# THE BADGERAIRE

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



February 20, 2014: Advanced Energy Design Guide

## February Program & Social Gathering

The Wisconsin Chapter of ASHRAE is proud to announce that on February 20<sup>th</sup> Ron Jarnagin (Distinguished Lecturer) from Pacific Northwest National Lab, located in Richland Washington, will be presenting on Advanced Energy Guide Lines – Going Beyond Minimum Standards.

The Advanced Energy Design Guide (AEDG) series of documents is one of the most popular in ASHRAE's history with well over a 100,000 copies in circulation. Focused on providing clear guidance for achieving 30% energy savings in smaller commercial buildings, the AEDGs meet the need for a large number of projects where project budgets and design professionals might be in short supply. The presenter 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.

For Further information on Ron please feel free to visit the follow site: <a href="http://cms.ashrae.biz/lecturers2/abstracts/Abstract.php?contactnumber=20&name=Jarnagin">http://cms.ashrae.biz/lecturers2/abstracts/Abstract.php?contactnumber=20&name=Jarnagin</a>

Topic: Advanced Energy Design Guide

Presenter: Ron Jarnagin

Time: 5:00 pm social hour, 6:00 pm dinner and presentation Location: Meyer's Restaurant – 4260 S. 76<sup>th</sup> Street, Milwaukee, WI





#### **President's Column December 2013**

Happy New Year Wisconsin Chapter!!

I hope this message finds you all doing well. The Wisconsin weather has certainly provided some "below normal" temperatures for us in the past week or so. All of us who are involved in the design of heating systems have had our systems put to the test recently, as temperatures of -10 to -20°F were common over a two day span. My hope is that no one had any issues arise with their systems.

This month's topic will be our annual WI Code Refresher which will be held at the University Club of Milwaukee. The event starts at Noon. Our presenters will be Tom Garvey and John Spalding. This will be the first time the two of them present at our January meeting. You can sign-up on our webpage at <a href="http://ashrae-wi.org/events/">http://ashrae-wi.org/events/</a>.

Thank you everyone who attended last month's meeting at the MSOE Alumni Association. We had a good turnout for the presentation, as well as for the Social Hour at Bar Louie's. For those that were in attendance at the meeting, if you did not receive your CEU Certificate, please contact Jason Nenonen at inenonen@ifahern.com.

We are looking forward to the upcoming months. Our February topic is Advanced Energy Design Guides – Going Beyond Minimum Standards will be presented by Past Society President Ron Jarnigan. This is designated as Distinguished Lecturer visit outside the (2) that the Chapter was granted by Region VI. The presentation will be in the evening on February 20<sup>th</sup> at Meyer's Restaurant in Greenfield. More information can be found in the upcoming pages of the newsletter.

During the first week of March, the Chapter will be hosting a special event at J.F. Ahern's office in the Valley. Past Society President Terry Townsend will be conducting a training session on the materials related to ASHRAE's bEQ Program. The purpose of the session is to educate the participants on the material needed to pass the Building Energy Audit Professional examination. Details for the event will be forthcoming.

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 <a href="mailto:illeffingwell@hga.com">illeffingwell@hga.com</a>.

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.

#### **February Program**

The chapter program scheduled for Thursday February 20th, 2014 will include a presentation by Ron Jarnigan, Staff Scientist at Pacific Northwest National Labratory. 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.

#### <u>ASHRAE Technology Awards –</u> 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: <a href="https://www.ashrae.org/cttc">www.ashrae.org/cttc</a>. 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), 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 <a href="mailto:abrophy@e-3group.com">abrophy@e-3group.com</a>. 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 <a href="mailto:abrophy@e-3group.com">abrophy@e-3group.com</a>.

#### **Buildings In Balance Webcast**

**April Webcast** 

Topic: Buildings in Balance: IEQ and Energy

**Efficiency** 

Event: Free Webcast Date: April 17<sup>th</sup>, 2014 Time: 1:00PM to 4:00PM

Website: <a href="https://www.ashrae.org/lEQwebcast">https://www.ashrae.org/lEQwebcast</a>

This webcast will feature industry experts who will identify the link between energy efficiency and Indoor Environmental Quality (IEQ) through the integrated design process. Viewers will be able to recognize the importance of the four cornerstones of IEQ and how system selection can benefit both energy efficiency and IEQ. This FREE webcast program will broadcast live via the internet.

(3) PDH's will be awarded to viewers of the live webcast that complete the Participant Reaction Form online by May 2<sup>nd</sup>, 2014 (included at link above).

#### **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)

# City of Milwaukee Energy Conservation/bEQ Training Program

March 6 - 7, 2014 8:00 AM - 5:00 PM

#### **ASHRAE Publications & Documentation:**

- Procedures for Commercial Building Energy Audits
- ASHRAE Standard 100 (latest edition)
- bEQ "In Operation" Procedures and Forms

These items will be provided by ASHRAE as a part of the seminar registration fee - download information will be provided by ASHRAE for all seminar registrants.

