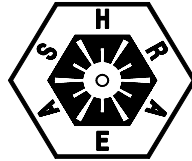


THE BADGERAIRE

AMERICAN SOCIETY OF HEATING, REFRIGERATING, AND AIR CONDITIONING ENGINEERS, INC.

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Volume Number 2007/8-VI – February, 2008

February Meeting: UWM Central Plant Tour Followed by Refreshments and Hors D'oeuvres at the Café Hollander

February's UWM Central Heating/Chilling plant tour promises to be interesting, informative and a good time. Here are the details:

Date: Thursday, February 21

Host: Mark Kazmierski, UWM Power Plant

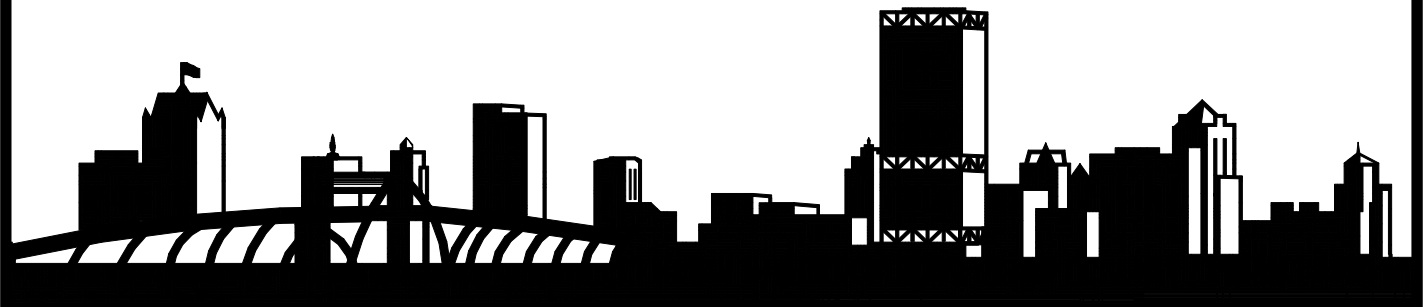
Time and Place: The tour will be staggered. We ask that you arrive *between 4:30 and 4:45* for registration and assignment to a group. The plant is located at 3359 N. Downer, Milwaukee, 53211. If you are not fortunate enough to find street parking, there is an *underground ramp about 100 yards to the north* of the facility at the Klotsche Center.

This tour will provide a great visual and hands/eyes-on experience for those who intend to attend the March program on *chiller plant design* by Hugh Crowther of McQuay.

The UWM plant generates high pressure steam for campus-wide distribution. In addition, it generates chilled water with a system consisting of two steam turbine-driven 2750 ton centrifugal chillers and one 3000 ton electric centrifugal chiller. A new 4,000 ton electric unit is in the works. One of the biggest issues facing the plant today is the Quagga Mussel infiltration in Lake Michigan. The ecology of the lake is rapidly changing and this creates problems for facilities that use Lake Michigan water for cooling, as UWM does. Filtration has become a major issue, as increased water clarity results in increased solar penetration. This contributes to more plant life, which ends up in plant intake piping. We encourage you to attend the meeting to learn about chiller plants AND the changing lake ecology!

After the tour, we will adjourn to the *Café Hollander at 2608 N. Downer*. Rather than having a sit-down dinner, we have asked the Hollander to host a grazing and beverage event that will allow socializing and mixing.

Reserve at www.ashrae-wi.org. Members free, guests and no-shows \$20.00.



From the President's Desk
By David Grassl

For those of you that came to our first meeting of the new year with Randy Dahmen, I hope you found the presentation very informative. With the new code on the horizon, it is important for all engineers, contractors, vendors and owners to be on the same page. By having Randy present to us every year, we hope that everyone can ask their questions and get a quick synopsis of the upcoming updates. Finally, our January meeting drew over 100 people, which was the highest attendance that we have had at an ASHRAE meeting in at least the three years. Thank you to all that attended.

Within the past few months, our Wisconsin Chapter has worked toward making an additional outreach to our Student Chapter at MSOE. It has been our goal to increase student attendance at meetings and provide awareness to what is happening within the industry. I am happy to say that there has been an increase in student presence the past few months. Also, we were part of the MSOE Career Fair in January, increasing student awareness of professional societies and the benefit to professional involvement. If you see any students at our meetings, please greet them and make them feel welcome.

