

# THE BADGERAIRE

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



Shaping Tomorrow's  
Built Environment Today

## December 19, 2013 Pump Curve Review and Application



### *December Program & Holiday Party*

We will be hosting a presentation on December 19<sup>th</sup> at 3-4pm on pump curve reviews and application. It will be held at the MSOE Alumni Partnership Center (1120 N. Broadway).

Afterwards we invite you to Bar Louie on Water Street to spread the Christmas Cheer and socialize among our Fellow ASHRAE members along with some of the MSOE Student chapter members. We will be providing Appetizers and drinks.

Please [register](#) in advance.

Also, Please check out our website for the upcoming events for the rest of our ASHRAE year. The following is a highlight of the events planned:

January: State Code Update

February: Open

March: Modine Facility Tour W/ AFE

April: Real World Integrated Design Suggestions - Distinguished Lecturer Lew Harriman

May: End of Year Social

June: Recess

July: Annual Golf Outing

August: Recess

September: 2014 year begins





### President's Column December 2013

Happy Holidays Wisconsin Chapter!!

I hope this message finds you all doing well. The weather is starting to look and feel like winter in Wisconsin, which means we are approaching the end of 2013 and on the verge of moving into a New Year.

This month's topic will discuss selecting pump curves and applications at the Alumni Partnership Building on the MSOE Campus. The meeting will be held from 3 – 4 p.m. You are welcome to stay afterwards and socialize with your fellow ASHRAE members for drinks and appetizers at Bar Louie, down the street from MSOE. We chose not to have a Holiday Party this year as we understand that people are busy this time of year. It is important that family comes first. Therefore, we are going to have an end-of-year social event in June. The weather will (hopefully) be much nicer and we should be able to capitalize on it.

Thank you everyone who attended last month's meeting at J.F. Ahern. The turnout for the event was great! We are hopeful that more of our meetings will create that kind of support. For those that were in attendance at the meeting, if you did not receive your CEU Certificate, please contact Jason Nenonen at [jnenonen@jfahern.com](mailto:jnenonen@jfahern.com).

I continue to encourage the membership body of the Chapter to attend our monthly meetings, provide feedback to us regarding operations, topics, and how we can improve as your Chapter Officers, as well as supporting other members within the Chapter. Please don't forget, We, the Board of Governors, are here to serve you, the industry that supports Us. You can contact me directly at [jleffingwell@hga.com](mailto:jleffingwell@hga.com).

I personally want to wish everyone and their families a blessed Holiday Season. Please be

safe if you are travelling and enjoy the time with family and friends during this time of year.

Have a great month people!

Jason Leffingwell  
President of "The" Wisconsin Chapter of ASHRAE

P.S. This is a reminder to the membership that each monthly meeting you attend, your name will be entered in our end of year raffle. The more you attend, the higher your chances are of winning, so make sure you are present at the meetings. We will have some great prizes for the Chapter.

### **ASHRAE Technology Awards – Wisconsin Projects**

Each year ASHRAE awards its members that develop innovative building designs applied to occupant comfort, indoor air quality and energy conservation. The designs incorporate ASHRAE standards for energy management and indoor air quality. We are currently looking for candidates from the Wisconsin Chapter that incorporate those unique and innovative design ideas into their projects. Categories include residential (new and existing), public assembly (new and existing), commercial buildings (new and existing), institutional buildings (new and existing), includes educational facilities and other institutional), health care facilities (new and existing) and industrial facilities or processes (new and existing).

Please use the following link for more information on the awards program: [www.ashrae.org/cttc](http://www.ashrae.org/cttc). Winners for each category will be determined by the Wisconsin Chapter Board of Governors. The winner in each category will be eligible to be submitted to the regional and national level to showcase projects designed by Wisconsin Chapter members. Performance must be proven through one year of verified operating data. Please submit your award applications to the Wisconsin Chapter CTTC Chair, Ryan McNally ([ryan.mcnally@exp.com](mailto:ryan.mcnally@exp.com)), by March 15<sup>th</sup>, 2014.

