

BUFFALO TALES

Newsletter of the Manitoba Chapter

The Manitoba Chapter of the American Society of Heating, Refrigerating and Air Conditioning Engineers was chartered in September 1935. It is the second oldest ASHRAE Chapter in Canada. ASHRAE Manitoba is part of ASHRAE Region XI and covers ASHRAE members in Manitoba and Northwest Ontario.



ASHRAE Supper Meeting

Thursday February 11, 2010

Victoria Inn, 1808 Wellington Avenue

Social Hour 5 PM

Supper 6 PM

Membership Promotion Night

After Supper Presentation

Chilled Beams

with

Darron Rempel

“The use of active and passive beams in heating and cooling can be advantageous to a design when looking for LEED credit, operational economic benefit, thermal comfort and indoor air quality. Although some of the technology is new to North America, the design and application is not difficult with an appropriate understanding of the advantages and disadvantages of the different technology.”

Our presenter, Darron Rempel graduated from the University of Manitoba in 1997 with a B.Sc in Mechanical Engineering. Darron has worked for EH Price since 2007 in the Applications Engineering department supporting chilled beam, radiant system and displacement ventilation products. Beyond providing advice and project assistance to customers, Darron is actively involved in application research and product design to expand the use and understanding of these systems.

ASHRAE dinner meetings are open to all. Pre-registration is required. To pre-register or to get information on the cost of ASHRAE events, e-mail stephen.norsworthy@snclavalin.com or visit www.ashraemanitoba.ca.

Larry Dowbenko, ECCO Heating Products Ltd. donated two programmable thermostats that were misplaced prior to the cribbage tournament. These will be raffled off during upcoming dinner meetings to raise funds for ASHRAE Research.

President's Message - Daryl Friesen



Hello all. I can't believe it's our February newsletter already. January seemed to fly by so I'm sure spring must be right around the corner. Oops, I think I might have just jinxed our chances for an early spring.

I just got back from the ASHRAE Winter meetings in Orlando. The meetings were very well attended and there were members present from all over North America and many other parts of the world. The Winter meeting certainly confirms that ASHRAE is alive and well not only here in Winnipeg but everywhere else in the world.

Thanks to everyone who attended last month's meeting. Farzad did a great job arranging a very interesting topic on the refrigeration systems used at the Olympic Venues for Refrigeration Night. We also had a number of students attending the meeting as it was also Students Night. Thanks to Peter Gryc for his efforts.

This month's meeting will be held on February 11th. The technical part of our evening will discuss the up and coming technology of Chilled Beams. If anyone reading this hasn't had a chance to sample the food at the Victoria Inn you are definitely missing out.

I invite everyone to come and enjoy a great meal and learn a bit as well. Hope to see you there.

Coming Events

March 11, 2010 – ASHRAE Manitoba meeting – Building Tour of Manitoba Hydro Place. Meeting at 4 pm with supper to follow at the Victoria Inn.

April 15, 2010 - ASHRAE Manitoba supper meeting date

April 13 and 14, 2010 – Better Buildings Conference at the Winnipeg Convention Center

April 21, 2010 1 to 4 p.m. EDT (noon to 3 PM in sunny Manitoba) – **free to all ASHRAE Webcast** “Right From the Start – Commissioning for High Performing Buildings”

Why do you need Commissioning? Why should Commissioning start in the design phase? How can you avoid or reverse building performance decay? How does Commissioning improve ROI? Get answers to these questions and tools to commission your next building by participating on your computer via the internet. **Please share this information with everyone** you think would benefit from participation, member or not. Online registration is required and begins **March 2nd** at www.ashrae.org/Cxwebcast.

Three (3) Professional Development Hours (PDHs) or three (3) AIA Learning Units (LU's) may be awarded to viewers who complete the “Participant Reaction Form” online by **April 30, 2010**.

