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THERMOGRAM

May 2015
Volume XLIX Issue 10

Main: ASHRAE Standard 90.1
Tech Session: ASHRAE Standard 189.1

**A SPECIAL THANKS TO OUR
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EVENING:**



TRANE®

It's Hard To Stop A Trane.®

ASHRAE May 7th MEETING:

Tech Session:	5:00 pm – 5:45 pm	Dinner:	6:30 pm – 7:00 pm
Network Hour:	5:30 pm – 6:30 pm	Main Speaker:	7:00 pm – 8:15 pm

Main Meeting: ASHRAE Standard 90.1

Speaker: Susanna Hanson

Susanna Hanson is an applications engineer at Trane with over fifteen years of experience with chilled-water systems and HVAC building load and energy analysis. Her primary responsibility is to aid system design engineers and Trane personnel in the proper design and application of HVAC systems. Her main areas of expertise include chilled-water systems and ASHRAE Standard 90.1. She is also a Certified Energy Manager.

She has authored several articles on chilled water plant design, and is a member of ASHRAE SSPC 90.1 Energy Standard for Buildings Except Low-Rise Residential Buildings. Susanna earned a bachelor's degree in industrial and systems engineering from the University of Florida, where she focused on building energy management and simulation.

Tech Session: ASHRAE Standard 189.1

Speaker: Brad Watkins

Brad Watkins is a sales engineer with Cummins-Wagner. He's had extensive training at the famed Little Red School House in Morton Grove, IL. Brad has a mechanical engineering degree from the University of North Dakota and currently serves on the Board of Directors for the Baltimore Chapter of ASHRAE.



**The May meeting will take place at the Engineers Club.
11 West Mount Vernon Place Baltimore, MD 21201**



2014-2015

Meeting Schedule

Please mark you calendar with the following dates for the 2014 through 2015 Baltimore Chapter meetings. A complete schedule indicating seminar, technical session and main meeting topics will be published in the coming month's Thermogram and is also available on the chapter website

www.ashrae-balto.org.

August 21st-23rd, 2014	Chapter Regional Conference	Richmond, VA
September 10th, 2014	5th Annual Product Show: 4:00—8:00pm	ESB
October 9th, 2014	Main Meeting: Comparison of Datacenter Classes on Energy Use Tech Session: Life Safety Dampers	ESB
November 6th, 2014	Main Meeting: Geothermal Water Source Heat Pumps Tech Session: Dedicated Outdoor Air Systems	ESB
December 5, 2014	Christmas Party	Timonium Fairgrounds
January 8, 2015	Main Meeting: Building Energy Quotient (bEQ) Tech Session: Variable Refrigerant Systems	ESB
February 5, 2015	Main Meeting: Refrigeration Tour Tech Session: N/A	Jailbreak Brewery Laurel, MD
March 5, 2015	Main Meeting: Advanced Energy Design Guides to Net Zero Buildings Tech Session: Airflow Measurement, Building Pressurization, and Intake Control	ESB
April 2, 2015	Main Meeting: Design Build for Green Buildings Tech Session: Liquid Dessicant Technology	ESB
May 7, 2015	Main Meeting: ASHRAE Standard 90.1 Tech Session: ASHRAE Standard 189.1	ESB
June 5, 2015	58th Annual Golf Outing	Turf Valley CC Ellicott City, MD