## YEA

Attention YEA members (those of you who are ASHRAE members, student or associate, and are 35 years of age or younger)! Your YEA chairman is Andy Brophy, you can reach him at [abrophy@e-3group.com](mailto:abrophy@e-3group.com). A kickoff event for the 2014 year is being planned for mid-January for all YEA members. You will be receiving an email with details before Christmas so keep your eyes peeled.

The event will be informational, as well as a chance to get together and network with your other fellow YEA members. We will take this time to plan out the remainder of the season.

Updates will now be posted to this newsletter monthly as well.

If you ever have any YEA questions or concerns, please contact Andy at [abrophy@e-3group.com](mailto:abrophy@e-3group.com).

## February Program

The chapter program scheduled for Thursday February 20th, 2014 will include a presentation by Ron Jarnigan, Staff Scientist at Pacific Northwest National Laboratory. Mr. Jarnigan has a diverse background with experience in fluid flow, power plants, transportation systems, HVAC systems and energy use. Mr. Jarnigan is also involved in standards development, including a chair position with the ASHRAE Standard 90.1 committee. He is very active with ASHRAE including positions on the Board of Directors and has served as ASHRAE Vice President. Mr. Jarnigan is a highly rewarded and regarded industry professional and speaker and we look forward to hearing firsthand about his experiences.

Registration and Social are from 5:30 to 6:00 PM. The presentation will run from 6:00 to 7:00 PM.

Location: To follow in upcoming meeting invite.

Presentation Topic: Advanced Energy Design Guides - Going Beyond Minimum Standards.

## Presentation Description:

Speaker Ronald Jarnigan of Pacific Northwest National Lab joins us to discuss Advanced Energy Design Guides. This presentation provides insight into The Advanced Energy Design Guide (AEDG) series of ASHRAE documents, which focuses on providing 30% energy savings for smaller commercial buildings. The AEDG's are compatible with a large variety of project types. Mr. Jarnigan chaired the initial AEDG for Small Offices as well as 3 additional guides and will offer perspectives on the partnership that contributed to the guides, the intent of the guides and how practitioners can apply the guides.

## April Program

The chapter program scheduled for Thursday **April 17, 2014** will include a presentation by Lewis Harriman, a Fellow of ASHRAE. Lewis Harriman is the Director of Research at Mason-Grant Consulting in Portsmouth, NH. He has an extensive background in energy, humidity and moisture in buildings and industrial processes.

Registration and Social are from 5:30 to 6:00 PM. The presentation will run from 6:00 to 7:00 PM.

The program will be held at Bucca Di Beppo located at 1233 N Van Buren St, Milwaukee.

Presentation Topic: Real World Integrated Design Solutions

Presentation Description:

Speaker Lewis Harriman of Mason-Grant Consulting joins us to discuss integrated design. The presentation will focus on methods for energy savings, improved occupant comfort and cost savings relating to the integrated design process. Real-world examples will provide a look at the interaction between architects and engineers on both productive and problematic project related instances. This presentation will be of interest to architects, building managers, energy auditors, mechanical engineers and students.



(Pictured Above: Lewis Harriman)

# ASHRAE Learning Institute

Seminars & Courses at ASHRAE's Winter Conference and AHR Expo in New York, NY

## 2 WAYS TO REGISTER

Internet: [www.ashrae.org/newyorkcourses](http://www.ashrae.org/newyorkcourses)

Phone: Call 1-800-527-4723 (US and Canada) or 404-636-8400 (worldwide)

## Full-Day Professional Development Seminars

\$485/\$395 ASHRAE Member -- Earn 6 PDHs/AIA LUs or .6 CEUs

### Commercial Building Energy Audits **NEW!**

Saturday, Jan 18 – 8:00 a.m. to 3:00 p.m.

### Healthcare Facilities: Best Practice Design & Applications

Saturday, Jan 18 – 8:00 a.m. to 3:00 p.m.

### Significant Changes to Standard 90.1-2010 and IECC-2012 **NEW!**

Tuesday, Jan 21 – 9:00 a.m. to 4:00 p.m.

### Energy Modeling Best Practices and Applications

Tuesday, Jan 21 – 9:00 a.m. to 4:00 p.m.

### Effective Energy Management in New and Existing Buildings

Wednesday, Jan 22 – 9:00 a.m. to 4:00 p.m.

### Operations and Maintenance of High-Performance Buildings

Thursday, Jan 23 – 8:00 a.m. to 3:00 p.m.

