

President's Message

Hello my ASHRAE friends! I hope everyone had a safe and happy Halloween! Last month I shared a riddle with you all, and the winner will be getting lunch on me this month. Congratulations to Matt Sargent from Alvine Engineering for being ever so brilliant! This month I thought I would get a bit festive instead. So anyone who was brave enough to dress up for Halloween, and then let the occasion be documented should send me their picture, sarahp@eqeco.com. Don't be shy, I promise I won't use them as blackmail in the future. Not unless I really have to at least. And the winner will get lunch on me of course!

Now for those of you who would prefer to keep things a bit more engineering focused, I would like to talk to you about our CTTC Committee, or Programs. Our chapter has been so blessed over the years. We have had many amazing leaders in this committee, which is why we also have such strong programs at our lunch meetings throughout the year.

Recently, we lost one of our two CTTC Committee leaders to a job out of state. So at this time, we would love to have anyone who is interested in learning the Programs ropes join the team let us know. If you would like to help us with the honor of bringing the best and brightest to our group to share their knowledge please step up. This is an opportunity to really connect with the membership, and help maintain the value of the NE ASHRAE Chapter.

Aaron Rasell is currently heading up the committee, and doing an amazing job! But I know he would love to have some help at the meetings, and with continued planning for future meetings, speakers and events. If you are interested please contact Aaron at, aaron.rasell@trane.com.

Thank you all for your support of this incredible organization.

Sincerely,

Sarah Poursharafeddin, MBA, LEED-AP

Nebraska Chapter ASHRAE President, 2013-2014

November 2013
Volume 55, Issue 3

Chapter Officers:

President

Sarah Poursharafeddin

President Elect

Jeff Backemeyer

Secretary

Tyler Glesne

Treasurer

Jessica Errett

1st Board Member

Tom Lewis

2nd Board Member

Mike Barry

Board Ex-Officio

Renee Meyersick

FYI

ASHRAE Indoor Air Quality Guide is now available for free download, see the link below.

<https://www.ashrae.org/resources--publications/bookstore/indoor-air-quality-guide>

Omaha Meeting – Tuesday, November 12th, 2013

- Location:** Anthony’s Steakhouse, 7220 F Street, Omaha, NE 68127
- Check-in:** 11:30 a.m. (Please arrive early to facilitate serving meals)
- Lunch:** To be served prior to 12:00 p.m.
- Menu:** Club Sirloin \$21.00
Chicken Cordon Bleu \$16.00
Grilled Salmon \$16.00
- Topic:** Geothermal Heating and Cooling Systems Fail on Two Commercial Projects
- Speaker:** William A. Lotz, PE, Consulting Engineer

Pre-registration for this meeting would be GREATLY APPRECIATED!!!

Reservation required by Monday, Nov 11th, 2013: Nick Mandel, Specialized Engineering
nmandel@specializedeng.com

Omaha Featured Speaker

Mr. Lotz specializes in consulting on moisture and insulation problems in buildings. He has 40+ years of experience in building construction; materials technology, and design, and has clients all over North America. Mr. Lotz has published over 250 technical articles in such publications as: ASHRAE Journal, Engineered Systems, RSI, Plant Engineering, Insulation Outlook, ASTM, Engineering News Record and HPAC. Mr. Lotz has a B.S. in Mechanical Engineering from the University of Miami and is a registered Professional Engineer in eight states. Mr. Lotz has been a member of ASHRAE for more than 40 years, is a Life Member and a Fellow.

Lecture Topic, *Geothermal Heating and Cooling Systems Fai on Two Commercial Projects*: The Design-Build contractor made several assumptions that were quite costly. The first project was a retrofit of an 80 room historic resort. The second project was a new 3 story office building. Both projects were in Maine, within 500 feet of the ocean and had the same owner.

The geothermal connections with the earth were multiple 1500 ft. deep open standing column wells. The water quality was poor, brackish and filled with grit.

