

ASHRAE BLUEPRINT

January 2017

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PRESIDENT'S MESSAGE John Schwartz

Chapter Meeting: Wednesday January 11th @
The Country Club of Sioux Falls
Social 11:45, Lunch 12:00, Program 12:15-1:00

RSVP at our Chapter homepage (www.sdashrae.org) no later than Noon on Friday, January 6th. <http://sdashrae.org/meetinginfo.php>.

Chapter Members and Guests,

Happy New Year! Hard to believe another year has passed. With that we look towards the future and our up and coming CRC in 2018. We will be holding the event at the Downtown Hilton Garden Inn and are just finalizing the dates and working with ASHRAE with the contractual side of things. After the 2018 CRC they are looking at having a "Super" CRC with Region X out West somewhere. This would be a combined CRC with the two Regions and the hope is that it goes well so moving forward it would continue. I believe it is a positive move and takes some of the burden off the smaller Chapters, such as ourselves, since they would more than likely not need to host future CRC. We will see...

We are fortunate to have another Distinguish Lecturer (DL) as our speaker this month. Gordon Sharp will also be offering an afternoon session and should be an interesting topic. Please read Justin Almond's article to get the full background on Mr. Sharp and his topics.

The BOG is pleased to announce the Chapter's support of a draft bill that will be introduced this legislative session. This bill clarifies that the 2009 International Energy Conservation Code is the required version called out in Chapter 13 of the 2015 International Building Code. We are throwing our hat in with the SD AIA, the SD Code Officials, and the Black Hills Chapter of ASHRAE. Thank you Kasey Abbott for your diligent on this matter and finally bringing it to fruition.

Also, don't forget you may utilize our Chapter webpage (<http://sdashrae.org>) to save future meetings to your calendar. Go to the Events tab, then you can select any of the future meetings which will take you to the link with that meeting's information and an icon to Add to Calendar.

Please mark your calendars and register early. See you all January 11th at The Country Club!

-John

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CTTC Justin Almond

In addition to presenting at the Lunch ASHRAE meeting, Gordon Sharp, PE will also be conducting an afternoon session following the meeting for continuing education credits. An event registration will be emailed if you would like to attend.



Mr. Sharp is the chairman of Aircuity, Inc. and has over 25 years of wide-ranging entrepreneurial experience and more than 25 U.S. patents in the fields of energy efficiency and laboratory controls. As founder, former president and CEO of Phoenix Controls, he led the development of this world leader in laboratory airflow controls that was acquired by Honeywell in 1998. The technologies invented by Mr. Sharp at Phoenix Controls are today saving over \$1.5 billion annually in energy use. In 2000, Mr. Sharp founded Aircuity, which was spun out of Honeywell and is a smart airside energy efficiency company.

Mr. Sharp is a graduate of MIT with bachelors and masters degrees in electrical engineering. He is Executive Vice President and a member of the board of directors of I2SL (International Institute for Sustainable Laboratories), the nonprofit foundation that operates the Labs21 conference. He is also a member of two important standards on ventilation: the ANSI/AIHA Standard Z9.5 Committee on Laboratory Ventilation and the ASHRAE SSPC 170 Committee on Ventilation of Health Care Facilities. He is also a voting member of ASHRAE technical committee TC9.10: Laboratory Systems and TC9.11: Clean Spaces/Cleanrooms.

Presentation: New Approaches to Slash Commercial Building Energy Use and Improve IEQ

In the face of significant energy costs and concerns over global warming, buildings are receiving increasing scrutiny to reduce their carbon footprint and cut their energy expenses. For many buildings outside air is the largest single driver of both energy efficiency and indoor environmental quality. Demand control ventilation has attempted to reduce energy expenses by controlling outside air but the actual results over time have been mixed at best. This talk will discuss a more energy efficient and healthier variation on demand control ventilation that uses a new, cost effective, and more accurate sensing approach known as multiplexed sensing. The presentation will also provide several commercial buildings case studies as well as a brief discussion of how these approaches can also be applied to laboratory facilities for even greater savings.

