



March 2020

Pile of Bones

Published by the Regina Chapter of ASHRAE

President's Message

By Pierre Ranger

I want to say that I am greatly looking forward to this month's meeting. We will be touring the ice plant at the Brandt Center, following by a meeting, small dinner and attendance at the game as a group! This should be a great event and we may have to limit the amount of people due to the tour capacity so please RSVP early.

We are looking for more volunteers to join the board so if you are willing to help in some way, please contact Cailin, there are opportunities available for people of differing ASHRAE skill levels.

Lastly, as a technical society, we want to use our knowledge to improve the built environment for the people who use those buildings. ASHRAE's vision statement is: "A healthy and sustainable built environment for all." In keeping with that concept, at last month's meeting, we heard from Dr. Stephanie Taylor that one of the largest contributors to seasonal spikes in infection rates of diseases such as the cold and flu is lack of humidity. As the technical leaders in our community, it is incumbent upon us to spread this message to those who aren't aware of this issue but are able to improve the current status quo in Saskatchewan. We definitely have very dry indoor environments in the colder months and we cannot improve this situation without working with the other people in the buildings industry to improve building envelopes and allow us to provide ventilation systems that can keep moisture inside the buildings.

-Pierre Ranger

Wednesday, March 11, 2020

ASHRAE Regina Chapter Meeting
Topic: Brandt Centre Ice Plant Tour
and Pats Game

Meeting Location: Brandt Centre
(meet at Brandt Centre Box Office)

5:30 – Brandt Centre Ice
Plant Tour

6:15 – Dinner

6:45 – Chapter Meeting

7:00 – Pats Game

Upcoming Events

Apr 2020 – ASHRAE Chapter Meeting

Committee Chair Reports

Vice President

By Cailin MacPherson

We've got a great tour of the Brandt Centre Ice Plant followed by supper, the business meeting and a Pats game for this month's ASHRAE meeting. We have room for 35 people to attend so please RSVP quickly to ensure your spot is secured!

All the best,

Cailin MacPherson

Programs, CTTC, Vice President, Alternate

Student Activities

By Marla Torwalt

The student branch is hosting a Student Resume Review Event on March 12 from 1:30-3:30pm at the University of Regina Campus. If you are interested in participating as a reviewer please contact me at m.torwalt@mac-eng.ca.

2020 ASHRAE Winter Conference and AHR Expo Successful

ASHRAE concluded a successful 2020 Winter Conference and AHR Expo, held February 1-5 in Orlando, Fla. This year's conference attracted nearly 2,800 buildings-related engineers, architects, contractors, students, and other industry professionals.

ASHRAE celebrated its 125th anniversary with paper sessions chronicling the progress of key industries and the evolution of energy modeling. An updated edition of the Society book, *Proclaiming the Truth*, was released at the conference in addition to a composite video highlighting ASHRAE's history which debuted at the plenary session.

The Winter Conference technical program featured more than 300 presentations, with interest surrounding this year's new track, *Big Data and Smart Controls*, where session topics included smart sensor technologies, occupant behavior in buildings and cost-based control of supply air temperature.

The AHR Expo offered more than 1,900 exhibitors, with 300 companies exhibiting for the first time. The three-day show occupying 506,000 net square feet of exhibit space, attracted attendees from more than 160 countries.

2019-20 ASHRAE President Darryl K. Boyce, P.Eng., provided Society updates and initiatives related to his presidential theme, *"Building for People and Performance. Achieving Operational Excellence."* He focused on how building professionals can ensure operational performance for the people that live, work, and interact in buildings.

During the conference, ASHRAE recognized major donors of its building campaign to support its Global Headquarters Renovation Project.

"With the opportunity to create a new ASHRAE Global Headquarters building, we are living the real-world challenge of designing and building a great environment for our staff, volunteers and industry visitors from around the world, that will operate effectively and not waste energy," said Boyce.

The plenary session drew more than 1,000 people and provided a forum for the presentation of awards to experienced and emerging leaders in the industry. Keynote speaker Ed Hochuli, retired Head Referee in the National Football League, closed the session with an empowering presentation on being successful at any job.

ASHRAE Learning Institute (ALI) offered four full-day seminars and 17 half-day courses. New courses included: *Guideline 36: Best in Class HVAC Control*

Sequences, Save 40% by Complying with Standard 90.1-2019, Best Practices for Installing DDC Systems, IgCC and ASHRAE Standard 189.1 Technical Provisions, Principles of Building Commissioning: ASHRAE Guideline 0 and Standard 202, Designing for Cold Climates and V in HVAC – What, Why, Where, How, and How Much. The new Certified HVAC Designer (CHD) certification exam was also administered during the conference.

The 2020 ASHRAE Annual Conference will take place June 27- July 1 in Austin, Texas. The 2021 Winter Conference will take place Jan. 23-27, and the AHR Expo, Jan. 25-27, in Chicago.

