

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

LONDON CANADA CHAPTER #116

http://LondonCanada.AshraeChapters.org

Mon Feb 27/2012

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> Student Activities Jeff Watson and Mike Pilluk

History & Newsletter Tom Pollard ph: 519-685-2570 tpollard@execulink.com Topic VIBRATION ISOLATION Wind & Siesmic

Speaker Chip Morrow Director of Sales The VMC Group

Meeting - Mon Feb 27/2012

UWO - WINDERMERE MANOR 200 Collip Circle London

5:30pm Social 6:00pm-Dinner 7:15pm - Program

\$45.00 for London Chapter dues paid members or \$200.00 for meal plan

\$50.00 for others

Feb = Student Night - FREE with valid student card

http://www.surveymonkey.com/s/GX8MPJS please register at SurveyMonkey site if you plan on attending the meeting



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Presidents Message

I hope everyone had a chance to enjoy time with their family and friends during the long weekend for family day.

I would like to thank Karl Gilroy and Scott Edmonds for organizing last months meeting as "Past Presidents Night" we had around 48 people attend and was a great night and I would also like to thanks Doug Cochrane for attending who is our Region 2 Nominating Member Chair.

Unfortunately this month one of our past presidents passed away "Dick" Palser of Palser Enterprises at the age of 88. He started Palser Enterprises in 1954 in London which the family continues to operate today. "Dick" Palser was chapter president during the 1982-83 year. We will be making a donation on behalf of the ASHRAE chapter and all its members to the Last Post Fund.

Our speaker this month is Chip Morrow from The VMC Group and his talk will be on "Vibration Theory & Practical Knowledge of Isolation Applications". We will be at the Windermere Manor @ UWO which is also Student Night.

For those of you who were able to attend the ASHREA show in Chicago it had the best attendance over the past 82 years. They had over 58,000 people registered and had over 39,000 visitors.

As you will notice on the ASHRAE website is their new logo which has been rebranded for the future please take at look at www.ashrae.org when you get a chance..

This year the ASHRAE web cast will be on "Dedicated Outdoor Systems" on April 19th @ Engineered Air's office please feel free to stop by and watch the broadcast. We will have more details for everyone closer to the date.

I look forward to seeing everyone at the meeting.

Jason Vandenberghe Chapter President 201/0/2012 ASHRAE London Canada Chapter



Richard Palser was London ASHRAE Chapter Past President 1982-1983

To our business family,

It is with heavy hearts that we inform you of the passing of Richard "Dick" Palser after a battle with pancreatic cancer. Richard was 88 years old and founded Palser Enterprises Ltd. in 1954.

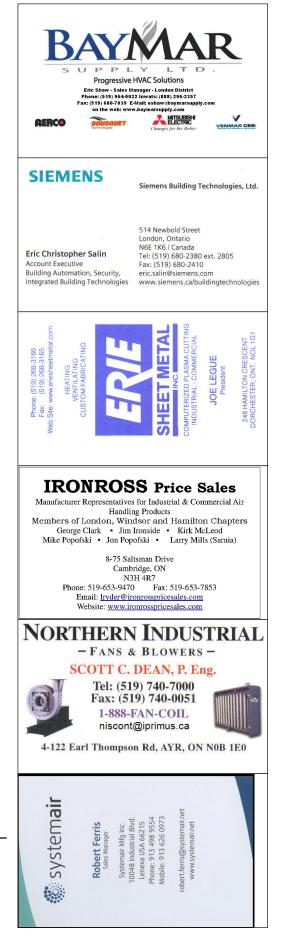
In lieu of flowers, please make a donation to the Last Post Fund: http://www.lastpostfund.ca/EN/donate.php.

The Last Post Fund's mission is to ensure that no eligible Veteran is denied a dignified funeral and burial, as well as a military gravestone, due to insufficient funds at time of death.

