



# ASHRAE BC TOTEM



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## Dinner Meeting at the Italian Cultural Centre

Wednesday, November 16

Topic	Meeting #3—ASHRAE Distinguished Lecturer Brian Monk "Energy Savings by Integrating a Total Filtration Strategy into Building HVAC"
Pre-Dinner Workshop	Doug Overholt on Terasen Gas & the Efficient Boiler Program
Time	4:30 PM—Pre-Dinner Workshop 5:30 PM—Social Hour 6:30 PM—Dinner followed by tour
Cost	Chapter Members—\$30 Society members & Guests of Members—\$33 Students—\$10

All reservations should be made by noon on Monday  
Please fax, phone, or e-mail your reservations to Victor Raju, Attendance Chairman  
Fax: 604-525-3147 Tel: 604-525-3341 E-mail: vraju@decdesign.ca

## President's Message



Wednesday, November 16 is our next meeting at the Italian Cultural Centre at 5:30 pm cocktails, 6:30 pm dinner. Our last meeting, the Tour of the UBC Health Sciences centre was excellent. It was a huge facility with a huge mechanical room. Mike Boyle and Sam Louie from MCW received the ASHRAE Regional Technology Award for the building and then gave all of us a great presentation followed by the tour. It was interesting to hear how the technical challenges of such a large building with so many labs

were dealt with as well as the time challenges posed by a tight schedule.

As you know, (if you read my September President's message), my theme for this year is "**Get Involved**". I started by introducing the Officers, Governors and Committee Chairs. I also gave you an overview of who does what and how things work, in the hope that you will call or email one of the Officers or Committee Chairs and "**Get Involved**".

You as an individual can get involved with ASHRAE in the BC Chapter in whatever capacity you would like. In addition to support from individuals, we as your local chapter have been fortunate to have support from is the businesses in the HVAC industry. Corporate entities support ASHRAE in a number of ways. Companies give financial sup-

(Continued on page 3)

## Letter from the Research Promotion Chair

On behalf of the Society and the BC Chapter, I would like to thank all of those who have supported ASHRAE's research programs over the past years and to express my hope that you will once again renew your much needed investment in *ASHRAE Research Canada* and the future of the HVAC&R profession and our industry.

The *Research Advisory Panel*, which was created in 1999, was charged with creating a new *Research Strategic Plan* that would guide the various *Technical Committees* in selecting and conducting their research projects in the future. The charge included identifying those subject areas of most importance and relevance as well as developing a process for maintaining the viability of the research plan.

The process of developing the *Research Strategic Plan* included gathering information from all segments of the Society and conducting "Environmental Scans" that helped identify the *research themes* that would provide the greatest benefits to the society. Out of this process, four broad, far reaching **Research Opportunity Themes** for ASHRAE were identified:

*Energy & Sustainability*

*Indoor Environmental Quality (IEQ)*

*Tools and Applications*

*Equipment, Components, and Materials*

The above themes are used as simple labels to describe the emphasis of any given project. It is expected, though, that each research project will help advance the goals of one or more themes. Each of the *Research Opportunity Themes* has under it a number of *Topical Areas* that provide examples of projects that could be undertaken to meet the themes' goals. These lists are only an indication of the *types* of research that might apply.

This is an exciting time for *ASHRAE Research Canada* and we hope you

will continue to be a part of its new vision.

As the first corporate contributor of this Chapter year and the first contributor during my tenure as your Chapter's RP Chairperson I want to thank **Refrigerative Supply** and in particular **Mike Fahlman** for the contribution of \$825.00 towards ASHRAE Research.