ASHRAE Resources Available to Address COVID-19 Concerns

ASHRAE, a *global society* advancing human well-being through sustainable *technology* for the built environment, has developed proactive guidance to help address coronavirus disease 2019 (COVID-19) concerns with respect to the operation and maintenance of heating, ventilating and air-conditioning systems.

The ASHRAE COVID-19 Preparedness Resources webpage, ashrae.org/COVID19, provides easily accessible resources from ASHRAE to building industry professionals.

“The recent escalation in the spread of coronavirus disease 2019 is alarming on a global scale,” said 2019-20 ASHRAE President Darryl K. Boyce, P.Eng. “While ASHRAE supports expanded research to fully understand how coronavirus is transmitted, we know that healthy buildings are a part of the solution. ASHRAE’s COVID-19 Preparedness Resources are available as guidance to building owners, operators and engineers on how to best protect occupants from exposure to the virus, in particular in relation to airborne particles that might be circulated by HVAC systems.”

Available on the webpage is ASHRAE’s recently approved position document on Airborne Infectious Diseases. The Society’s position is that facilities of all types should follow, as a minimum, the latest practical standards and guidelines.

The following publications are referenced in the position document and on the resources webpage:

- ANSI/ASHRAE Standard 62.1-2019, *Ventilation for Acceptable Indoor Air Quality*– Outlines minimum ventilation rates and other measures intended to provide IAQ that is acceptable to human occupants and that minimize adverse health effects.
- ANSI/ASHRAE Standard 62.2-2019, *Ventilation for Acceptable Indoor Air Quality in Residential Buildings*– Defines the roles of and minimum requirements for mechanical and natural ventilation systems and the building envelope intended to provide acceptable indoor air quality in low-rise residential buildings.
- ANSI/ASHRAE/ASHE Standard 170-2017, *Ventilation of Health Care Facilities* – Ventilation guidance, regulation, and mandates to designers of health care facilities. It addresses hospital spaces, outpatient spaces, and nursing home spaces.
- ANSI/ASHRAE Standard 52.2-2017, *Method of Testing General Ventilation Air-Cleaning Devices for Removal Efficiency by Particle Size* –

Establishes a method of laboratory testing to measure the performance of general ventilation air-cleaning devices in removing particles of specific diameters.

- ANSI/ASHRAE Standard 55-2017, *Thermal Environmental Conditions for Human Occupancy* – Specifies conditions for acceptable thermal environments and is intended for use in design, operation, and commissioning of buildings and other occupied spaces.
- ANSI/ASHRAE Standard 185.2-2014, *Method of Testing Ultraviolet Lamps for Use in HVAC&R Units or Air Ducts to Inactivate Microorganisms on Irradiated Surfaces* – Establishes a test method for measuring the intensity of ultraviolet lamps on irradiated surfaces under typical HVAC&R operating conditions.
- ANSI/ASHRAE Standard 161-2018, *Air Quality within Commercial Aircraft* – Defines the requirements for air quality in air-carrier aircraft and specifies methods for measurement and testing in order to establish compliance with the standard.
- ASHRAE Guideline 28-2016, *Air Quality within Commercial Aircraft* – Serves as a companion to ANSI/ASHRAE Standard 161, *Air Quality within Commercial Aircraft*. Includes additional research and supporting information for guidance in assessing and assuring good air quality within the aircraft cabin.

The position document also advises that new and existing healthcare intake and waiting areas, crowded shelters, and similar facilities should go beyond the minimum requirements of these documents, using techniques covered in ASHRAE's Indoor Air Quality Guide to be even better prepared to control airborne infectious disease (including a future pandemic caused by a new infectious agent).

Because small particles remain airborne for some period of time, the design and operation of HVAC systems that move air can affect disease transmission in several ways, such as by the following:

- Supplying clean air to susceptible occupants
- Containing contaminated air and/or exhausting it to the outdoors
- Diluting the air in a space with cleaner air from outdoors and/or by filtering the air
- Cleaning the air within the room

ASHRAE recommends the following strategies of interest to address disease transmission: dilution ventilation, laminar and other in-room flow regimes, differential room pressurization, personalized ventilation, source capture ventilation, filtration (central or unitary), and UVGI (upper room, in-room, and in the airstream).

Owners, operators, and engineers are encouraged to collaborate with infection

prevention specialists knowledgeable about transmission of infection in the community and the workplace and about strategies for prevention and risk mitigation.

For access to the full position document, standards, publications, technical committees, research projects and other material to prepare for COVID-19, visit the ASHRAE COVID-19 Preparedness Resources webpage at ashrae.org/COVID19.

2019-2020 Meetings and Events

March 11, 2020 - Dinner

Topic: Brandt Centre Ice Plant Tour &
Pats Game

Location: Brandt Centre (meet at Box
Office)

April 2020

Topic: TBD

Date & Time TBD

Other Chapter Meetings will be
announced in future newsletters

June 27 – July 1, 2020

ASHRAE Annual Conference

Location: Austin, Texas

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