Sincerely, Rich Palser President Palser Enterprises Ltd

January Summary

Duane McLennan, Product Manager, Noise Control and Vibration, EH Price Ltd., disussed equipment and options for controlling noise and vibrations. Each project and building area may have different critiria and therefor may require different items to satify the building spaces.





Februrary Speaker



<u>Chip Morrow</u> Director of Sales The VMC Group

As Director of Sales for The VMC Group, Mr. Morrow is responsible for the development of business globally. He plays an integral role ingrowing The VMC Group's sales in our OEM (Original Equipment Manufacturer), industrial, military, aerospace and commercial construction divisions.

In addition to his responsibilities as Director of Sales, Chip is a frequent lecturer for The VMC Group on seismic design and the newly adopted United States building codes based on the International Building Code (IBC). He has lectured throughout the United States, Europe, the Middle East and Southern Asia regarding seismic design and seismic building codes.

Since joining The VMC Group in 2002, Chip has utilized his experience in the development and growth of new business for innovative products and technologies as well as helped develop The VMC Group's OEM equipment certification services for code compliance. The VMC Group is the largest IBC seismic and wind certifying agency for the HVAC, power generation and fire protection industries.

Prior to The VMC Group, Chip employed his degree in Industrial Distribution and Mechanical Engineering from Clarkson University in several capacities. This included the sales and marketing of mechanical power transmission products for Rockwell Automation as well as new product and new business development for Nexen Group, where he developed a new line of braking systems for linear motion products.

ASHRAE Lecture Summary

Noise and vibration of mechanical systems are concerns of the design professional. Understanding vibration and how to manage its effects into the building structure are required in order to reduce the annoyance to the inhabitants of the building; to help increase the life of the component; and to help increase the life of the building structure.

The presentation will focus on basics of vibration theory as well as a practical knowledge of common vibration isolation applications. Additionally, the discussion will address requirements for proper restraint of rooftop components for wind when vibration isolation is also a requirement. The intent is to teach the design professional how to minimize exposure to risk and liability as it relates to the Canadian building codes.

Contact: Chip Morrow Email: chip.morrow@thevmcgroup.com Phone: 973-838-1780

Upcoming Meetings March 26/2012 UWO Mindermere Manor

March 26/2012 UWO Mindermere Manor Bob Bach Vice-Chair, Energy, of the recently renamed Building Code Conservation Advisory Council Energy Efficiency in the Ontario Building Code – What You Need to Know for 2012

April 19/2012 Engineered Air - London Office ASHRAE Webcast - DEDICATED OUTDOOR AIR SYSTEMS

April 30/2012 UWO Mindermere Manor Brian Monk ASHRAE DISTINGUISHED LECTURER Annex Air Hospital Filtration Systems and Airborne Contaminant Control