Submitted by: Peter Horwood

Each year, the Chapter Audit Committee convenes to review the Annual Financial Statements and Budgets. We are currently looking for a volunteer to serve on the committee. If you are interested, please contact Chris Collett, Chapter Treasurer at (604) 535-4215 or email to [chriscollett@telus.net](mailto:chriscollett@telus.net)



PHOTO'S BY  
STEVE MONTAGANO



LAST MONTH'S TOUR OF UBC HEALTH SCIENCES BUILDING



KEVIN MARPLE  
REGIONAL VICE CHAIR—MEMBERSHIP



CHARLOTTE ROSS—SECRETARY



NORM GRUSNICK—GOLF TOURNAMENT & PAST PRESIDENT



LAST MONTH'S TOUR OF UBC HEALTH SCIENCES BUILDING

WHEN YOU ATTEND THE MONTHLY MEETINGS AND OTHER ASHRAE EVENTS, WE ARE, OF COURSE, PLEASED TO COLLECT PAYMENTS BY CASH, CHEQUE AND CREDIT CARD. WHEN CONSIDERING YOUR PAYMENT OPTIONS, PLEASE REMEMBER THAT THE CHAPTER IS CHARGED A HEFTY COMMISSION ON ALL CREDIT CARD TRANSACTIONS. SO, IF YOU HAVE A CHOICE, WE WOULD BE MOST GRATEFUL IF YOU COULD CONSIDER PAYING BY CASH OR CHEQUE.

## PRESIDENT'S MESSAGE, continued...

(Continued from page 1)

port by making donations to ASHRAE research, by paying ASHRAE membership dues for their employees and by paying for the dinners of employees that attend ASHRAE dinner meetings.

Corporate financial support is essential and very much appreciated, but ASHRAE is a volunteer driven organization that is most successful if people participate by attending chapter meetings and events. The executive work diligently on meetings in the hope of having as many people as possible come out to enjoy and hopefully be informed by them. However, most successful companies are busy places. Time is always in short supply and employees have to manage their time based on what is considered important. Therefore, perhaps the greatest support is given by those companies that encourage their employees to attend ASHRAE meetings.

How can a company encourage an employee to attend ASHRAE? After all the meetings are in the evening and the employee is on their own time. I have already mentioned financial support, but perhaps the greatest factor is if management really considers that ASHRAE meetings are important. Senior management can say as much, but as with most leadership, the greatest encouragement is often by example. When senior management attend ASHRAE meetings themselves, it is the best possible signal that ASHRAE is important.

Of course it is incumbent upon the ASHRAE executive to ensure that there is good, timely, pertinent topics for presentations so that the meetings are worth attending. This year's VP Programs is Wayne Borrowman. He is just now finalizing our 8 meetings for 2005-2006. You can contact Wayne at [wborrowman@toromont.com](mailto:wborrowman@toromont.com) or [BCChapterPrograms@Mail.ASHRAE.org](mailto:BCChapterPrograms@Mail.ASHRAE.org) or

(604) 525-8899. If you are too late for this year, in 2006-2007 Chris Collett will likely be Vice-President in charge of programs. You can contact Chris at [chris@collett.net](mailto:chris@collett.net) or [BCChapterTreasurer@Mail.ASHRAE.org](mailto:BCChapterTreasurer@Mail.ASHRAE.org) or (604) 535-4215.

If there is anything to do with ASHRAE that you would like to talk about, please feel free to contact me. I am President this year and can be contacted at [Bob.MacKie@ca.Belimo.com](mailto:Bob.MacKie@ca.Belimo.com) or [BCChapterPresident@mail.ashrae.org](mailto:BCChapterPresident@mail.ashrae.org) or 604-787-3024.

It is always worthwhile to meet the people in our industry. The more people out to meetings, the better for everybody.

Bob MacKie

## CTTC REPORT

### B.C. Chapter Members Win Big in the ASHRAE Technology Awards!

Projects by three Lower Mainland engineering firms have maintained the B.C. Chapter's growing tradition of success in the annual ASHRAE Technology Awards. Congratulations to **MCW Consultants** and **Jade West Engineering**, who have won 2005 ASHRAE Regional & Chapter Technology Awards, and to **Cobalt Engineering** (formerly VEL), who also won an ASHRAE B.C. Chapter Technology Award.

