THE BADGERAIRE

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

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A PURLICATION OF THE WISCONSIN CHAPTER OF ASHRAE

Volume Number II _ October 2006

October Program – Milwaukee County Power Plant Tour Thursday, October 19, 2006

The October chapter meeting will be a tour of the Milwaukee County Power Plant hosted by John Hyland of Wisvest and Gregg Achtenhagen of Ring & DuChateau. This tour will be given in groups of approximately 12 people and should last around half an hour. The tour will focus on the chilled water side of the plant, but will hopefully include a brief tour of the steam side time permitting. Please bring a hard hat, safety goggles and wear proper footwear.

Program Location

Milwaukee County Power Plant 9250 W. Watertown Plank Road, Milwaukee, WI

Registration: 4:30 p.m. – 5:00 p.m. Program: 5:00 p.m. – 6:00 p.m.

O'donoghue's Irish Pub 13225 Watertown Plank Rd, Elm Grove, WI **Appetizers: 6:00 p.m. – 8:00 p.m.**

The program cost of \$20.00 will include appetizers. Checks should be payable to the "Wisconsin Chapter of ASHRAE". Details of this program can be found on the program page.

PLEASE MAKE YOUR RESERVATIONS ONLINE AT <u>WWW.ASHRAE-WI.ORG</u> OR TELEPHONE YOUR RESERVATION TO MAGGIE ROLL @ 414.778.7422. IF CALLING IN YOUR RESERVATION, PLEASE SPELL OUT YOUR LAST NAME ON THE MESSAGE. PLEASE HAVE YOUR RESERVATIONS IN BY CLOSE OF BUSINESS, MONDAY, OCTOBER 16, 2006.



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PRESIDENT'S COLUMN

I would like to start this month's column off by thanking a number of people. First let me thank Kieran Donohue of Critical Room Control for providing an interesting and informative presentation on hospital clean room applications at our September meeting. Next I would like to thank Bill Murray, our Region VI History RVC, and his wife Pat for making the trip from Minnesota to attend our meeting. Finally, I would like to thank David Grassl, our Chapter Vice-President and head of Programs for having put together what I believe will be a very good series of programs for our chapter this year.

As I mentioned in our first monthly newsletter, one of our goals for this year is to increase attendance at our monthly meetings, and overall activity within the chapter. One way we hope to increase attendance is by providing interesting meeting topics, such as this month's tour. Another way we hope to improve attendance is by beginning to offer continuing education credit (in the form of PDH's) at applicable meetings. As of this printing, we expect to provide continuing education credit at our January, February, March, April, and May meetings. This credit should be recognized by the licensing boards of most states with continuing education requirements.

We will be having our first social function with the YEA and Student Chapter groups on Thursday, October 12th. I would like to invite all of our chapter membership who is interested to attend this function (regardless of age); I would specifically like to encourage our student members and YEA members to consider attending this function. We believe this type of activity will help to make regular meetings more enjoyable as it provides opportunity to get to know your peers who attend the meetings in a less formal setting. More information on this function is included in the newsletter.

If you have questions about any of the information in this newsletter please feel free to contact me at any time. I look forward to seeing you at our tour on October 19th. Thank you.

Corey Metzger Wisconsin Chapter of ASHRAE President corey-metzger@mchsi.com

Attention "Young" Members

The Wisconsin Chapter of ASHRAE will be having a social function for YEA and Student Members on Thursday, October 12th. We will be meeting at Bar Louie,

located at 1114 N. Water Street, from about 7:00 P.M. to about 9:00 P.M. This will be an informal get together with food and drinks available from the menu for anyone interested. As is stated in the President's Column, we welcome any of our membership to this function. We especially encourage the YEA and Student Members to come out and get to know their peers. We hope to see you there.

Membership & Product Directory

To better serve our members and the local companies who serve them, this year the Wisconsin Chapter is putting together a Membership and Product Directory for all its members. The intent of this Directory will be to provide better communication between manufacturers and their sales representatives, engineers who specify products, contractors who purchase and install the equipment, and other interested parties.

The content of the Directory will include all 2006-2007 ASHRAE Wisconsin Chapter members with contact information and company listings of local product manufacturers and representatives who purchase an Ad for Product/Service Listing.

The Cost of an Ad/Product Listing will be \$100.00, which would allow local manufacturer representatives to list all their product lines. All Wisconsin Chapter members and Advertisers will each receive one (1) free copy of the Directory, while additional copies may be purchased for \$5.00. Templates for the Product Listing are available upon request. All Ads must be received by **October 31, 2006** in order to ensure the Ad will appear in the 2006-2007 Membership and Product Directory.

For members who wish to omit their names and contact information in the Directory, to request a template for an Ad, or for more information, please contact David Grassl at (414) 266-9231 - david.l.grassl@gasai.com or Corey Metzger at (414) 778-7430 - corey-metzger@mchsi.com.

ASHRAE Research: Navigation for a Sustainable Future

Sustainability and the 'Triple Bottom Line'

Let's start our investigation of sustainability with a definition:

"Sustainable development seeks to meet the needs and aspirations of the present without compromising the ability to meet those of the future."