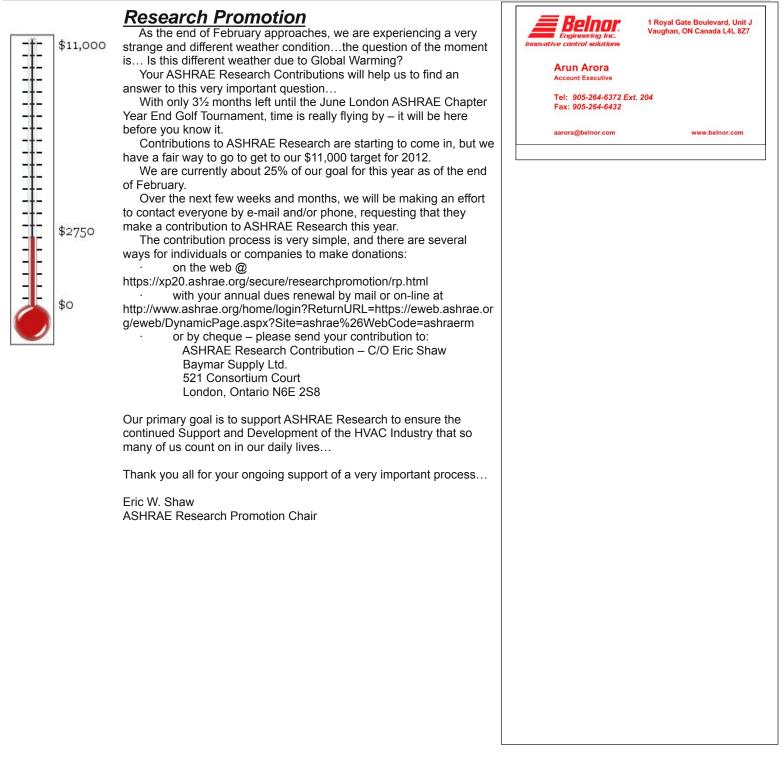


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<u>ASHRAE WEBCAST</u> <u>April 21, 2011 – 1:00 p.m. – 4:00 p.m. EDT</u> "Ground Source Heat Pump Systems: Putting the Earth to Work for You"

ASHRAE's Chapter Technology Transfer Committee with support from ClimateMaster, Mammoth, Taco, the International Ground Source Heat Pump Association, and the ASHRAE Foundation will present a free Webcast, "Ground Source Heat Pump Systems: Putting the Earth to Work for You" on Thursday, April 21, 2011. The program will be archived online until May 5, 2011 for those unable to participate in the live webcast. Registration will be required to view the archived program.

Membership Promotion Committee

Greetings from your Membership Promotion Committee,

Over the past few months we have been in discussions with the Architect's Association of London to arrange a joint meeting to address changes to the Ontario Building Code through supplementary standard SB10, which took effect on January 1st, 2012. Unfortunately, the Ontario Architect's Assosciation has already endorsed a similar event on this subject and this means that our event next month will not be a joint event. We we still be encouraging any interested Architect's to attend and any other non-members who may be interested. Our event is scheduled for next months meeting, on March 26th, 2012. We will be sending out a flyer with more specific details on the event.

We encourage members to invite coworkers and colleagues to attend our monthly meetings, to increase awareness of ASHRAE throughout the HVAC&R community. Also, feel free to pass along my contact information to anyone you may know who is interested in knowing more about ASHRAE or becoming a member.

Once again, a reminder to anyone who may be eligible for grade advancement to see the instructions included in the October Newsletter for details on how to advance your membership. Please feel free to contact me if you have any further guestions on grade advancement.

We would like to welcome our new members to the ASHRAE London membership listed below. We have also included one of our recent new members biographies.

Best Regards, Jordan Foster Chapter Membership Chair 2011/2012 ASHRAE London Canada Chapter

<u>ASHRAE Makes Guidance on Green Buildings Easily Accessible in eBook Format</u> ATLANTA –ASHRAE has published its first ever eBook for use on the Apple iPad.

The third and latest edition of "ASHRAE GreenGuide: The Design, Construction and Operation of Sustainable Buildings" is now available in an eBook format to allow iPad users convenient access to the book's guidance, which covers each stage of the building process, from planning to operation and maintenance of a facility, with emphasis on teamwork and close coordination among interested parties. The eBook follows ASHRAE's latest mobile apps on duct fitting databases and Standard 62.1, Ventilation for Acceptable Indoor Air Quality.

The GreenGuide eBook includes embedded links to other sections of the book and to graphics and relevant web pages.

"We want people to have access to ASHRAE guidance wherever they are, without having to carry around a hardback book," Sheila Hayter, chair of the organization's Publishing and Education Council, said. "With the release of GreenGuide eBook, detailed information on the design of high performance buildings is as close as one keeps their iPad."

The GreenGuide eBook is available as a download in Apple's iBooks store for \$39.99 and requires the iBooks app.



ASHRAE Grants: Reusing Air to Save Energy in Low-Income Housing

ATLANTA Reducing energy costs through reuse of air to help make homes for low-income households in hot and humid climates is the goal of a student research project being funded by ASHRAE.

