

ASHRAE Ottawa Valley Chapter

Chapter Meeting #3 – 21 November 2018

Meeting Date:	21 November 2018			
Location:	Centurion Conference & Event Center, 170 Colonnade Rd, Ottawa, ON			
Attendance:	Total:	74		
	Members:	63	Guests:	11
			Students:	0
Theme:	Student			
Tour:	None			
Tech Session:	None			
Table Top:	Hydro Ottawa and S+P Canada Ventilation			
Program:	ASHRAE Presidential Address, Humber River Hospital Design			
Speakers:	President Sheila Hayter and Kurt Moneiro P.Eng.			
Prepared by:	Adrienne Mitani			

Social (17:30 – 18:10)

Business Session (18:15 – 18:35)

- President Daniel Redmond welcomed everyone and gave the call to order.
- President Daniel Redmond introduced the Board of Governors and the Executive, as well as guest from ASHRAE Society and Region. Including ASHRAE Society President Sheila Hayter, Society President-Elect Darryl Boyce, Alice Yates, Director of Government Affairs, and Jeff Clark DRC for Region II. ASHRAE Society representatives were in Ottawa to speak with governmental officials which just happened to coincide with the ASHRAE meeting.
- Secretary Adrienne Mitani introduced the guests.
- Membership Promotion Chair Andrew Brown introduced the new members to the Ottawa chapter.
- Student Activities Chair Elizabeth Primeau who welcomed the students from Cégep de l'Outaouais who were attending the meeting with the professor. She also spoke about the upcoming presentation by President Sheila Hayter at Carleton University the following evening and an upcoming event with the Earl of March high school tour at Modern Niagara.
- Table tops for the evening were Hydro Ottawa and S+P by Tim Sutton. Hydro Ottawa spoke about their ongoing programs and invited people to get in contact with them about new projects and retrofits. Tim Sutton spoke about their line of commercial and residential ventilation products.
- Michael Callaghan announced the upcoming ASHRAE Bowling event the following evening on November 21st, and a reminder to register.
- President-Elect Aaron Dobson spoke about the current Research Promotion campaign and the raffle, with two draws for the evening. One for two tickets to the Ottawa Senators vs Columbus donated by Climateworks, as well as four tickets for Ottawa vs the New York Rangers donated by Clement Marchand.

Business Session Finished at 18:35 pm

Dinner (18:35 – 19:15)

- Dinner served at 18:35 pm
- Dinner was salad with a choice of dressings, chicken with potatoes and vegetables.
- Dessert was cake served with a choice of coffee or tea.

Evening Program (19:15- 20:50)

- Evening program started at 19:55pm
- Tickets were raffled off for research promotion, with \$720 raised. Tickets were chosen by President Hayter and President-Elect Darryl Boyce and tickets were won by Ross McIntyre and Rod Lancefield.
- President Daniel Redmond introduced President Sheila Hayter and her Presidential address.
- Sheila introduced her presidential theme of Building our New Energy Future, and our responsibility for the energy that we use.
- She spoke about her background with her father Dick Hayter who was ASHRAE president from 1995 for 1996, as well as her work with NREL and the Renewable Energy Laboratory.
- President Hayter emphasized how our decision-making impacts the environment and it is our responsibility to become aware. ASHRAE's role in this includes a new ASHRAE primer, the New Energy Future, available on line, to help building professionals for practical look at energy. The buildings are the number one use of electricity, which is why ASHRAE needs to be a leader to promote more energy efficient buildings with new guidelines and expanding the Distinguished Lecturer (DL) program to include Smart Grid and other topics.
- President Hayter also is focused on creating new networks with other organizations, including cyber security, wellness, and resilience. She spoke also of how ASHRAE chapters can get involved and take a leadership role through our expertise in building design.
- President Daniel Redmond announced the program topic and introduced the speaker, Kurt Monteiro, who is a past recipient of an ASHRAE Technology Award for new healthcare facilities.
- Kurt started with giving an overview of the site, which was very large at 1.8 million square foot, with the largest green roof in Canada and two parking garages. The idea of the project was Lean, Green and Digital, to increase automation, limit the amount of movement required across the building and standardize and to use technology during construction to minimize costs.
- The building was designed and constructed in 44 months, which meant that equipment was procured during 100% design development stage, this required flexibility to be built into the design for the owner and well as changes during the course of the project.
- Green was done by including sustainable elements, this included excellent indoor air quality and a high level of infection control that was required for the building occupants.
- Design elements that were targeted:
 - o High performance building envelope

- Optimized heating and cooling plants
- Effective heat recovery
- High performance dynamic glass.
- Controls optimization for the cooling and heating plants were necessary to meet energy targets for the building. This included VSD's as well as heat recovery chillers.
- On the ventilation side, the air handling units were installed in parallel with each unit sized at 100% but would work together at low velocity with oversized ductwork to reduce fan power. The cost benefit analysis indicated a 7 year payback, since the project was a P3 partnership (public-private partnership) which would operate the building for the following 30 years, it made sense for the premium in materials and space required.
- On the digital side, they implemented metering at many levels to gather data and create efficiencies. System integration was required between the mechanical, electrical as well as the hospital systems, so that the system could turn off ventilation, windows, and lighting for rooms that are not occupied.
- The building was designed for a certain performance of the building, and the designer and contractors had committed to based on the P3. Based on utility data for energy intensity the building performances, it is one of the best performing acute care facility in this area, so far it has met it electricity targets, while they are still working on the natural gas targets for the building.
- Kurt then answered a number of questions from the audience including if this could have been done as a design-bid-build, which the motivation for the energy efficiency due to the energy targets and penalties if the P3 project did not meet them.
- President Daniel Redmond thanked speaker and presenting a gift of a commemorative coin to President Sheila Hayter and Kurt Monteiro.
- The attendees were reminded of the survey which will be emailed after the meeting, and a reminder that there was no meeting next month.
- The next meeting is January 24th at the Centurion Conference and Event Center with a presentation on Indoor Agriculture.

Meeting adjourned 21:10 pm