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(World Commission on Environment & Development, 1987)

The concept of sustainability or sustainable development is expressed here in terms of what it is attempting to accomplish – meeting 'needs and aspirations' of people now and in the future.

The next level of explanation often used to make the concept more real is the idea of sustainability as an appropriate balance sheet incorporating 'the triple bottom line':

- Economic Prosperity: the financial balance sheet of our activities, personal, business, and community
- Environmental Stewardship: a measure of the impact of our activities on the natural environment, short and long-term
- Social Opportunity: a gauge of the impact of our personal, business, and community behaviors on each other and the health of our society overall, both local and global.

The first two are often combined in the term 'ecoefficiency'. John Torinus in the Milwaukee Journal has
referred to these as the 'green and gold' opportunity of
sustainability. The third is more often identified as 'social
responsibility', but I do favor the positive side,
emphasizing the benefit of responsible action on the part
of individuals, companies, and communities.

Too often the 'triple bottom line' is viewed like they are three separate entities. Milton Friedman promoted the idea that the 'business of business is business', often used by the 'show me the money' types to cut any discussion beyond the financial bottom line. That might rightly be identified as the 'short-term' financial bottom line, ignoring the long term health of business and community. We in the M7 Region can certainly recognize that there is an intimate, dynamic relationship at play here. Water access and pollution, workforce skills and access to jobs, energy costs and renewable energy sources are all local issues each involving every element of the triple.

Control engineers and business analysts have an approach that makes good sense in this application. It goes like this:

- Each of us, individuals, businesses, and communities behaves according to our values, attempting to maximize our experience.
- That experience-outcome is modeled as a utility function. It may include elements of short term satisfaction as well as those related to our long term health and aspirations.
- Our global society is a very dynamic system with many parameters that define its situation

- including those related to economic prosperity, environmental stewardship, and social opportunity.
- Our experience-outcome, the value of utility actually realized, depends our actions on the system and its inherent dynamics.

The point is to recognize that economy, ecology, and social opportunity are tied tightly together in a dynamic social system. Sustainable development calls on us to act in that social system, maximizing our experience, but with the constraint that we do not impair future generations to do the same. That seems pretty reasonable doesn't it?

Jude Anders

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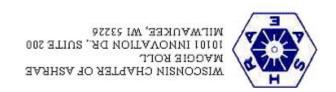
P.S. Last year I read a paper by two learned folks from New Zealand. Their thesis was that engineers are not well positioned to act on sustainable development. It is out of scope, the wrong context, and engineering education does not prepare us to contribute. What a crock! Let's consider the engineering opportunity to contribute to sustainable development in the next issue. Meanwhile, please let me know your thoughts on the issue any time.

ATTENTION! Saving Energy in Hydronic Systems

On March 15th, 2007 the Wisconsin ASHRAE Chapter is pleased to announce they will be sponsoring a day-long seminar on Saving Energy in Hydronic Systems. The featured speaker for the seminar will be Roy Ahlgren, the Director of the ITT Fluid Handling's Training & Education Department teaching courses in steam and water system through ITT Bell & Gossett's Little Red Schoolhouse. He is a past chairman of the ASHRAE Technical Committee TC6.1 Hydronic and Steam Equipment and Systems. Roy is also the author of many booklets and articles on Fluid Handling topics.

With the recent and continued push within ASHRAE to design and incorporate energy efficient systems; this seminar will assist in energy saving techniques through pumping applications. This practical course will be a great opportunity to focus on pump fundamentals, hydronic systems, pump selection, parallel & series pumping, system control, system balance, primary-secondary pumps, air management, open and closed systems, and the use of variable flow systems.

Location and prices for the seminar are to be determined at a later date, with food and beverages for the entire day. Options will be available for half-day attendance at a reduced rate. Look for sign-up options next month.



MEETING DATE / THEMES	LOCATION	TOPIC	SPEAKER
October 19, 2006	O'Donaghue's	Milwaukee County Central Plant Tour	John Hyland
Wednesday, November 15, 2006 Evening Meeting	Buca Di Beppo's	Sustainability in Design – A Tour of Johnson Controls @ JCI Brengel Center	TBA
December 1, 2006 Holiday Dinner Dance	Westmoor Country Club	N/A	N/A
January 18, 2007 Evening Meeting	Alioto's	Standard 62.1 – 2004	Dennis Stanke
February 15, 2007 Lunch Meeting	MSOE	Wisconsin Code Review	Randy Dahmen of the Wisconsin Dept. of Commerce
March 15, 2007 All day Seminar	TBA	Energy Savings in Hydronics	Roy Alghren
April 19, 2006 Evening Meeting	TBA	Evaporative Cooling Techniques	TBA
May 17, 2007 Evening Meeting	Milwaukee County Zoo	Tour of a Cold Storage Facility or Milwaukee County Zoo	TBA
June Evening Meeting	Milwaukee County Zoo	Tour of a Cold Storage Facility or Milwaukee County Zoo	TBA

All meetings will be held the third Thursday of every month, except December.

^{*}Please note: This is a tentative schedule; topics may be subject to change.