Statistics show that some 38.6 million households in the United States are in need of low-income home energy assistance. In hot and humid climates, reducing residential energy consumption is a challenge due to high humidity in warm months.

Through ASHRAE's grants-in-aids program Simge Andolsun, a student at Texas A&M University, plans to model a new HVAC&R energy saving strategy with partial conditioning or reuse of air. Partial conditioning is based on using the remaining energy of the air returning from the occupied zones in unoccupied zones before it returns to the system or is exhausted from the system, according to Andolsun.

"The strategy is expected to provide substantial over 50 percent reduction in the overall HVAC&R energy consumption of residential buildings before any onsite energy reduction, according to the project, Partial Conditioning (Reuse of Air) as an Energy Saving Strategy for Sustainable Affordable Housing in Hot and Humid Climates.

Andolsun is one of 21 students who will receive a grant through ASHRAE Graduate Student Grant-In-Aid Award Program, which is designed to encourage students to continue their education in preparation for service in the HVAC&R industry. The grants, totaling \$210,000, are awarded to full-time graduate students of ASHRAE-related technologies.

Andolsun's project will be modeling on Colonias, or residential neighborhoods at the Mexican border in Texas, which has the second highest number of housing units eligible for low-income home energy assistance. The state's hot and humid climate also results in 45 percent higher average energy consumption for air conditioning when compared to that for heating.

The study will be conducted in four steps: data collection, baseline design and modeling, partial conditioning design and modeling, and analysis and recommendations.

Other recipients of ASHRAE grants-in-aid are:

• Bikash Acharya, University of Maryland, College Park, Electrostatic Enhanced Separation of Fine Liquid Droplets from Gas Streams

• Aleksandar Andelkovic, Faculty of Technical Sciences Novi Sad, Serbia, Development of an Integrated Building Design Method by Coupling Building Energy Simulation and Computational Fluid Dynamics; also receives the Grant-In-Aid Life Member Club grant given to the highest top-rated applicants and supported by a financial contribution from the club.

• Singe Andolsun, Texas A&M University, Partial Conditioning (Reuse of Air) as an Energy Saving Strategy for Sustainable Affordable Housing in Hot and Humid Climates

• Stephen F. Bourne, University of Texas, Austin, Emissivity Changes due to Dust Fouling for Horizontal and Rafter Installed Radiant Barrier Systems

Howard Cheung, Purdue University, Modeling and Testing of Heat Pump Systems

• Jordan D. Clark, University of Texas at Austin, Development of Library of Mass Transfer Correlations for Indoor Surfaces for Use in Passive Pollutant Removal Applications

• Brian Matthew Fronk, Georgia Institute of Technology, Condensation Heat Transfer and Pressure Drop of Binary Fluid Mixtures in Microchannels

Caroline Hachem, Concordia University, Investigation of Design Methodology for Net-Zero-Energy Solar Neighborhoods

• Vibhash Chandra Jha, university of Maryland, Development of High Performance Compact Absorption Refrigeration Systems Utilizing Innovative Force-Fed Micro Channels Application of Low-Grade Waste Heat

• Kyle Konis, University of California, Berkeley, Developing a Field-Based Monitoring Procedure for Indoor Environmental Quality to Assess Façade Performance

• Abhinav Krishna, Purdue University, Organic Rankine Cycle with Solution Circuit for Waste Heat Recovery

• Ki Sup Lee, Purdue University, Establishment of Design Procedures to Predict Room Airflow Requirements in Partially Mixed Room Air Distribution Systems

• Shichao Liu, University of Texas, Exposure Study in Hospital Waiting Rooms: Analysis of Airflow Distributions for Exposure Reduction

• Wei Liu, Tianjin University, Validation of CFD Models for Predicting Air Distribution and Contaminant Transport in a Commercial Aircraft Cabin

· Raphael Kahat Mandel, University of Maryland, Thin Film Evaporation on MIcrogrooved Surfaces

• Peter May-Ostendorp, University of Colorado at Boulder, Near-Optimal Control of Mixed-Mode Buildings and Generalized Rule Extraction

• Ananda Krishna Nagavarapu, Georgia Institute of Technology, Investigation of Binary Fluid Heat and Mass Transfer Phenomena at Microscales in Internal and External Ammonia Water Absorption; also receives the Grant-In-Aid Life Member Club grant given to the highest top-rated applicants and supported by a financial contribution from the club.