Finally, in February we have a tour of the UW-Milwaukee Central Plant which should be an exciting tour with many features that are not commonplace in our everyday designs. Please sign up early to reserve a spot, as there is only a limited quantity of people that can sign up for the tour. Look for more information to follow, we hope to see you soon.

ASHRAE & CSI Webinars

This month the Wisconsin Chapter will be providing two webinars to our members in a joint event with the Milwaukee CSI Chapter.

Webinars can be viewed free of charge at Graef, Anhalt, Schloemer and Associates on the dates described below.

The first webinar will be held on February 12th at 1 pm and is titled MasterFormat for HVAC Engineers. This webinar will cover the cover basic specification issues and the conversion process of MasterFormat 95 to MasterFormat 2004. Additionally, material will highlight select Subgroup and Division content/issues that are of primary interest to the HVAC&R industry. Other topics to be discussed will be the principles of construction documentation, MasterFormat basics, the evolution of MasterFormat including the expansion process, application of the MasterFormat and the procurement of contracting requirements group details. The speaker for this webinar will be Charles E. Gullledge III, PE, CSI, ASHRAE.

Our second webinar will be on February 26th at 1 pm and cover the issue of vapor barriers, specifically dealing with selecting the proper envelope barriers based on climate, codes and design criteria. This webinar will cover the three important components of the building enclosure including: air barriers, water-resistant barriers and vapor barriers. While the function of individual barriers is relatively well understood, there is confusion on the consequences of combining two or more functions into a single membrane. The objective of this webinar include understanding the air, water and water vapor transport through the building enclosure; understanding the role and the design criteria for air, water and vapor barriers; review of current codes for air, water and vapor barriers; and guidelines for choosing vapor permeable or non-permeable air and water barriers. The speaker for this webinar will be Dr. Maria Spinu, PhD, CSI.



"science for sustainable environments"

Navigation for a Sustainable Future

This morning at the Winter Meeting, I attended a series of presentations on "Exergy Analysis for Sustainability". I've been curious about exergy so I committed the entire morning.

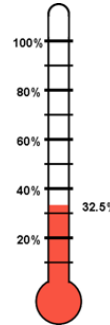
After a few thermodynamics-like presentations, several speakers gave examples – necessary for this controls engineer – and it got real interesting. Rational Exergy Management enables our designs to address the effective use of energy and impact on the carbon footprint of buildings - within one framework. Energy and cost analysis are only part of the process of design for sustainability. This was new to me. And then, someone asked about the end of life costs of a ground source heat pump system. Things are changing in our industry!

Your investment in ASHRAE Research can help us prepare for it and even accelerate the change.

WI Chapter RP Campaign 2007-08

FYI - the Chapter officers have invested in ASHRAE Research, further evidence of their leadership in the Chapter. This year, the Wisconsin Chapter will be recognized with the Full Circle Award – good stuff! Please thank the officers when you can for their commitment of time and talent as well as their personal investment in our profession through contribution to ASHRAE Research. Is it time for you to join the leaders?

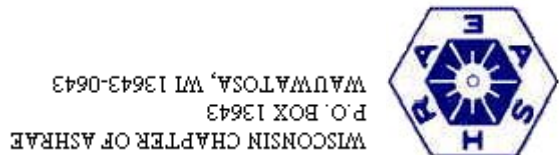
Best Regards,
 Jude Anders (judeanders@sbcglobal.net)
 Wisconsin Chapter Research Promotion Chair



ASHRAE WI Chapter Research Promotion 2007 – 2008 Campaign January Report	
Goal:	\$5,000
Contribution:	\$1,625
Achievement:	32.5%

**Chapter Research Donors
2007-2008 Campaign**

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Table Top Participants
Fluid Handling, Inc. (November) Hydro-Flo Products, Inc. (January) H.O. Trerice Company (February)



Upcoming Meetings-Mark Your Calendars!

MEETING DATE / THEMES	LOCATION	TOPIC	SPEAKER
Thursday, February 21 4:30/4:45 PM	UWM Central Heating/Chilling Plant	Tour of a Gas Fired Chilling/Steam Central Plant	UWM Plant Staff Mark Kazmierski, Host
Thursday, March 20 5 PM	TBA	Chiller Plant Design	Hugh Crowther, McQuay
Thursday, April 18 5 PM Tentatively	TBA	Leed Documentation and Administration	TBA
	Thursday, May 15, 5 PM	Schlitz Audabon Nature Center	Tour