Main Meeting Schedule: 5:30 pm social hour, 6:30 pm dinner, 7:00 pm speaker

Tech Session Schedule: 5:00 - 5:45 pm

Cost: \$25 dinner fee for full members, \$10 dinner fee for students



2014-2015 Chapter Leadership Roster

Officers

President P:410-645-1552	Dave Lawson F:410-645-1616	Siemens Bldg Technologies president@ashrae-balto.org
President-Elect P:410-780-0500	Adam Fauer F:410-780-0566	Green Contracting Co. vp@ashrae-balto.org
Treasurer P:410-316-7917	Dave Reese F:410-356-3109	KCI Technologies, Inc. treasurer@ashrae-balto.org
Secretary P:410-323-0600	Craig Parks F:410-540-9041	BKM secretary@ashrae-balto.org
Board Member P:410-880-0850 x123	Brad Watkins F: 301-490-7156	Cummins-Wagner asstsecretary@ashrae-balto.org
Board Member P:410-329-8100	Steph Kunkel F:301-490-7156	JMT gov2@ashrae-balto.org
Board Member P:410-215-0717	Matt Grice F:410-298-3940	Gannett Fleming senioradvisor@ashrae-balt.org
Past-President P:410-579-8100	Mike Lamdin F:410-540-9041	Leach Wallace Associates pastpresident@ashrae-balto.org

Committee Chairs

Attendance/Recpt. P:410-793-0202	James Cote F:410-721-7472	United Energy Products reservations@ashrae-balto.org
Chapter Programs P:410-780-0500	Adam Fauer F:410-780-0566	Green Contracting Co. programs@ashrae-balto.org
Historian P:443-478-6008	Alex Clark F:410-527-2730	Spears Votta & Associates historian@ashrae-balto.org
Membership P:410-628-4215	Joe Cranston F:410-628-4219	Ariosa & Company membership@ashrae-balto.org
Refrigeration P:410-403-2200	Jon Olmstead F:410-403-2225	The Trane Company refrigeration@ashrae-balto.org
Research Promotion P:443-561-1600	Jeff Shook F:443-561-1601	Chesapeake Systems research@ashrae-balto.org
Scholarship P:410-527-2709	Andrew Taranto F:410-527-2730	Johnson Controls, Inc. scholarship@ashrae-balto.org
Student Activities P:410-329-8100	Sam Phillip F: 410-472-2200	JMT studentacts@ashrae-balto.org
Student Activities P:410-646-5400	Rob Broczkowski F: 410-646-4738	Mueller Associates studentacts@ashrae-balto.org
Student Chapters P:410-329-8100	Sam Phillip F: 410-472-2200	JMT studentchaps@ashrae-balto.org
Student Chapters P:410-646-5400	Rob Brockzkowski F: 410-646-4738	Mueller Associates studentchaps@ashrae-balto.org
Young Engineers P:443-921-8718	Kaylee Haupt F:410-377-2543	BKM yea@ashrae-balto.org
CTA P:410-265-6100	Adam Sontag F:410-298-9820	James Posey Associates, Inc. cta@ashrae-balto.org
CTTC P:410-780-0500	Adam Fauer F:410-780-0566	Green Contracting Co. cttc@ashrae-balto.org
Thermogram P:410-381-7655	Kelly Brennan F:410-381-7654	Schneider Electric newsletter@ashrae-balto.org
Engineers Week P:410-323-0600	Craig Parks F: 410-377-2543	BKM engweek@ashrae-balto.org
Web Technician P:410-579-8100	Dave Brackett F:410-540-9041	Leach Wallace Associates ashtech@ashrae-balto.org
Christmas Party P:410-527-2612	John Prusak F:410-472-4928	Johnson Controls, Inc. Christmas@ashrae-balto.org
Golf Outing P:443-561-1600	R L Gladden F:443-561-1601	Chesapeake Systems golf@ashrae-balto.org
Women in Engineering P:240-542-5568	Jennifer Leach F:301-490-7156	Cummins-Wagner wie@ashrae-balto.org
Grassroots Activities P:410-494-1111	Ben Wood F:410-494-1112	Kibart gga@ashrae-balto.org

President's Pen

Greetings Members,

Baseball is back, and that my friends... is a good thing.

That said, the May Technical and Dinner sessions are the last opportunity for ASHRAE to get together at the club, and this is typically a very well attended meeting, so please RSVP to James early.