Kashif Nawaz, University of Illinois at Urbana Champaign, Aerogel Coated Metal Foams for Desiccant Applications

• Amanda Pertzborn, University of Wisconsin-Madison, Optimization of Advanced Ground-Source Heat Pump Systems

- Sugirdhalakshmi Ramaraj, Purdue University
- Feini Zhang, University of Illinois at Urbana-Champaign, Hybrid Water-/Air-Cooled Condensers for Organic Rankine Cycles

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.



User's Manual Assists in Meeting Requirements of ASHRAE Residential IAQ Standard

ATLANTA Guidance that explains the "why" and "how" behind requirements in ASHRAE's residential indoor air quality standard is contained in a newly published user's manual.

The 62.2-2010 User's Manual is a complete guide to meeting the requirements of ANSI/ASHRAE Standard 62.2-2010, Ventilation and Acceptable Indoor Air Quality in Low-Rise Residential Buildings. The manual provides explanations and examples showing how to meet all parts of the standard and includes background material explaining why many of the requirements are included. The User's Manual covers nine sections of the standard and three appendices.

"While the standard is written to be as simple as possible, it can still be challenging to apply in some situations to ensure that all the requirements are met," Steve Emmerich, chair of the Standard 62.2 committee, said. "The example calculations and system drawings are particularly helpful. In addition, since the standard is written in code language, it does not address the 'why' behind any requirements. So the User's Manual provides the 'how' and 'why' while the standard gives the 'what'."

The standard has undergone significant changes since it was last published, so the updated User's Manual allows users to stay up to date with those changes.

"One of the most important changes is the addition of alternate means for existing buildings to comply with the standard," Roger Hedrick, lead author of the User's Manual, said. "Many new examples are provided to illustrate these new compliance paths."

The Manual is written for residential HVAC&R contractors and installers as well as residential builders, developers and architects. The new sections related to existing buildings are meant to make the standard more useable as part of weatherization programs or retrofit projects. It also may be useful to code officials and to those homeowners who are technically knowledgeable.

The cost of the Standard 62.2-2010 User's Manual is \$55 (\$47, ASHRAE members). To order, contact ASHRAE Customer Service at 1-800-527-4723 (United States and Canada) or 404-636-8400 (worldwide) or visit www.ashrae.org/bookstore.

The GreenGuide eBook is available as a download in Apple's iBooks store for \$39.99 and requires the iBooks app.

Return to Chicago Sees High Attendance, Rebranding for ASHRAE

ATLANTA –Chicago once again proved to be a popular destination for the 2012 ASHRAE Winter Conference, with high attendance numbers, as well as an exciting announcement about the future of the Society. Some 2,800 people attended the Conference, held Jan. 21-Jan. 25, in Chicago, III. Attendance this year was higher than the past four Winter Conferences, except Las Vegas 2011.

Also taking place in conjunction with the Conference was the Air-Conditioning, Heating, Refrigerating Exposition, which attracted nearly 58,000 registered attendees, including a record 39,000 plus visitors. It was also the largest AHR Expo in the Show's 82-year history, at nearly 430,000 square feet, making it 5 percent bigger than the Show held in Chicago in 2006.

The biggest buzz at the ASHRAE Winter Conference was the announcement of ASHRAE's rebranding, which includes a new logo and tagline, as well as a move to refer to the Society as simply "ASHRAE," as opposed to its full name. "The evolved ASHRAE brand supports our focus on improving engineering standards and our market position as a community of engineers and related professionals united by knowledge, mission and a code of ethics to design, construct and operate better places for people to live, work and play," ASHRAE President Ron Jarnagin, said. A redesigned ASHRAE.org was also announced along with the rebranding during the Conference. The updated website provides better navigation, a better search engine and better tracking, all of which helps visitors find the information they need to support their efforts in the industry and the Society.

The Winter Conference technical program featured nearly 300 presentations, with the top attended session in the systems and equipment, O&M and high performance buildings tracks. The top-attended sessions were Selection of Proper Chiller Technology; Thermal Displacement Ventilation Applications; Heat Pump Optimization; Air Source vs. Ground Source Heat Pump Systems; Integrated Design Energy Retrofits; and Water-Cooled VRF Systems.

Other Conference highlights included the Technical Plenary, which drew 600 attendees, with its focus on Chicago's Energy-Efficient, Economic Model for Sustainability.

These, and additional sessions, from the Technical Program are part of ASHRAE's Virtual Conference, which provides access to more than 250 presentations and PDFs of posters. Register or access presentations at www.ashrae.org/chicagovirtual.

Also offered were six Professional Development Seminars and 14 short courses from the ASHRAE Learning Institute. The most popular courses were Complying with Standard 90.1-2010: HVAC/Mechanical; Energy Management in New & Existing Buildings; Understanding Air-to-Air Energy Recovery Technologies and Applications; and Designing Towards Net Zero Energy Commercial Buildings. Additionally, two new courses were offered: Basics of Combined Heat and Power, which was very well attended, and Evaluating the Performance of LEED®-Certified Buildings.

Pencil and paper exams for all six ASHRAE certifications were also offered at the Conference; 27 people sat for the exams. Those who pass the exam will join the 1,100 others who have already obtained ASHRAE certifications. ASHRAE certifications include Building Energy Assessment Professional; Building Energy Modeling Professional; Commissioning Process Management Professional; Healthcare Facility Design Professional; High-Performance Building Design Professional; and Operations and Performance Management Professional.

Top selling publications included "Procedures for Commercial Building Energy Audits, second edition;" ASHRAE Pocket Guide; 2012 Winter Conference CD; Standard 90.1-2010 Energy Standard for Buildings Except Low-Rise Residential Buildings; Standard 62.1-2010, Ventilation for Acceptable Indoor Air Quality; "A Practical Guide to Seismic Restraint, second edition;" "Energy Efficiency for Existing Commercial Buildings: Technical Implementation;" and Standard 90.1-2010 User's Manual.

WELCOME TO AIREX!

Company Background

AIREX INC is a leading distributor of HVAC products to the commercial, industrial, and hi-rise markets in the greater Toronto area. We also distribute HVAC products to other key areas of the southern Ontario region. We are an established Canadian company that has been in business since 1982.

We are looking to add a qualified individual to our winning team for the position of APPLICATION ENGINEER to cover the London, Sarnia, & Windsor areas.

General Position Description

The Application Engineer will be required to call on mechanical engineer consultants in order to have our exclusive product offerings specified as basis of design or equal on upcoming and future projects. This person will also promote our strong customer focus, and superior product lines to further grow our successful business in these regions (travel required in noted areas).

Specific Position Responsibilities

The Application Engineer will:

Work to have our exclusive product lines in master specifications as base bid or acceptable/equal meet with regular and prospective consulting engineers on a regular basis to build upon and create new relationships

recommend products to customers & engineers, based on specific needs provide technical solutions about products, price and durability represent the company in an ethical and professional manner at all times

Work Experience and Educational Background

Familiarity with consulting engineering firms in the southwestern Ontario region would be a definite asset. Minimum 2 years related work experience.

College Diploma or University Degree with a strong focus on 1 of the following: mechanical engineering mechanical design technology mechanical design and drafting

Interested applicants should forward resumes and salary range expectations to:

Vince Castellano – vcastellano@airex.ca Website – www.airex.ca

Due to the volume of response, only individuals selected for interview will be contacted.