**Michael Boyle, Sam Louie** and **Steve Bruskiwich** from MCW Consultants won both the Region XI and B.C. Chapter Awards (New Institutional Buildings Category) for the UBC Life Sciences Building, which our chapter members toured at the September dinner meeting.

**John Makepeace** from Jade West Engineering also won Region XI and B.C. Chapter Awards (Existing Commercial Buildings Category) for their submission on their Chiller Upgrade at the TD Tower in Vancouver.

**Goran Ostojic** from Cobalt Engineering received a B.C. Chapter Award (New Institutional Buildings Category) for the UBC Technology Enterprise Facility III.

Details about these winning projects will appear in upcoming issues of the Totem and also

on the B.C. Chapter Website at [www.ashrae.bc.ca](http://www.ashrae.bc.ca)

Each year, the ASHRAE Technology awards recognize outstanding achievements by members who have successfully applied innovative building design in the areas of occupant comfort, indoor air quality and energy conservation.

The overall purpose of the ASHRAE Technology Awards programme is to:

Recognize ASHRAE members who design and/or conceive innovative technological concepts that are proven



**CHRIS COLLET—TREASURER**

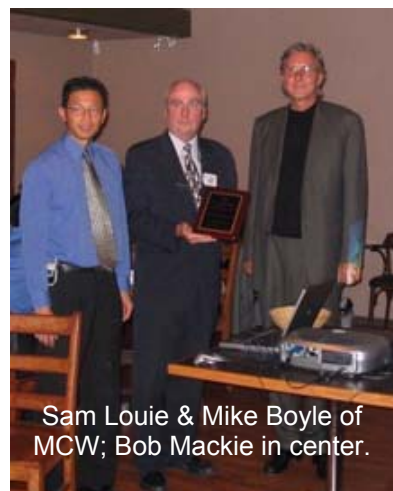
through actual operating data;  
 Communicate innovative systems designs to other ASHRAE members;  
 Highlight technological achievements of ASHRAE to others, including associated professionals and societies worldwide, as well as building and facility owners.  
 ASHRAE's Chapter Technology Transfer Committee (CTTC) coordinates the awards competition, which includes

judging at the Chapter, Regional and Society levels

Each year, the Society presents awards in seven categories: Commercial Buildings (New and Existing); Institutional Buildings (New and Existing); Health Care Facilities (New and Existing); Industrial Facilities or Processes (New and Existing); Public Assembly (New and Existing); Residential (New and Existing); Alternative or Renewable Energy Use.

To enter the Chapter and Regional Competitions, a short form submission must be prepared and sent via our local CTTC chair to the Regional Chairman. Winners in each ASHRAE region may then choose to prepare an additional submission for the Society competition

Further information about the ASHRAE Technology awards appear in upcoming Totems, or you can visit the ASHRAE website at [www.ashrae.org](http://www.ashrae.org) and use the search term "Technology Awards" in the search engine on the home page.



Sam Louie & Mike Boyle of MCW; Bob Mackie in center.

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#### Addenda Availability Changes

#### ASHRAE Implements New Process to Update Code-Intended Standards

ATLANTA - As part of ongoing efforts to increase use of its standards, the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) has announced a major change to availability of addenda to code-intended standards.

The move puts ASHRAE in line with issuance of model building codes.

In the past, addenda for code-intended standards on continuous maintenance were posted individually on ASHRAE.org after being approved by the Board of Directors for publication. Now, Board-approved addenda to code-intended standards will be published in a supplement. The supplements for each standard will be published on a regular schedule halfway between the three year publication of each standard. The addenda also will be incorporated into each standard when it is reissued after its last publication.

Richard Hermans, P.E., chair of ASHRAE's Standards Committee, acknowledges the change is significant.

"Our whole approach to how we relate to the building code industry is changing," Hermans said. "We are seeking more involvement with the model code development community to assist us in our code proposals. We are responding to member concerns over the cost of keeping up with our code-intended standards. By cost, I am not referring to the dollars spent for obtaining the updated documents but rather the cost in time to train employees about the new requirements contained in addenda. And we are aligning our release of certain standards to coincide with the model code schedules for code change proposals."