### Complying with Standard 90.1-2013 **NEW!**

Thursday, Jan 23 – 8:00 a.m. to 3:00 p.m.

### Introduction to Building Enclosure Commissioning **NEW!**

Thursday, Jan 23 – 8:00 a.m. to 3:00 p.m.

## Half-Day Short Courses

\$159/\$119 ASHRAE Member -- Earn 3 PDHs/AIA LUs or .3 CEUs

### Electric Rates, Rules and Regulations **NEW!**

Saturday, Jan 18 – 12:00 p.m. to 3:00 p.m.

### Laboratory Design: The Basics and Beyond

Sunday, Jan 19 – 2:00 p.m. to 5:00 p.m.

### Air-to-Air Energy Recovery Applications: Best Practices

Sunday, Jan 19 – 2:00 p.m. to 5:00 p.m.

### Mathematical Optimization Techniques and their Applications: to HVAC&R Systems and Components

Sunday, Jan 19 – 2:00 p.m. to 5:00 p.m.

### Combined Heat & Power: Design through Operations

Monday, Jan 20 – 8:30 a.m. to 11:30 a.m.

### High-Performance Building Design: Applications and Future Trends

Monday, Jan 20 – 8:30 a.m. to 11:30 a.m.

### IAQ Best Practices for Design, Construction and Commissioning **NEW!**

Monday, Jan 20 – 8:30 a.m. to 11:30 a.m.

### Commissioning for High-Performance Buildings

Monday, Jan 20 – 2:45 p.m. to 5:45 p.m.

### Designing High-Performance Healthcare Facilities **NEW!**

Monday, Jan 20 – 2:45 p.m. to 5:45 p.m.

### Exceeding Standard 90.1-2013 to Meet LEED® Requirements **NEW!**

Monday, Jan 20 – 2:45 p.m. to 5:45 p.m.

### Data Center Energy Efficiency

Tuesday, Jan 21 – 1:00 p.m. to 4:00 p.m.

### Fundamentals and Applications of Standard 55 **NEW!**

Tuesday, Jan 21 – 1:00 p.m. to 4:00 p.m.

### Design of Commercial Ground Source Heat Pumps **NEW!**

Tuesday, Jan 21 – 1:00 p.m. to 4:00 p.m.

### Applications of Standard 62.1-2013: Multiple Spaces Equations and Spreadsheets **NEW!**

Wednesday, Jan 22 – 9:00 a.m. to 12:00 p.m.

### Troubleshooting Humidity Control Problems

Wednesday, Jan 22 – 1:00 p.m. to 4:00 p.m.

## HVAC Design Training

March 17 – 19, 2014 --- Level I - Essentials --- Atlanta, GA and Toronto, Canada

March 20 – 21, 2014 --- Level II - Applications --- Atlanta, GA

### HVAC Design: Level I – Essentials - Registration is \$1,239, \$989 (ASHRAE Member)

Gain practical skills and knowledge in designing, installing and maintaining HVAC systems that can be put to immediate use. The training provides real-world examples of HVAC systems, including calculations of heating and cooling loads, ventilation and diffuser selection using the newly renovated ASHRAE Headquarters building as a living lab.

### HVAC Design: Level II – Applications - Registration is \$829, \$679 (ASHRAE Member)

In two days, gain an in-depth look into *Standards 55, 62.1, 90.1, and 189.1* and the *Advanced Energy Design Guides*. Training will focus on a range of topics including: HVAC equipment and systems; energy modeling; designing mechanical spaces; designing a chiller plant; and BAS controls.

Visit [www.ashrae.org/hvacdesign](http://www.ashrae.org/hvacdesign) to register

# ASHRAE Certification Programs

Receive the recognition you deserve by earning an ASHRAE Certification at the 2014 ASHRAE Winter Conference and AHR Expo.

