Payne lois_payne@rl.gov
President-Elect (509) 735-1589	Jay Ashbaugh jpashbaugh@meierinc.com
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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.

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
Mark Simon at (509) 377-8713
msimon@energy-northwest.com

Important Notice About Future Meeting Dates

The dates for the Winter and Annual Meetings in 2008 and 2009 are:

- **2009**, Jan. 24-28 in Chicago, and June 20-24 in Louisville, KY.



See the light...

...and learn to think outside traditional boundaries of building systems design



WHEN: March 26th-27th, 2008

WHERE: Seattle University, Pigott Hall

FOCUS: A comprehensive educational event that provides practical and technical information that participants can take back to their offices and apply to their projects.

PREVIEW: Sneak peek at the program

- sustainable healthcare facility design
- evaluating the carbon footprint of your project
- designing low exergy systems
- innovative cooling technologies
- radiant system case studies
- the big picture behind water efficiency
- optimizing interior and exterior lighting systems
- daylighting strategies
- green specifications and utilizing MasterFormat 2004
- BIM from contractor to consultant
- designing systems for sustainable operations and energy efficiency
- latest in ASHRAE resources
- the business side of green design
- product and technology expo

OFFERED BY: Puget Sound Chapters of ASHRAE and IEEE.

REGISTRATION: Open January 2008

Engineering **Vision** 2030

Education and innovation that empowers engineers to build a sustainable future.