All of these actions point to a policy of releasing addenda on a predictable schedule spaced out over years, he said. "In this way, we will develop our code-intended standards in the same way that groups such as the International Code Council and the National Fire Protection Association, both of which incorporate ASHRAE standards, maintain their model codes," he said.

The change applies only to code-intended standards that are on continuous maintenance. These are:

- \* Standard 15, Safety Standard for Refrigeration Systems;
- \* Standard 34, Designation and Safety Classification of Refrigerants;
- \* Standard 52.2, Method of Testing General Ventilation Air Cleaning Devices for Removal Efficiency by Particle Size;
- \* Standard 62.1, Ventilation and Acceptable Indoor Air Quality in Commercial, Institutional, Industrial and High-Rise Residential Buildings;
- \* Standard 62.2, Ventilation and Acceptable Indoor Air Quality in Low-Rise Residential Buildings;
- \* Standard 90.1, Energy Standard for Buildings Except Low-Rise Residential Buildings;
- \* Standard 90.2, Energy Efficient Design of Low-Rise Residential Buildings;
- \* Standard 140, Standard Method of Test for the Evaluation of Building Energy Analysis Computer Programs.

The first supplements for standards published will be available in March 2006.

For more information on ASHRAE's work in standards, visit [www.ashrae.org/standards](http://www.ashrae.org/standards).

ASHRAE, founded in 1894, is an international organization of 55,000 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.

Save a Little Gas?

If you have a natural gas fired hot water tank, and you have not flushed the sediment out of it for a year or more, you probably should. I used the following procedure last week, and saw a lot of sediment flow from my tank.

Switch the gas valve to Pilot

Turn off the water supply to the tank

Connect a hose to the drain valve at the bottom of the tank and put the other end of the hose in the sewer sump

Open the drain valve, then open a hot water faucet upstairs and another downstairs.

Read a book for 10 minutes

Check that the tank has stopped draining, then turn on the water to the tank for 30 seconds. If it is convenient, catch the first 5 litres that come out of the tank in a bucket, so you can see the sediment. If you don't see any sediment, your tank is way cleaner than mine was, and you might as well turn off the drain valve and re-fill the tank.

If your tank is like mine, wait 5 minutes for it to drain again, then turn the supply on for 30 seconds. I repeated this 5 times, and saw significant sediment each time. It looked like I was getting less sediment each time, and it was getting late so I quit before I got clean water out.

When you are done flushing, close the drain valve and open the supply valve to the tank. Wait till the air stops flowing from the open faucets, then close them.

Switch the gas valve back to ON.

The screen on my kitchen faucet needed cleaning the next day.

I have no idea how much gas I might be saving by removing the solids from the bottom of my hot water tank, it just feels like the right thing to do.

Let me know what you flush from your tank, and how many cycles you do.

Submitted by: Ed Chessor.

**PROGRAM CHAIR'S REPORT**



Wayne Borrowman

Well the September meetings started off very well with the tour of the UBC Health Sciences Centre and an above average attendance. What an interesting building, 52,000 square metres with a large variety of different rooms and uses. That much space requires a lot of make-up air, 320,000 litres/sec to be exact, all which must be conditioned. To accomplish this and the other mechanical functions there is a massive 3,000 square metre mechanical room that holds \$15 million of mechanical equipment that makes it all happen. With all that, the building is still designed to use 28% less energy than a typical laboratory building.

A big thanks to Charlotte Ross who had a vision that this would be an excellent tour and provided much of the behind the scenes time required to arrange it. As well a thank-you to Ledcor and UBC for helping us out to make it happen, and to Sam Louie & Mike Boyle of MCW for providing the technical presentation and acting as tour guides.



**CHARLIE SABEAN—GOVERNOR**



**LISA & VICTOR—REGISTRATION**



**VICTOR RAJU—REGISTRATION**