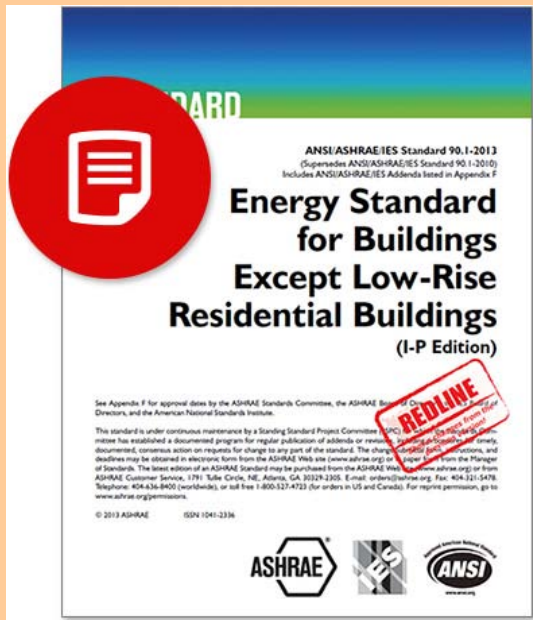
Take advantage of ASHRAE's special administration of the certification examinations on January 23, 2014. All exams will begin at 9:00 a.m. (candidates must report to the testing room at 8:30 a.m.). These exams are being offered in conjunction with the 2014 ASHRAE Winter Conference and AHR Expo in New York City. Refresh your knowledge in preparation of earning an ASHRAE certification with learning opportunities at the show and conference.



For more information, visit [www.ashrae.org/NYCEXams](http://www.ashrae.org/NYCEXams)

## Hot Products from ASHRAE

### Latest Edition of Standard 90.1 Now Available as a Redline



Priced from \$135 (Members Pay \$115)  
Available now in I-P or SI units

Use the redline to instantly identify updates in the 2013 revision of Standard 90.1.

This expanded document compares the 2013 edition to 2010, ensuring you know exactly what changes have been made from one edition to the next.

It's an indispensable reference for engineers and other professionals involved in the design of buildings and building systems. Select the redline upgrade in print or digital format to receive two documents; the clean, active version of the standard and the redline version.

About Standard 90.1-2013: *Energy Standard for Buildings Except Low-Rise Residential Buildings (ANSI approved; IES co-sponsored)*

provides the minimum requirements for energy-efficient design of most buildings. Learn more

About Redlines: A redline document is a quick, easy way to compare all the changes between the active standard and the previous version. Redlines allow users to instantly identify additions, deletions, and other formatting and content changes. Learn more

Visit [www.ashrae.org/bookstore](http://www.ashrae.org/bookstore) to learn more about this and other outstanding ASHRAE publications!



## Upcoming Chapter Meetings-Mark Your Calendars!

Meeting Date	Topic	Speaker	Location	Time
December	Pump Curves & Application		MSOE Alumni Partnership Center 1120 N. Broadway	3:00-4:00pm
January	Annual Code Refresher	Greg Talaska/Tom Garvey	University Club – 924 E Wells St. Milwaukee,	12:00-1:00pm
February	Advanced Energy Design Guides	Ron Jarnigan	TBD	5:30-7:00pm
March	Modine Facility Tour	TBD	1500 Dekoven Ave, Racine, WI 53403	4pm
April	Real World Integration Design Suggestions	Lew Harriman (DL)	1500 Dekoven Ave, Racine, WI 53403	4pm
May	End of Year Social		TBD	TBD
June	Recess			
July	Annual Golfing Outing		TBD	TBD

### Other Chapters

For details regarding *surrounding chapter* meetings see:

- o Northeast Chapter <http://www.newwisconsinashrae.org/>
- o Madison <http://www.ashraemadison.org/>
- o Illinois [www.illinoisashrae.org](http://www.illinoisashrae.org).

### **Wisconsin Chapter Officers and Committee Chairs**

President	Jason Leffingwell
Vice President	Jason Nenonen
Secretary	Jared Wasielewski
Treasurer	Mike Anderson
CTTC Chair	Ryan McNally
Refrigeration Chair	Phil Golden
Membership	Chris Staab
Research Promotion Chair	Randy Sikkema
Student Chapter Coordinator	Dave Schneider
Historian	Tim Pann
Newsletter Chair and Editor	Brian Lynch
Online Communication	Joe Carmichael
YEA	Andy Brophy
Special Activities	Mike Jahner
Golf Outing	Joe Schmidt
Scholarship	Dan Young

Wisconsin Chapter of ASHRAE