

AMERICAN SOCIETY OF HEATING, REFRIGERATION AND AIR CONDITIONING ENGINEERS INC.

LONDON CANADA CHAPTER #116

http://LondonCanada.AshraeChapters.org

Mon Nov 30/2009

Board of Governors

President

Eric Shaw ph: 519-964-0022 eshaw@baymarsupply.com

Vice President & Program

Jason Vanderberghe ph: 519-670-8066 jasonv@aquatech.ws

Treasurer

Jack Maynard ph: 519-681-1221 jack.c.maynard@jci.com

Secretary

Jamie Kruspel ph: 519-667-3445 jamie.kruspel@td.com

Committee Chairs

Research

Karl Gilroy ph: 519-451-5100 kgilroy@price-hvac.com

Membership

Scott Turner ph: 519-681-1977 scott@somersep.com

Student Activities

Ibrahim Simhat ph: 519-681-1221 ibrahim.semhat@jci.com

Past President

Scott Edmunds ph: 519-667-4108 sedmunds@uniongas.com

History & Newsletter

Tom Pollard ph: 519-685-2570 tpollard@execulink.com

TOUR:

GMLP ENGINEERING GREEN BUILDING UWO

After Dinner Topic:

CIPH & HYDRONICS IN CANADA

Mr John Goshulak

Vice-President, Sales and Marketing Weil-McLain Canada

Meeting - Mon Nov 30/2009

Research & Student Night

5:15 PM - **Tour** (see inside for more info)

6:15pm-Dinner 7:15pm - Program

Windermere Manor

Western Research Park

\$35.00 for London Chapter dues paid members or \$175.00 for meal plan

\$10.00 for Students with valid student card

\$45.00 for others





http://LondonCanada.AshraeChapters.org Mon Nov 30/2009 Page 2

President's Message:

With only a month to go to Christmas, and less than six weeks until a new year, it seems as though this year has been one big blur. The weather man has been unusually kind to us so far; I hope that we do not have to pay for it later on...

This month's meeting/tour should be an interesting one – we are returning to the UWO for another Facility Technical Tour – of The Engineering "Green Building" which has been named the Claudette MacKay-Lassonde Pavilion.

The pavilion began construction in early 2008, and the grand opening of the facility was held on homecoming weekend back in October of this year.

It is the hope of the UWO that this building achieves a Gold rating, and becomes the first of many Green Building Projects to come in the future – such as the Stevenson Lawson Building, and the Physics Building projects that we will see coming soon.

The pavilion will be the second green building in London – The first LEED facility is the Sisters of St. Joseph's new residence, which we have previously toured.

Our dinner will follow immediately after the tour at the Windermere Manor @ 200 Collip Circle, which is in the UWO Research Park on the northwest corner of Windermere Road and Western Road.

The theme of our meeting will be both a Student's Night, as well as a Research Night. Our speaker will be John Goshulak – VP of Sales and Marketing for Weil-McLean Canada. He is the past chairperson of the Canadian Hydronics Council, and is a member of the CSA B214 Technical Committee on hydronic heating installation standards.

Our January Meeting will be a special night as we are planning to hold a Past Presidents Night – where we will honour our Chapter History by recognizing some of our Past Presidents by having them speak about their experiences during their year(s) as President of the London Chapter.

If you would be interested in participating as a speaker at this historic event, please speak to Jason Vandenberghe (or myself), and we will be happy to discuss the details of our program.

Our recent Board of Governors meeting was attended by the UWO Student Branch Executive – at which they made a contribution to the discussions related to our chapter business.

We would welcome anyone who wishes to participate or assist with the operation and planning of chapter functions and meetings... please feel free to attend.

We look forward to seeing everyone out to the final meeting of 2008, and hope that you will all be able to attend.

Eric Shaw President - ASHRAE London Canada Chapter



SIEMENS

Siemens Building Technologies, Ltd.