#### March 6 2014

- "Procedures for Commercial Building Energy Audits"
- a. Energy Audit Levels of Effort & Processes
  - Preliminary Energy-Use Analysis
  - Level 1 Walk-Through Analysis
  - Level 2 Energy Survey & Engineering Analyses
  - Level 3 Detailed Analysis of Capital-Intensive Modifications
- b. Measurement & Instrumentation Requirements
- c. Engineering Analyses
  - Energy Calculations Methodologies
  - Economic Evaluations/Investment-Grade Criteria
- 2. "ASHRAE Standard 100"
- a. Energy Efficiency Measures
  - Building Envelope
  - HVAC Systems
  - Building Automation & Controls Systems
  - Refrigeration Systems
  - Water Systems
  - Energy Generation & Distribution Boiler & Chiller Systems
  - Lighting Systems
- b. Energy Use Analysis & Target Requirements
  - Energy Intensity Targets
  - EUI-Multipliers
- c. Operation and Maintenance Requirements

- d. Implementation and Verification Requirements
- 3. bEQ "In Operation" Procedures and Forms
- a. General Instructions & Worksheets/Charts
- b. Form 1
- c. Form 2
- d. Form 3
- e. Form 4
- f. Form 5

#### March 7, 2014

If there are an insufficient number of registrants for a second day Training Session, a walk-thru Level 1 audit will be conducted with the first day registrants in a small City of Milwaukee facility. The registrants will be divided into at least three teams for the audit and bEQ activities.

After completing the walk-thru, the registrants will complete the various Energy Audit forms, define an energy intensity target, conduct preliminary energy audit calculations, prioritize identified energy conservation measures and prepare an outline Level 1 Energy Audit Report.

The second activity will be completing the various forms, worksheets and charts for bEQ submittal of the City of Milwaukee facility.

The final activity for the registrants will be the completion of a seminar assessment questionnaire.

#### TARGET AUDIENCE OF REGISTRANTS:

- Professional Engineers
- Architects
- Engineers-in-Training (EITs)
- Designers
- Technicians
- Contractors
- CxA and/or RCxA Certified Professionals



ASHRAE's Chapter Technology Transfer Committee will present a **FREE** Webcast, "Buildings in Balance: IEQ and Energy Efficiency," on Thursday, April 17, 2014.

The program will be archived online until May 2, 2014, for those unable to participate in the live webcast. Registration will be required to view the archived program.

Please promote the Webcast and host it as a chapter activity.

Chapters that host the Webcast will earn 100 Presidential Award of Excellence (PAOE) points.

Below are several tips to assist you with hosting the webcast:

- Secure a viewing location with a PC, video projector, and a screen.
- **Promote the webcast program.** Distribute the enclosed brochures at your next chapter meeting and use the **Media Kit** at **www.ashrae.org/ieqwebcast** to notify Chapter Members and colleagues about the Webcast via your Chapter newsletter, webpage, and email.
- Register your site. Online registration begins March 17, 2014 at www.ashrae.org/ieqwebcast. Only one registration per site is needed. The site coordinator's registration will cover all participants at the site.
- Test your equipment. When you complete registration, you will be given a link to test your system.
- Use a signup sheet or email RSVP to maintain an accurate headcount of participants at your site.
- Remind attendees to complete the online Participant Reaction Form. Attendees who complete the Participant Reaction Form by May 2, 2014 may be awarded three (3) Professional Development Hours (PDHs). The webcast program has also been approved for three (3) AIA Learning Units (LUs) and three (3) GBCI Continuing Education Hours (CEs).

To add a registration reminder to your Outlook and find additional information regarding the program and presenters, visit www.ashrae.org/ieqwebcast.

If you have any questions or need assistance, please call (678) 539-1200 or email ashrae-webcast@ashrae.org.

# **Upcoming Chapter Meetings-Mark Your Calendars!**

Meeting Date	Topic	Speaker	Location	Time
		Greg	University Club -	
January	Annual Code	Talaska/Tom	924 E Wells St.	
	Refresher	Garvey	Milwaukee,	12:00-1:00pm
February	Advanced			
	Energy Design			
	Guides	Ron Jarnigan	TBD	5:30-7:00pm
March	bEQ Training		JF Ahern-	
	Session	Terry Townsend	Menomonee Valley	TBD
March	Modine Facility		1500 Dekoven Ave,	
	Tour	TBD	Racine, WI 53403	4pm
April	Real World			
	Integration			
	Design	Lew Harriman	1500 Dekoven Ave,	
	Suggestions	(DL)	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 chapte*r meetings see:

Northeast Chapter

o Madison

o Illinois

http://www.newisconsinashrae.org/ http://www.ashraemadison.org/ www.illinoisashrae.org.

**Wisconsin Chapter Officers and Committee Chairs** 

Join and John Million	
Jason Leffingwell	
Jason Nenonen	
Jared Wasielewski	
Mike Anderson	
Ryan McNally	
Phil Golden	
Chris Staab	
Randy Sikkema	
Dave Schneider	
Tim Pann	
Brian Lynch	
Joe Carmichael	
Andy Brophy	
Mike Jahner	
Joe Schmidt	
Dan Young	

Wisconsin Chapter of ASHRAE