May is also our chapters Student Night. Each year we invite those who participated in the Student Challenge that takes place every March, and recognize their accomplishments. Please make an effort to engage the students and parents as you see them throughout the course of the evening... after all, some of them are the future of our business. While I am on that topic, special thanks to Sam Phillip and Rob Broczkowski who Chair and Co-chair Student Activities for our Chapter. Nice work guys....

A couple announcements:

Sign-up is active for the 58th Annual Golf outing at Turf Valley, taking place Friday June 5th. Please contact RL Gladden for your reservation – the sign up form is attached in this issue.

YEA – Kaylee is planning a Young Engineers event in the near future – stay tuned for more details

Finally, Thanks to Trane for sponsoring the Network Hour at the May meeting... we do appreciate it.

Be well,



Dave Lawson
Chapter President – '14-'15

In alignment with the "Green Trends" of ASHRAE we have eliminated the paper copies of the Membership Roster. An electronic copy will be available at meetings, upon request.

INFORMATION

CORNER

ASHRAE Research Promotion

Since 1919, members of ASHRAE have supported the Society's technical research programs through research promotion. Thanks to this strong tradition of generosity and member support, ASHRAE is today the world's leading resource for technical information in the fields of Heating, Ventilation, Air Conditioning and Refrigeration (HVAC&R). ASHRAE currently funds between 2 and 3 million dollars in research annually, investigating numerous issues of importance in the industry today. See the projects below for an example of the work that is currently being performed as a result of the support of ASHRAE members.

ASHRAE Region 3 Active and Recently Completed Research Projects and Grants

<i>Implementation of Total Cost of Ownership (TCO) Principles into Higher Education as an Integrated Decision Making Tool</i>	APPA, Alexandria, VA
<i>CHP Design Guide - Update to the Cogeneration Design Guide</i>	EXERGY PARTNERS CORPORATION, Herndon, VA
<i>Methods to Increase Maximum Velocity of Makeup Air for Atrium Smoke Control - CFD Study</i>	Arnaud Trouve & James Milke, University of Maryland
<i>Informing Energy Efficient Occupant Behavior with Real Time Building Energy Modeling</i>	Justin DeBlois, University of Maryland
<i>Numerical Modeling and Optimization of Manifold-Microchannel Heat Exchanger for HVAC Applications</i>	Martinus Arie, University of Maryland
<i>Experimental Heat Transfer and Pressure Drop Characteristics of a Novel Solution Heat Exchanger for Absorption Cooling</i>	Rohit Andhare, University of Maryland
<i>Occupants Number and Behavior can have Large Effects of Building Energy Use</i>	Yang-Seon Kim, Penn State University
<i>Human Behavior & Low Energy Architecture Linking Environmental Adaptation, Personal Comfort, and Energy Use in the Built Environment</i>	Jared Langvin, Drexel University
<i>Next Generation, Ultra-Efficient, Micro-structured Thin Film Heat Exchangers for Low Delta T Energy Recovery</i>	Jared Levy, University of Maryland
<i>Development of fouling averse , high performance gas liquid absorber for application in high performance absorption refrigeration cycles</i>	Stefan Bangerth, University of Maryland

To contribute to ASHRAE's research promotion fund, please visit the ASHRAE website at

<https://www.ashrae.org/standards-research--technology/research-promotion>.

For more information, you may contact the Jeff Shook, the Baltimore Research Promotion Chair at research@ashrae-balto.org.

INFORMATION



Join us at ASHRAE's 2015 Annual Conference
June 27–July 1 | Atlanta, Georgia | www.ashrae.org/atlanta

Special first
time attendee
registration
fee available!

Join ASHRAE in its hometown of Atlanta! Take advantage of the opportunity to discuss and examine the latest topics in the building industry, such as high performing buildings and modeling, through the technical program; participate in technical tours; attend ASHRAE Learning Institute courses; sit for an ASHRAE certification exam; and earn professional development credits.