Notes from the Louisville ASHRAE Annual – June 21 to 25, 2009

Louisville is home of Muhammad Ali and the Louisville Slugger baseball bats and banners and posters everywhere were constant reminders of that. Daytime temperatures in were consistently mid 90's and it was muggy all week. Nights cooled into the mid to high 70's. A couple of rain storms passed through but I was inside for those. Anyone that got caught in the rain was totally soaked within a minute or two and the streets filled curb to curb with water.

Thursday afternoon I attended a management session “How managers differ from leaders.” Managers have staff, react to goals, take credit, focus on overcoming staff weaknesses and exercise power over their staff. Leaders win and motivate followers, set goals, take responsibility, leverage strengths, empower, are open minded, have vision, are committed to their goals and their followers know and understand those visions and goals and leaders acknowledge the contributions of others.

Strategic planning involves answering the following questions: Where are we? Where do we want to go? How are we going to get there? Who is going to do what to get us there? What is the time from to get there? How do we measure our success or achievement? Work with the easy to work with volunteers. Don't waste time or energy trying to get difficult or low productivity people to contribute.

In the late evening I went for a stroll to check out the gay pride festivities (just looking). It was real big on real big females and a bit shy on shy cute guys. It was interesting but not as raucous or bizarre like Vancouver's pride parade and activities.

During two and a half days of pre-conference meetings someone referred to “Recognition ceremonies for the uninvolved”; mentioned that Norway is setting up hydrogen fuelling stations for vehicles; said to watch <http://www.charlirose.com/view/interview/9044> and other related interviews there.

Sunday June 21 - Technical Plenary – the speaker imagined life in a time of fuel poverty. How do you design a building for the future realities of unstable energy supplies and prices, buildings that will still be leasable during economic collapse? What kind of buildings are empty in your market (dead buildings)? Don't build that kind. Building systems often don't work because they are too complex. Hard times and high energy costs will mean that businesses will start to care a lot more about operating costs. Mixed mode operations (e.g., opening windows) are very difficult to design for (predict loads, service building systems).

EE buildings are more complex to design and, well done, cost less to build, so traditional % fees do not work. Climate change may mean future buildings need to withstand weather events that are more extreme than current codes call for. In France, nuclear power plants get shut down during peak demand periods if they overheat rivers. On the theme of locating an enterprise to minimize energy dependence, reference was made to a large data server facility located near the ocean to get “free” cooling. <http://www.arup.com/assets/download/download396.pdf>

Monday June 22 Forum #7 – What does a water conservation standard need to address to safely minimize the amount of water used in buildings? Water uses are AC, plumbing, irrigation/landscaping and domestic. Alternate sources are drain water, storm, grey, dish washing,

laundry, reclaim (boiler).

Expect once through cooling systems to be banned and expect to see dual piping systems – potable and non-potable – in building codes.

In California, the embedded energy in 1000 gallons (US) of municipal water and waste is about 5kWh, half in the water, half in the waste and treatment. In the US, between 2 and 150 gallons of water are embedded in each kWh of electricity generated. There was discussion about site energy in water (e.g., DHW heating energy or pumping in tall buildings), source energy in water and source water in energy.

Pumping down of aquifers is stressing agriculture and agriculture stresses domestic water supplies. It takes about 16 kWh to desalination 1000 gallons (US) of water

Supper was good company in a loud bar with okay food and upscale prices. After supper some of us headed to a blues bar operated by the brother of someone once famous, now dead.

June 23 Tuesday Seminar 41 - Grease, Smoke and Odour Control in Commercial Kitchens

Cooking emissions account for more than 20% of the PM_{2.5} in outdoor air in LA and Denver.

Charbroiling meat produces a lot of emissions. Locations with outdoor air quality problems are passing legislation aimed at controlling food services emissions. Regarding the high tech pollution control equipment that is being installed to meet this legislation, Robert Ajenaran said “I have never met a restaurant owner that was not shocked when he got his first maintenance bill for his pollution control equipment”

UV lights can be used to reduce restaurant emissions. UV light gradually breaks down grease in ducts and other exposed surfaces. In getting rid of grease, it produces other compounds, usually water, CO₂ and base minerals but may also produce free radicals and other “new” pollutants.