Eric Christopher Salin Account Executive Building Automation, Security, Integrated Building Technologies

514 Newbold Street London, Ontario N6E 1K6 / Canada Tel: (519) 680-2380 ext. 2805 Fax: (519) 680-2410 ericsalin@siemens.com www.siemens.ca/buildingtechnologies



IRONROSS INC. (est. 1986)

Manufacturers Agents for Industrial & Commercial Air Handling Products

FANS •COILS • AIR HANDLING UNITS • SILENCERS • ISOLATION • FILTERS • DAMPERS

Jim Ironside

George Clark

Larry Mills (Sarnia)

678 BELMONT AVE. WEST, SUITE 304 KITCHENER, ONTARIO N2M 1106 PHONE: 519-742-0171 FAX: 519-742-0543 E-MAIL: <u>info@efi-ironross.com</u>

NORTHERN INDUSTRIAL - FANS & BLOWERS SCOTT C. DEAN, P. Eng. Tel: (519) 740-7000 Fax: (519) 740-0051 1-888-FAN-COIL niscont@iprimus.ca 4-122 Earl Thompson Rd, AYR, ON NOB 1E0





Speaker

John Goshulak, P.Eng Vice-President, Sales and Marketing Weil-McLain Canada

John is one of Canada's heating ambassadors volunteering countless hours on behalf of the hydronic industry. He is a professional engineer with over 25 years in the HVAC business contributing to the growth of key North American and European "Blue Chip" organizations in controls and boilers.

John is the past chairperson of the Canadian Hydronics Council and member of the CSA B214 Technical Committee on hydronic heating installation standards and a past member of the risk reduction group - gas fired boilers as an industry stakeholder. He is a contributor to such magazines as HPAC Canada including this article on boilers.

John is Vice-President, Sales and Marketing, Part Owner, of Weil-McLain Canada Sales Inc., Burlington, Ontario He is responsible for all aspects of the sale and marketing of Weil-McLain product (boilers, tanks, accessories) across Canada, including managing 15 distinct sales territories and over 200 key customer accounts.

Professional Experience includes:

Model National Energy Code for Buildings, Task Group on HVAC and Service Water Heating Systems, 2007-present.

CSA Strategic Steering Committee Member, Fuel Burning Equipment, 2001-present.

CSA Depressurization Task Group Vice-Chairman, 2007-present.

along with several other associations.

Daryl Somers, CET 96 Meg Drive London, Ontario Pax: (519) 681-1977 Fax: (519) 686-9324 N6E 3T7 Mobile: (519) 670-7720 email: daryl@somersep.com







Previous Meeting Summary

Mr William (Bill) McCartney from Isotherm Engineering Ltd. visited the ASHRAE London chapter and spoke on LEED IS NOT COMMISSIONING.

The presentation reviewed some of the commissioning responsibilities indicated within ASHRAE Guideline 0-2005, 1.1-2007 and discuss such areas as LEED









http://LondonCanada.AshraeChapters.org Mon Nov 30/2009 Page 4

Research Night

November 30th will be our Research Promotion night and I would like to start by thanking all of you who have in the past and continue to contribute towards ASHRAE Research Canada. Last year the London Chapter received \$11,476 in contributions and has set a budget for the 2009/2010 campaign of \$10,000. The ASHRAE Society Goal for the 2009/2010 campaign is \$2,080,375 and is currently sitting YTD at \$187,725. I will soon be calling on those of you who have contributed in the past, to continue your support, and would like to ask for those who have not contributed to consider doings so.

ASHRAE Research plays a key role in sponsoring research projects that help set the standards and design criteria we all see and use today. When you contributed to ASHRAE Research Canada your contributions are used for research projects within Canada and the donations collected are always less than the number of research projects on going, so in fact your donation is usually matched by at least 2-1 by ASHRAE Society.

ASHRAE Research's mission is

"Improve the quality of life and to answer tomorrow's questions through research today."

Last year, Region II raised just over \$142,000 and the total research projects is at \$556,707 so your contribution was matched at almost 4-1.

| | | | The Nature, Significance and Control of Solar Driven Vapor | | |
|-----------|-----|---------|---|--|-------------------------------|
| 1235-RP | 4.4 | 167,000 | Diffusion in Wall Systems | CONCORDIA UNIVERSITY | |
| 1311-RP | 4.1 | 145,283 | Improving Load Calculations for Fenestrations with Shading Devices | U. OF WATERLOO | |
| 1328-RP | 5.6 | 80,000 | Algorithm for Smoke Modeling in Large, Multi-Compartmented Buildings | NAT. RESEARCH COUNCIL CANADA | |
| 1453-RP | 4.2 | 136,924 | Updating the ASHRAE Climatic Data for Design and Standards | NUMERICAL LOGISTICS - Waterloo Canada | |
| GIA 07-08 | | 7,500 | Geothermal Energy | U. OF LAVAL Jasmin Raymond | Graduate Student Grant-in-Aid |
| GIA 09-10 | | 10,000 | Development of Models and Tools to Perform Ongoing | CONCORDIA UNIV Danielle Monfet | Graduate Student Grant-in-Aid |
| GIA 09-10 | | 10,000 | Development of a Solar Building Design Methodology and its implementation into a Solar House Design Tool for Temperature Climates | CONCORDIA UNIV Willaim O'Brien | Graduate Student Grant-in-Aid |
| REGION II | | 556,707 | | | |

Karl Gilroy

Research Promotion Chair - ASHRAE London

Scott Edmunds

Research Promotion Co-Chair - ASHRAE London

Next Meeting - Mon Jan 18/2010

Topic: Past President's Night (note the revised meeting date)

ASHRAE will hold its 2010 Winter Conference, Jan. 23-27 in Orlando accompanied by the AHR Expo, Jan. 25-27





http://LondonCanada.AshraeChapters.org Mon Nov 30/2009 Page 5

HVAC option at The Mechanical and Materials Engineering (MME) of UWO

The Department of Mechanical & Materials Engineering at the University of Western Ontario offers a general professional Master of Engineering (M.Eng.) Degree program and several more specialized programs of similar character. The general program offers students an opportunity to upgrade their skills in several areas of their choice and thus it assists qualified engineers in the advancement of their professional careers. It also provides students with the diversified skills necessary to address key technological challenges.

The program is comprised of 8 elective half courses. In addition, the candidate must either successfully complete an intense project course or two additional elective courses. The project course involves self-study or short-term investigation (often industry based). Minimum residency time is 2 academic semesters.

In response to the increased demand of the industry and students, MME is planning to add an HVAC option for the MEng students; the interested students are expected to take 8 courses related to the area of HVAC, fluid mechanics and heat transfer, energy conversion and renewable energy, and project management. In addition, the students must either successfully complete an industry sponsored HVAC project course or two additional electives courses related to HVAC and energy. The proposed program is expected to attract 10 MEng students per year. Thus, at this stage, it is important to receive a constructive feedback regarding how much support that ASHRAE London Chapter and industry can provide to this program so that the MEng students can work on real projects during their master with close supervision by professionals from the HVAC industry in London.

Please feel free to contact me if you require additional information.

M. Walid Altahan; MESc; P.Eng; PMP The University of Western Ontario

Mechanical & Materials Engineering Office: SEB 1067 Phone: (519) 661-2111 Ex: 88293 Fax: (519) 661-3020

Email: waltahan@eng.uwo.ca

ASHRAE LONDON STUDENT CHAPTER

The ASHRAE London Student Chapter was first introduced in October of 2008 when Ibrahim Simhat and Jamie Kruspel addressed Walid Altahan's HVAC class. Following the presentation, student membership forms were distributed to the interested students. Upon completion of the registration formalities, the ASHRAE Student Chapter was officially established in late March of 2009 with the election of the executive members.

In September of 2009, student interest increased producing approximately 10 members committed to participating in the weekly meetings. Since September, we have developed an ASHRAE Student Chapter website and are in the process of securing an office and workspace for the club.

In order to promote ASHRAE and student membership, we will be sending the link to our website to other faculties around the campus. The website will include meeting times and locations, planned projects and a general overview of ASHRAE. We hope this will cultivate the interest of students in other faculties outside of mechanical engineering.

Future projects and goals include the disassembly and performance analysis of an air handling unit, analyse the performance and the efficiency of the geothermal heat pump system in the Engineering Green Building, and organizing an informational sessions at few of London's secondary schools to inform future students of the benefits of engineering and ASHRAE.

The ASHRAE Student Chapter would like to thank Walid, Ibrahim and Jamie for taking the time to help establish the club and also ASHRAE London for extending invitations to their monthly meetings. These meetings are a great opportunity for students to witness the process of the professional world.

Student Chapter Executive Members

President: Douglas Farough Vice President: Chris Fischer Secretary/Treasurer: Arumugam Thirugnanavel dfarough@uwo.ca cfische@uwo.ca athirugn@uwo.ca



http://LondonCanada.AshraeChapters.org Mon Nov 30/2009 Page 6

ASHRAE Jobs is the Society's Online employment resource

With an exceptionally difficult recruitment market, the ASHRAE Jobs Career Center has been averaging 55 active job postings per month and just over 5,000 monthly job seeking visitors. Recruiters are experiencing, on average, 12 online applications per job posting and have access to just over 1200 resumes that have posted its launch on June 15.

ASHRAE Jobs is not only about the hire. It is the path to a hire. By visiting www.ashraejobs.com, you can search for certain skill sets and demographics that you are "always looking for". It is the place to capture high performers you can use to replace underperformers. Is this the place to see if your competitors people are out searching and interested in you. It is also the place to capture candidates for your Q1 hires because we are only 45 days away.

ASHRAE Jobs understands you do not want to be sold to. But you still have opportunities and problems, and may need a professional to discuss those with. That is what you can expect from ASHRAE Jobs: a no-strings-attached conversation where a representative listens and then makes recommendations whether they include ASHRAE Jobs or not. For more information, visit www.ashraejobs.com, call 888-482-2562 or e-mail John VonHarz at jvonharz@ashraejobs.com. An ASHRAE Jobs representative is available during business hours to discuss your firm's needs and make recommendations on next steps.

Changes Proposed to Standard 90.1 Airside Control Requirements

Proposed changes designed to improve the energy efficiency of buildings covered by ASHRAE/IESNA Standard 90.1 are open for public comment.

ANSI/ASHRAE/IESNA Standard 90.1-2007, Energy Standard for Buildings Except Low-Rise Residential Buildings, provides minimum requirements for the energy-efficient design of buildings except low-rise residential buildings. Currently, 18 proposed addenda to the standard are open for public review.

"As we move toward publication of the 2010 standard, the 90.1 committee is considering many changes to reduce building energy use and cost," Chair Mick Schwedler said. "The proposed addenda that are out for review move toward our goal of 30 percent energy cost savings."

Among the proposed addendum out for public review is addendum bh, which would require supply air temperature reset in multiple-zone HVAC systems. Balancing the reset with an increase in fan energy can substantially reduce system energy use, Schwedler said.

"A preliminary energy analysis indicates that the whole building energy savings for buildings affected by this requirement is between 2.5 and 3 percent," he said.

Proposed addendum bf provides new requirements for continuous air barriers. Schwedler noted that while performance requirements have existed for fenestration and door products, evidence suggests that the opaque envelope is the source of the majority of air leakage in buildings.

"A working group comprised of many interested parties developed an energy saving proposal that we hope will lead to acceptance and adoption," Schwedler says.

Other addenda include f, which would allow a number of paths to reduce building roof load; bq, which reduces additional lighting power allowances by reducing both lighting energy and the energy needed to cool the space; and bn, which requires orientation of fenestration to be considered to reduce thermal loads.

The proposed addenda to ASHRAE/IESNA Standard 90.1 are available during their public review period. To read the addenda or to comment, visit www.ashrae.org/publicreviews.

ASHRAE, founded in 1894, is an international organization of some 50,000 persons. ASHRAE fulfills its mission of advancing heating, ventilation, air conditioning and refrigeration to serve humanity and promote a sustainable world through research, standards writing, publishing and continuing education.



http://LondonCanada.AshraeChapters.org Mon Nov 30/2009 Page 7

ASHRAE Research Targets Tying Together BIM, Energy Efficiency

Ensuring that a common language of "energy efficiency" is spoken by both building information modeling software used by architects and energy analysis and simulation software used by engineers is the goal of new research funded by ASHRAE. The project will develop open-source reference models by which developers may test their solutions to interoperability between BIM and energy simulation software. The project will focus on the most common thermal features in buildings assumed to have the greatest impact on energy use, and provide guidelines for describing thermal models extracted from BIM and the rules for extracting those models used in whole building energy analysis applications.

"This research will promote the inclusion of energy efficiency measures in the early design of building model development," said Mark Clayton, Ph.D., principal investigator for the project. "It is expected to greatly increase the efficiency and accuracy of energy analysis and allow building designs to achieve higher levels of energy efficiency."

The project is one of 13 approved for funding by ASHRAE at its 2009 Annual Conference, totaling some \$1.6 million.

ASHRAE Research Project 1468, Development of a Reference Building Information Model (BIM) for Thermal Model Compliance Testing, was awarded to Texas A&M University. The \$175,311 project is expected to take 15 months to complete. It is sponsored by ASHRAE's technical committee (TC) 1.5, Computer Applications.

Studies have shown that problems related to exchanging information among various building design software systems causes more than \$16 billion per year of unnecessary expense. Given that new computer technologies for representing buildings are expected to transform the processes for architectural engineering design services, it is imperative that standards for data exchange among disparate software systems be established, according to Clayton, the associate director of the Center for Housing and Urban Development at Texas A&M.

"Consequently, the research will enable ASHRAE to foster standard for interoperability between various BIM software systems and energy simulation systems and address some of the costs attributable to poor interoperability," said Clayton. "More significantly, improved interoperability is expected to improve the quality of design and the energy efficiency of buildings.

Other projects approved for funding are:

- Development of Design Tools for Surface Water Heat Pump Systems, RP-1385, Oklahoma State University, two years, \$193,132, sponsored by TC 6.8, Geothermal Energy Utilization
- Measuring, Modeling, Analysis and Reporting Protocols for Short-Term M&V of Whole Building Energy Performance, RP-1404, Milwaukee School of Engineering, two years, \$199,512, sponsored by TC 4.7, Energy Calculations
- Stability of Candidate Lubricants for CO2 Refrigeration, RP-1409, Spauschus Associates, one year, \$46,200, sponsored by TC 3.2, Refrigerant System Chemistry
- Ventilation Requirements for Refrigerating Machinery Rooms, RP-1448, CPP Inc., 18 months, \$93,368, sponsored by TC 4.3, Ventilation Requirements and Infiltration
- Balancing Latent Heat Load Between Display Cases and Store Comfort Cooling, RP-1467, University of Colorado-Boulder, two years, \$167,425, sponsored by TC 10.7, Commercial Food and Beverage Cooling Display and Storage. The Air-Conditioning, Heating and Refrigeration Institute (AHRI) is contributing \$100,000 toward the project.
- Thermal Comfort in Commercial Kitchens, RP-1469, KEMA Inc., two years, \$350,000, sponsored by TC 5.10, Kitchen Ventilation
- Measuring Air-Tightness of Mid- and High-Rise Non-Residential Buildings, RP-1478, Wiss, Janney, Elstner Associates Inc., two years, \$150,000, sponsored by TC 4.3, Ventilation Requirements and Infiltration
- Binary Refrigerant Flame Boundary Concentrations, RP-1507, Safety Consulting Engineers Inc., one year, \$87,500, sponsored by TC 3.1, Refrigerants and Secondary Coolants
- Establishment of Design Procedures to Predict Room Airflow Requirements in Partially Mixed Room Air Distribution Systems, RP-1522, Building Energy and Environmental Engineering, two years, \$104,500, sponsored by TC 5.3, Room Air Distribution
- Establishing Benchmark Levels and Patterns of Commercial Building Hot Water use, RP-1544, Research Quality and Design Engineering, 18 months, \$190,000, sponsored by TC 6.6, Service Water Heating
- Effects of Fin Design on Frost and Defrost Thermal Performance of Micro-Channel Heat Exchangers, RP-1589, Oklahoma State University, 18 months, \$137,065, sponsored by TC 8.4, Air-to-Refrigerant Heat Transfer Equipment
- · Implementation of Total Cost of Ownership Principles into Higher Education as an Integrated Decision Making Tool, RP-1590, APPA (Association of Physical Plant Administrators of Universities and Colleges), one year, \$125,000, sponsored b TC 7.8, Owning and Operating Costs

ASHRAE, founded in 1894, is an international organization of some 50,000 persons. ASHRAE fulfills its mission of advancing heating, ventilation, air conditioning and refrigeration to serve humanity and promote a sustainable world through research, standards writing, publishing and continuing education.



http://LondonCanada.AshraeChapters.org Mon Nov 30/2009 Page 8

ASHRAE Assists College Students with Tuition through Scholarships

In order to reduce the financial strain on engineering students across the country, ASHRAE will award over \$80,000 in scholarship money for the 2009-2010 school year.

"Any investment in relevant education is of great importance, as it prepares individuals to become effective citizens," Victor Goldschmidt, chair of the ASHRAE Scholarship Trustees, said. "This is more notable in the area of HVAC&R, as it enhances the advancement of the arts and sciences of HVAC&R for the benefit and future of society."

The 16 recipients of ASHRAE's scholarship assistance are as follows:

- Reuben Trane Scholarship: \$10,000 to be awarded over two years, Daniela Sifuentes, George Fox University, mechanical engineering. The scholarship was established by the Trane Company in memory of its founder, an innovative engineer, inventor and business executive whose company is now one of the largest amongst the HAVAC&R industry.
- Willis H. Carrier Scholarships: \$10,000 for one year, Sean Kolich, Kansas State University, architectural engineering, and Felipe Pincheira, Southern Illinois University, mechanical/civil engineering. The scholarship was established by the Carrier Corp. in memory of its founder, who installed the world's first scientifically designed air conditioning system.
- Frank M. Coda: \$5,000 for one year, Andrea Gregg, Kansas State University, architectural engineering. The scholarship was created in memory of ASHRAE's former executive vice president, who served from 1981-2004.

The following awards include one-year \$3,000 scholarships

- Duane Hanson Scholarship: Ryan Beaudrie, Lawrence Technological University, mechanical engineering. The scholarship was established by Gayner Engineers and is named for the company's former president.
- · Alwin B. Newton Scholarship: Kelly Griffith, Kansas State University, architectural engineering. The scholarship is named for an industry pioneer and ASHRAE fellow who was granted 219 patents.
- Henry Adams Scholarship: Dakota Kelley, University of Nebraska, architectural engineering. The scholarship was established by Henry Adams, Inc. in memory of its founder, a Charter Member and sixth president of ASHRAE'S predecessor society, ASHVE, in 1899.
- ASHRAE Region IV/Benny Bootle Scholarship: James Wood, Clemson University, general engineering. The scholarship was established collaboratively by Region IV and Benny Bootle, a former Region IV chair and regional director on the ASHRAE Board of Directors.
- ASHRAE Region VIII Scholarship: Andrew Cunningham, Oklahoma Christian University, mechanical engineering. This scholarship was established by Region VIII, which includes Arkansas, Oklahoma and Mexico and parts of Louisiana and Texas
- J. Richard Mehalick Scholarship: Daniel Hehman, University of Pittsburgh, mechanical engineering. The scholarship was created by a former ASHRAE member who was instrumental in the development of air-conditioning equipment used in commercial, military, aerospace and transportation application.
- Donald E. Nichols Scholarship: Mallory Johnston, Tennessee Technological University, mechanical engineering. The scholarship was established by a former member of ASHRAE's Board of Directors who served for four terms.
- ASHRAE Memorial Scholarship: James Moriarty, University of Connecticut, civil/environmental engineering.
- Associate of Engineering Technology: Craig Daniels, University of Northwestern Ohio, HVAC&R technology.
- Bachelor of Engineering Technology: Benjamin Lipscomb, Montana State University, mechanical engineering technology.
- ASHRAE General Scholarships: Sean Holder, St. Louis University, mechanical engineering and Jeremy Tucker, Portland State University, mechanical engineering.

Over the course of 20 years ASHRAE has awarded a combined \$991,000 to over 190 deserving undergraduate and graduate students. It is ASHRAE's belief that aiding these future leaders of the heating, ventilation, air-conditioning and refrigeration industry will in turn benefit society as they lead the way in sustainable HVAC&R technology.

"ASHRAE is a partner in the education and development of technicians and professionals who, as future ASHRAE members, embrace ASHRAE's mission serving for the betterment and comfort of all citizens world-wide," Goldschmidt said.

For more information on ASHRAE scholarships, visit www.ashrae.org/scholarships.

ASHRAE, founded in 1894, is an international organization of some 50,000 persons. ASHRAE fulfills its mission of advancing heating, ventilation, air conditioning and refrigeration to serve humanity and promote a sustainable world through research, standards writing, publishing and continuing education.



AMERICAN SOCIETY OF HEATING, REFRIGERATION AND AIR CONDITIONING ENGINEERS INC.

LONDON CANADA CHAPTER #116 www.LondonCanada.AshraeChapters.org

Past Presidents Night

The London ASHRAE Chapter is very excited to announce our first ever "Past Presidents Night". It will be held on Monday January 18th 2010 at the Lamplighter Inn on Wellington Road South.

Please accept this letter as an invitation to join us for what will be a great night spending an evening with old friends and colleagues. We will have some of our past Presidents stand up and share some of their memories and stories of ASHRAE and the London Chapter, which first started in 1971 with Jack Vanstone as the Chapter's very first President.

Dress code will be in effect with shirt, tie and Jackets for the special occasion. We will have a Chef on hand for dinner to carve the Roast Beef.

We do plan on announcing all the Past Presidents who attend and will be taking a group photo to remember the night by.

Mark the date in your calendars we do expect a very large turn out so please let us know in advance if you will be attending, an accurate head count will be necessary to assure enough food for everyone!

Once again we are very excited to be hosting the "Past Presidents Night", and we look forward to seeing all of you there in January.

Thanks.

Jason Vandenberghe VP and program Chair

New GMLP Engineering Green Building Tour - The University of Western Ontario

A tour will be held for the University of Western Ontario new <u>GMLP Engineering Green</u> <u>Building</u> on <u>Monday, November 30, 2009 at 5:15PM</u>. The tour will consist of highlighting key design concepts and strategies behind the green building design, more specifically in the Heating, Ventilation, Air conditioning and Refrigeration (HVAC & R) aspects.

The gathering location for the tour will be in front of the main entrance of the GMLP Engineering Green Building (See map below) at 5:15PM. Parking will be available beside the Spencer Engineering Building. If you have any question, feel free to contact me:

Ibrahim Semhat

Email: ibrahim.semhat@jci.com

Phone: 519-852-1470.