Seminar Topic: A Holistic Overview of Technologies and Strategies to Achieve Deep Energy Reductions in Laboratories

As we strive to build more energy efficient laboratories and vivariums, the most impactful approach is often to reduce the outside airflow. In the last few years new design approaches such as demand based control of lab air change rates, chilled beams (hydronic cooling), and VAV exhaust fan control have been successfully employed to safely reduce these lab airflows to as low as 2 ACH to cut energy consumption significantly. Although these concepts may have been discussed individually in the past, this talk provides a holistic discussion of how these and other energy saving technologies such as heat recovery can be combined to create a whole that is greater than the sum of the parts. Several case studies will be provided as well as the results of a sophisticated lab energy analysis tool to determine potential energy and capital cost savings for a typical lab building.

Mr. Sharp is a frequent speaker at national and international conferences on the topics of energy efficiency in buildings and indoor environmental quality and has testified before the US Congress on the topics of climate change and energy efficiency.

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SPECIAL EVENTS

Kevin Eggert

Please save the date of February 18th for the ASHRAE annual Valentine's day gathering. The event will consist of a night at the Old Town Dinner Theater in Worthing, SD featuring a production of "Last of the Red Hot Lovers". Be watching your inbox for an email invite in the next few weeks.

The 2016-2017 South Dakota Chapter ASHRAE Line-up:

Sept 7	Noon	Jason Camarato, Greenheck <i>"Good Kitchen Design Principles"</i>
Oct 5	Noon	Alan Niles, WaterFurnace International (Distinguished Lecturer) <i>"Net-Energy Water Loops: a clear path to Net Zero Energy Buildings"</i>
Oct 21	ASHRAE Shootout	Hunter's Pointe, Humboldt. Sporting Clays and Lunch.
Nov 9	Afternoon Seminar	Douglas T. Reindl, PH.D., P.E., Univ. of Wisc.- Madison <i>"ASHRAE Standard 15"</i> (Distinguished Lecturer)
Nov 9	Evening	Douglas T. Reindl, PH.D., P.E., Univ. of Wisc.- Madison <i>"Refrigeration – A Review & Update"</i> (Distinguished Lecturer) Student Night
Dec 7	Noon	Ken Still, Critical Fuel Systems <i>"Mission Critical Fuel Oil Systems"</i>
Jan 11	Noon	Gordon Sharp, PE, Aircuity "New Approaches to Slash Commercial Building Energy Use and Improve IEQ" (Distinguished Lecturer)
Jan 11	Afternoon Seminar	Gordon Sharp, PE, Aircuity "A Holistic Overview of Technologies and Strategies To Achieve Deep Energy Reductions in Labs." (Distinguished Lecturer)
TBD	Valentines Event	Olde Towne Dinner Theatre
Mar 8	Noon	TBD

April 5	Evening	TBD Student Night and Past Presidents Night
April 21	12:00-3:00pm	ASHRAE Sponsored Webcast "Integrating Control Technology & Analytics for Optimal Building Performance"
May 26		Golf – Brandon Golf Course

Membership Nathan Larson

If you know of anyone that may be interested in joining ASHRAE, be sure to tell them about ASHRAE and invite them to a meeting. Membership information can be found at www.ashrae.org/members/ or call Nathan at 605-996-7548 with questions.



The ASHRAE Winter Conference and AHR Expo is just around the corner in Las Vegas! If you plan on attending or are thinking about it, the dates are January 28 – February 1, 2017. It is a great opportunity to be part of Technical Committees you might be interested in as well as training opportunities. Visit www.ashrae.org to see the winter conference information and www.ahrexpo.com for the AHR expo information.

There will be a Regional IX dinner being held on Sunday night in Las Vegas during the Conference. Email blakeashrae@gmail.com (preferred) if you plan to attend or sign the regional dinner sign up at the ASHRAE registration area in Las Vegas.

Region IX Dinner

Sunday, January 29, 2015 at 7:30pm
 Carmine's Las Vegas
 The Forum Shops at Caesars
 3500 Las Vegas Blvd. S, Las Vegas, Nevada 89109
 Phone : (702) 802-6566 Fax: (702) 483-6992
 \$25 for members, Free for Students
MEET AT RESTAURANT