ASHRAE Manitoba Chapter Officers

President	Daryl Friesen	Midwest Engineering	989-3636	daryl@midwesteng.mb.ca
President-Elect	Jesse Sandhu	SMS Engineering	775-0291	jsandhu@smseng.com
Vice-President				
Secretary	Stirling Walkes	SMS Engineering	775-0291	swalkes@smseng.com
Treasurer	Corey Nation	E.H. Price Ltd.	982-2222	coreyn@price-hvac.com
Governor	Dieter Bartel	Manitoba Hydro	477-7717	dbartel@hydro.mb.ca
Governor	Robert Bisson	Public School Finance Board	945-8452	rbisson@gov.mb.ca

Committee Chairs

Chapter History

CTT	Russell Lavitt	SMS Engineering	775-0291	rlavitt@smseng.com
Honours & Awards	Dieter Bartel	Manitoba Hydro	477-7717	dbartel@hydro.mb.ca
Membership	Stephen Norsworthy	SNC-Lavalin	786-8080	stephen.norsworthy@snclavalin.com

Programs	Johann Baetsen	Epp Siepman Engineering	453-1080	jbaetsen@eppsiepman.com
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Refrigeration	Farzad Hashemina	Cimco Refrigeration	783-1178	FHasherminia@toromont.com
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Research & Promo	Sergio Almeida	Trane	632-1543	salmeida@trane.com
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Student Activities	Peter Gryc	SMS Engineering	775-0291	pgryc@smseng.com
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Other

Accommodations	Jesse Sandhu	SMS Engineering	775-0291	jsandhu@smseng.com
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Homepage Editor	Devin Evenson	Manitoba Hydro	474-3971	devenson@hydro.mb.ca
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Newsletter Editor	Bert Phillips	UNIES Ltd.	633-6363	phillips@unies.mb.ca
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Roster	David Stones	Wardrop Engineering	272-1331	dstones@shaw.ca
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Special Events	Gary Bailley	Manitoba Hydro	360-5156	gbailley@hydro.mb.ca
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ASHRAE Region XI Officers

Director & Regional Chair	Erich Binder	Erich Binder Consulting Calgary AB		erich.binder@worleyparsons.com
Assistant Regional Chair	Traci Hanegan	Coffman Engineers, Spokane WA		hanegan@coffman.com
Technology Transfer	Eileen Jensen	Bonneville Power Portland, OR		nejensen@bpa.gov
Membership Promotion	Russell Lavitt	SMS Engineering, Winnipeg MB		rlavitt@smseng.com
Student Activities	Doug LeCren	Colt Engineering, Anchorage AK		douglas.lecren@nanworleyparsons.com
Resource Promotion	Ray Sieber	Saskatchewan Research Council, Regina SK		sieber@src.sk.ca
Nominating Committee	Norm Grusnick	ECCO Manufacturing, Langley BC		ngrsnick@ecomfg.com
Nominating Committee	Kevin Marple	Benz Air Engineering Portland OR		kmarple@benzco.com
Regional Historian	Tim McGinn	Cohos Evamy Calgary AB		mcginnt@cohos-evamy.com
Treasurer	Rob Craddock	Inland Metal Manufacturing, Regina		rob@inlandmetal.ca
Web Page Editor	Kathy Habke	SAC ASHRAE Calgary, AB		chapter.administrator@sac-ashrae.com
CRC Chair, 2010	Jerry Belanger	J-Clan Services Ltd. Regina, SK		jclan@sasktel.net

ASHRAE, founded in 1894, is an international organization of 50,000 persons. Its sole objective is to advance through research, standards writing, publishing and continuing education the arts and sciences of heating, ventilation, air conditioning and refrigeration to serve the evolving needs of the public.

ASHRAE needs you, but more importantly you need ASHRAE. ASHRAE always has room for more professionals, just like you. For information regarding ASHRAE membership, contact Manitoba Membership Chair, Stephen Norsworthy, stephen.norsworthy@snclavalin.com or visit ASHRAE Manitoba at www.ashraemanitoba.ca

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