Conference Technical Program—includes the third annual Research Summit, which brings together researchers to present and discuss the latest research. Tracks focus on the design, construction and operation of high performance buildings, specifically advanced design guidance, modeling, operation and optimization, and indoor air quality. Laboratories, refrigeration, fundamentals, applications, systems and equipment round out the program.

Networking—share ideas and learn from fellow members from your hometown and around the world.

ASHRAE Learning Institute—choose from two full-day professional development seminars and seven half-day short courses to stay current on new HVAC&R technologies.

ASHRAE Certification—to gain a competitive edge, apply by June 9 to sit for an ASHRAE Certification exam.



CORNER

ASHRAE Women in Engineering



The focus of the Women in Engineering group within ASHRAE is to facilitate the retention of women working in the built environment by encouraging opportunities for professional development, expanding leadership skills, and creating a network of women supporting women.

May is Women in Engineering month in the Baltimore Chapter. Show your support for women working in the built environment by attending and wearing a “I support Women in Engineering” button. Women in Engineering is an affinity group of the Baltimore Chapter of ASHRAE. For more information on future Women in Engineering events, please contact wie@ashrae-balto.org.



**ASHRAE Baltimore Chapter
GOLF OUTING & BANQUET**

Friday, June 5, 2015

**TURF VALLEY COUNTRY CLUB
ELLCOTT CITY, MARYLAND**

\$135/PERSON

\$150 FOR HOLE SPONSOR

**\$650 FOR FOURSOME
(including hole sponsor)**



9:00 AM	SHOTGUN START
9:00 AM—5:00 PM	CASH BAR & LUNCH AVAILABLE
3:00 PM—4:00 PM	RECEPTION
4:00 PM—6:00 PM	DINNER
5:00 PM	AWARDS & PRIZES

GOLF & DINNER RESERVATIONS

**R.L. GLADDEN
CHESAPEAKE SYSTEMS
TEL: 443.561.1600
GOLF@ASHRAE-BALTO.ORG**

CHECKS PAYABLE TO: ASHRAE BALTIMORE CHAPTER C/O CHESAPEAKE SYSTEMS LLC
7400 COCA COLA DRIVE, HANOVER, MD 21076 NO TICKETS WILL BE ISSUED

COMPANY: _____

CONTACT: _____

PHONE: _____ EMAIL ADDRESS: _____

NAMES OF FOURSOME: _____

(PLEASE INCLUDE EMAIL ADDRESS AND PHONE) _____

NO. OF PLAYERS _____ @ \$135/EA

HOLE SPONSOR: YES _____ @ \$150/EA

TOTAL FOR PLAYERS: _____

TOTAL FOR HOLE SPONSOR: _____

TOTAL AMOUNT OF CHECK: _____

PLEASE NOTE THAT ALL CORPORATE LOGOS FOR HOLE SPONSORSHIPS MUST BE SUBMITTED ELECTRONICALLY

EMAIL R.L. GLADDEN AT GOLF@ASHRAE-BALTO.ORG OR FAX TO R.L.'S ATTENTION: 443-561-1601

TO: BALTIMORE CHAPTER, ASHRAE
EMAIL: reservations@ashrae-balto.org
FAX: (410) 721-7472



YES! I will attend the meeting on Thursday, May 7th

Reservations: We are encouraging members to make reservations via e-mail. Those planning to attend should write to reservations@ashrae-balto.org indicating name(s) and membership status. (member or guest) Please be sure to also include "ASHRAE Meeting" in the subject matter line.

Fax reservations should be sent to:

United Energy Products, attn: James Cote - Reservations at 410-721-7472, or call James at 410-793-0202

Deadline for reservations and cancellations: Monday, May 4th- NOON. Reservations made after the deadline will be placed on a waiting list.

This FAX will confirm the following members/guests indicated below:

Circle one:

1. _____

Member Guest

2. _____

Member Guest

3. _____

Member Guest

4. _____

Member Guest

5. _____

Member Guest

6. _____

Member Guest

7. _____

Member Guest

8. _____

Member Guest