The water to air heat pumps began failing during the first week of operation. The filtering systems installed for grit removal were inadequate and the systems alternatively plugged up resulting in a shutdown of the heat pumps or allowed large quantities of granite drilling dust into the system.

There were other problems:

- ◆ Inadequate electrical grounding of the building, resulting in electrolysis of the system
- ◆ Mixed metals in the piping system (copper, bronze, steel, stainless cast iron, cupranickel, etc., resulting in corrosion)
- ◆ Plenum ceiling with combustibles
- ◆ Illegal, combustible vapor barrier
- ◆ Lack of a professional engineer involved in the design
- ◆ Lack of summer time humidity control
- ◆ Well failure with little heat transfer
- ◆ Rapid corrosion failure of the well pumps

Future Omaha Chapter Meetings

Dec. 10 th	TBD	11:45 @ Anthony’s
Jan. 14 th	TBD	11:45 @ Anthony’s
Feb. 11 th	TBD	11:45 @ Anthony’s
Mar. 11 th	TBD	11:45 @ Anthony’s
Apr. 8 th	TBD	11:45 @ Anthony’s
May 14 th	Haymarket DEC/Arena Tour Joint with Omaha, LES	TBD
June	ASHRAE Golf Outing	TBD

Chapter Chairpersons:

Membership Promotion

Chris Hawk

Research Promotion

Shaun Nienhueser
Matt Sargent

Student Activities

Kim Cowman
Jake Kopocis

Chapter Technology Transfer & Omaha Programs

Aaron Rasell

Lincoln Programs

Mike Barry

E-Commerce

Eric Granzow

Historian

Jim Ellis

Reception

Nick Mandel

UNO Student Chapter

Lily Wang

UNL Student Chapter & Chapter Website

Tim Wentz

Special Events

Rob Harper

Newsletter

Nick Decker

Librarian

Bill Wieseler



American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc.

Lincoln Meeting – Wednesday, November 13th, 2013

Location: Valentino's, 35th & Holdrege, Lincoln
Check-in: Noon (Please arrive early to facilitate serving meals)
Lunch: To be served prior to 12:00 p.m.
Menu: Buffet **\$13.00** **Please note new price!**
Topic: Elevator Pits, Oil Detection and Ventilation Requirements
Speaker: Gerald Brown, Chief Elevator Inspector State of Nebraska

[Pre-registration for this meeting would be GREATLY APPRECIATED!!!](#)

Reservation required by Tuesday Nov 12th, 2013: Mike Barry, Black Hills Corp
mike.barry@blackhillscorp.com

Lincoln Featured Speaker

Gerald Brown is the Chief Elevator Inspector for the State of Nebraska. He became the Nebraska State Elevator Inspector in August 2012. He is a 3rd generation Union Elevator Constructor; Honorary Retiree in February 2012. He has 31 years in the elevator trade. He has been inspecting elevators for 25 years. He has an associate's degree in elevator technology. He is a Qualified Elevator Inspector (QEI) through NAESA International.

The Presentation will be about Elevator Pits, Oil Detection and Ventilation Requirements.

Future Lincoln Chapter Meetings

Dec. 11 th	Tim Wentz	Noon @ Valentino's
Jan. 8 th	Lab and Exhaust Pressurization, Jim Ellis	Noon @ Valentino's
Feb. 12 th	ASHRAE President or UNL MESC Students	Noon @ Valentino's
Mar. 12 th	DL, Victor Goldschmidt (3 hour tech session)	Noon @ Valentino's
Apr. 9 th	UNL Controls, Stefan Newbold	Noon @ Valentino's
May 14 th	Haymarket DEC/Arena Tour Joint with Omaha, LES	TBD
June	ASHRAE Golf Outing	TBD

- Articles for next month are due by Monday, **December 2nd, 2013**
- Please send to:

Nick Decker
ndecker@olssonassociates.com

ASHRAE, founded in 1894, is an international organization of 51,000 persons. ASHRAE fulfills its mission of advancing heating, ventilation, air conditioning and refrigeration to serve humanity and promote a sustainable world through research, standards writing, publishing and continuing education.



American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc.