



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

LONDON CANADA CHAPTER #116

<http://LondonCanada.AshraeChapters.org>

Mon April 28/2008

Board of Governors

President

Scott Edmunds
ph: 519-667-4120
sedmunds@uniongas.com

Vice President and Program

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

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

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

Committee Chairs

Membership

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

Research

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

Golf Tournament

Hugh Palser
ph: 519-471-9382
hpalser@palserent.com

Newsletter

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

TOPIC:

**BUILDING TOUR
THE SISTERS OF ST JOSEPH**

of the Diocese of London

485 Windermere Road
London

LEED GOLD CERTIFIED

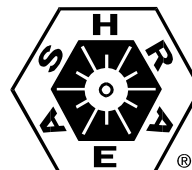
Meeting - Mon April 28/2008

London Chapter Members = \$25.00
Students = \$10.00 Others = \$35.00

TOUR NIGHT

5:00pm Tour
485 Windermere Road

6:00pm Diner - East Side Mario's
94 Fanshawe Park Road East





President's Message

I hope those of you who made it out to our March meeting enjoyed the presentation of Distinguished Lecturer, Mr. Victor Goldschmidt. While I was unable to stay and hear Victor's presentation on Differing Perspectives in Global Warming, I was fortunate to hear him speak on the same subject during the Region II CRC held in Moncton last summer. No doubt, Victor's topic was both thought provocative and politically bold, to say the least.

Last week, a few members had the opportunity to watch the free ASHRAE Webcast on Integrated Building Design at the University of Western Ontario. The four Webcast speakers spoke to many project delivery & design issues that an integrated building design team can better manage & collaborate on than traditional building teams. ASHRAE will be offering a DVD version of the live broadcast in the near future.

Our last official meeting for the 2007/2008 year will be our upcoming technical tour. We have been fortunate enough to arrange a tour of the first LEED-rated building in London, the Sisters of St. Joseph's Residence at the corner of Richmond Street & Windermere Road. I would like to thank Derek Vakaras of Chorley & Bisset for helping to arrange the tour. Following the tour, we have made dinner reservation at East Side Mario's north of Masonville Mall.

As many of you know, the ASHRAE London Golf Tournament is scheduled for Monday June 2nd, 2008 at the Forest City National Golf course. Hugh Palser has confirmed that the tournament is now fully booked and any further registrations received will be put on a waiting list. All foursome that have been confirmed however must provide full payment to Hugh by May 15th or risk having their reservation cancelled and filled by the first foursome on the waiting list. If you have any questions about your reservation and/or final payment, please contact Hugh via email at hpalser@palsernet.com. Once again I would like to thank Hugh Palser and his staff for their hard work & dedication in organizing this event.

As this year's program winds down, our Research Promotion fundraising drive will kick into full swing. Letters will be sent out shortly asking for your support of ASHRAE Research. Please consider making your annual contribution to this very worthwhile cause that benefits all of us in the HVACR industry.

Lastly, I would like to thank everyone on the ASHRAE London Board of Governors for their support and hard work over the last year. ASHRAE is a volunteer organization and the time & effort contributed by a few members in running the chapter is greatly appreciated. Without them, the monthly technical meetings and other events wouldn't be possible. Once again, we are looking for new members to join the Board of Governors and would welcome your participation. Nominations for next year's Chapter Board of Governors are now being accepted by Dennis Dawe up until the golf tournament. If you are interested in helping out, please contact Dennis at dennis.dawe@chorley.com

I certainly hope to see you out to our technical tour on April 28th and I'm sure I'll see many members and new faces on June 2nd.

Scott Edmunds
ASHRAE London Canada Chapter President

Pete Edmiston Branch Manager
Carrier
Carrier Canada Sales and Distribution
305-307 Consortium Court
London, ON N6E 2S8
Tel: 519-455-7000
Fax: 519-455-7733
E-mail: pete.edmiston@carrier.utc.com

BAYMAR SUPPLY LTD.
Eric W. Shaw Sales Manager, London District
241 Consortium Crt.
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Fax (519) 680-7039
eshaw@baymarsupply.com
www.baymarsupply.com
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Eric Christopher Salin Account Executive
Building Automation, Security, Integrated Building Technologies
514 Newbold Street
London, Ontario
N6E 1K6 / Canada
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Fax: (519) 680-2410
eric.salin@siemens.com
www.siemens.ca/buildingtechnologies

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Upcoming Meetings & Events

Mon June 2, 2008

ASHRAE London Golf Tournament - SOLD OUT

*** payment must be received before May 15 ****

March 2008 Meeting Summary

GLOBAL WARMING
DIFFERING PERSPECTIVES

by Victor Goldschmidt
ASHRAE Distinguished Lecturer
Professor Emeritus, Purdue University

Mr Goldschmidt presented a number of ideas in regards to the global warming that is making the news recently. Victor showed that maybe more investigation if required to determine the causes and effects.

Victor also visited the Univ of Western at lunch time and spoke to the engineering students about "Creativity and Problem Solving" in which he explained that not all problems can be solved by using equations found in text books.

ASHRAE LONDON ELECTIONS

The Board of Governors elections are now open. Society would like to see committees with at least 3 people so that each is not overworked. Currently the London Chapter operates with just one dedicated person per chair position who have volunteered their time. WE NEED ADDITIONAL CHAPTER MEMBERS TO VOLUNTEER.

If you are interested and can assist in any way, please contact Scott Edmunds <sedmunds@spectraenergy.com> or Dennis Dawe <dennis.dawe@chorley.com>.

Free Download Available of ASHRAE Advanced Energy Design Guides

www.ashrae.org/freeaedg

- 1) Small Warehouses and Self-Storage Buildings (** NEW **)
- 2) K-12 School Buildings
- 3) Small Retail Buildings
- 4) Small Office Buildings

These guides have been developed through the collaboration of ASHRAE, the American Institute of Architects (AIA), the Illuminating Engineering Society of North America (IESNA), and the U.S. Green Building Council (USGBC), with support from the Department of Energy (DOE), to help meet all of an owner's energy performance requirements. In an effort to promote building energy efficiency, ASHRAE and its partners have made these guides available for download (PDF) at no charge.

SOMERS ENVIRONMENTAL PRODUCTS INC.

Daryl Somers, CET

96 Meg Drive
London, Ontario
N6E 3T7

Tel: (519) 681-1977
Fax: (519) 686-9324
Mobile: (519) 670-7720
email: daryl@somersep.com

Norm Clarke, P. Eng.
District Manager

TRANE

Trane Canada
8 Belleisle Court
London, On N5V 4L2
Tel 519 453 3010
Fax 519 453 3024
Windsor Tel 519 256 7922
Sarnia Tel 519 337 0740

Jason Vandenberghe Technical Sales Representative

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Phone (519) 652-5502 • Fax (519) 652-0265
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3392 Wonderland Rd. S., Bldg. 9, Unit 1, London, Ontario N6L 1A8



BACnet Unplugged: Updates Made to Building Controls Standard

Advances related to the BACnet standard, including recommending public review for an addendum that would tunnel BACnet over ZigBee wireless networks, were made during ASHRAE's recent Winter Meeting.

Proposed Addendum q would lead to a significant reduction in the cost of installation at the sensor and controller level by reducing the amount of wired networking required in a building automation system, according to Jerry Martocci, convener of the BACnet committee's Wireless Networking working group.

"Marrying these two technologies seemed obvious," said Martocci. "BACnet already had the object and services model designed specifically for building automation but no wireless network, and ZigBee had the wireless capabilities but no object model for building automation. We just had to put the two together to benefit from the synergies."

The addendum recommendation began about two years ago with meetings between BACnet and ZigBee experts. "During this time we learned about ZigBee's data communications, and they learned about BACnet's networking and objects and services model," said BACnet chairman Bill Swan. "Together, we looked at a number of approaches and discussed the pros and cons of each."

For various technical reasons, battery-operated devices, including sensors, will probably be ZigBee only, but powered controllers would have BACnet/ZigBee capability. Martocci notes that the "mesh" networking among ZigBee nodes leads to self-healing networks, so that even if a link between two nodes is obstructed, the "mesh" network can route around the obstructed link, leading to reliable networks.

In other developments, the BACnet committee worked toward approval of nine additional addenda during the meeting. "Only a few of these are going out for first public review," said Swan, "but it is our expectation that these are all likely to pass without significant comments."

One such addendum is Addendum j, support for physical access control. This was drafted by the Life Safety and Security working group, comprised of BACnet and experts from the physical security industries. Public reviews of Addendum j have been announced in journals and other media serving the security industry, with long review periods to help ensure it gets the most complete review possible.

Another addendum being prepared for public review is Addendum i, support for lighting applications. This addendum was drafted by the Lighting Applications working group, comprised of representatives from lighting controls manufacturers and BACnet experts.

The BACnet committee continues to work on a broad range of other items, such as integrating buildings and the energy utilities, developing standard profiles for various building automation devices, CCTV control, and elevator monitoring.

ASHRAE High-Performance Building Design Professional Certification Now Available

ASHRAE's new certification program provides the necessary training and tools for the design of high-performance buildings that live up to their performance capability.

Registration is now open for ASHRAE's high-performance building design professional certification. The first exam will take place June 25 at ASHRAE's 2008 Annual Meeting, June 21-25, Salt Lake City. Exams at testing centers around the world will become available in the fall. For more information or to register, visit www.ashrae.org/certification.

"This new certification program will allow practitioners to demonstrate a well-rounded understanding and knowledge of how HVAC&R design is integrated into high-performing buildings to achieve the overall goal of sustainable practice used in green buildings," Kent Peterson, P.E., ASHRAE president, said. "The program combines the criteria of ASHRAE Standards 90.1 (energy efficiency), 62.1 (ventilation) and 55 (thermal comfort) with the innovative approaches included in the Advanced Energy Design Guide series in an integrated design approach that strives to achieve practical, cost-effective high-performance building designs."

The content of the exam includes sustainability concepts, HVAC and sustainable processes and environmental improvement programs and rating systems; energy analysis; indoor environment; controls and monitoring; benchmarking with performance metrics; water conservation, commissioning in sustainable construction; and operation and maintenance of high-performance buildings.

The high performance design professional certification is renewable every three years, and those certified must earn 45 professional development hours during that time.

"This program has been designed so that it is inclusive of global design approaches and tools," Peterson said.



Lessons from ASHRAE Roundtable on High-Performing Buildings Shared in Video

Early involvement by all members of the building team is crucial to the success of high-performing buildings, according to panelists in a new video from ASHRAE.

"You can't operate efficiently if the building hasn't been designed with that in mind," said Don Winston, P.E., director of technical services, The Durst Organization, Inc. "The operators will always win in the end. If you don't design it in a way that it can be operated in accordance with its performance goals, it won't be....it really goes back to the design process and a level of cooperation. Everyone has to be in on it, including the operations team, from day zero."

Lessons learned in sustainable design can now be seen via a free online video at www.ashrae.org/roundtable. The video is a recording of a special roundtable, High-Performance Buildings: Lessons from the Leaders, originally presented at ASHRAE's 2008 Winter Meeting.

The panelists discuss owner motivations, technical challenges, design choices and trade-offs, costs for these projects, and share perspectives about whether the expectations set early in the design process have been met once the buildings are occupied.

The panelists include representatives of New York's best-known owner/developer firms, along with the engineering designers who bring their projects to reality. Their projects include some of the most sustainable buildings in New York City, such as 4 Times Square, the Chrysler Center, One Bryant Park and the New York Times Headquarters.

"What does high performance mean?," questions panelist Tom Scarola, director of engineering, Tishman Speyer. "Up until even a few years ago, buildings were designed very prescriptively based on meeting codes, not challenging whether they could perform better. What we do today is called high performance but it is just good and efficient design. It is reasonable to believe that the issue is no longer if it is a high-performance building, the question is how high. Building a high-performance building means never having to say you're sorry."

The panelists agree that it is essential that planning for the design, operation and maintenance of high performing buildings start early and involve all members of the building team. They also agree that designers and engineers should strive to incorporate new technologies and design methods.

"Put behind you what've done for the last 20 jobs," suggests panelist Scott Frank, P.E., partner, Jaros Baum & Bolles. "Get in the habit of saying 'how can we do this differently,' ask 'why not' at every turn, worship the god of common sense, and be sure every decision and recommendation you make is backed up by rigorous engineering."

Dan Nall P.E., senior vice president/director-advanced technologies, Flack + Kurtz addresses sustainability outside the U.S. market.

"Perhaps the most informative experience I have had is working on projects in the Middle East, where the entire support infrastructure is being built at the same time as the buildings. This provides an opportunity to investigate the relations of multiple buildings to their support infrastructure and the opportunities that exist to create a complex cascading utilization of resources. The answer doesn't lie in making individual green buildings – it lies in making green cities."

Building Performance Highlighted in ASHRAE's 2008 Annual Meeting

The mountains of Salt Lake City provide the perfect backdrop for scaling the peak of performance at ASHRAE's 2008 Annual Meeting.

"Are you looking to advance your career?" ASHRAE President Kent Peterson said. "Or maybe you're seeking to improve performance of the buildings you design, construct and operate. Either way, ASHRAE's meeting and its focus on building performance is the place for you. Advance your knowledge by taking advantage of ASHRAE's education and technical program. Improve the performance of your buildings by learning how to apply the latest technologies that your fellow members share at the meeting. We hope to see you there."

The meeting takes place June 21-25, Salt Lake City, Utah. To register or for more information, visit www.ashrae.org/saltlake. Most events take place at the Salt Palace Convention Center.

A highlight of the meeting includes Ira Magaziner, chairman of the Clinton Climate Initiative, as technical plenary speaker. The program takes place at 2 p.m. Sunday, June 22, at the Salt Palace Convention Center. Registration is required to attend.

As chair of the Clinton Climate Initiative (CCI), formed in August 2006, Magaziner oversees the mission of applying the Clinton Foundation's business-oriented approach to the fight against climate change in practical, measurable and significant ways. ASHRAE is a partner in the Initiative.

The ASHRAE technical program, with more than 100 sessions, will focus on benchmarking, establishing a basis for measuring future performance. The program takes place Sunday-Wednesday at the Salt Palace Convention Center.

The ASHRAE Learning Institute will offer two professional development seminars and four short courses, focusing on a range of HVAC&R related topics. The seminars provide guidance on complying with Standards 62.1 and 90.1, while short courses cover topics related to sustainability and energy reduction in buildings.

ASHRAE also will launch its new certification program - high performance building design professional. Candidates who earn the certification will have demonstrated a well-rounded understanding and knowledge of how HVAC&R design is integrated into high-performing buildings to achieve the overall goal of producing a sustainable design. For more information, visit www.ashrae.org/certification.