



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

LONDON CANADA CHAPTER #116

<http://LondonCanada.AshraeChapters.org>

Mon Feb 29/2016

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Eric Shaw

Newsletter

Tom Pollard

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Ibrahim Simhatl

Building Tour - 5:30pm

London District Energy
301 Colborne St., London

Dinner

Budapest Restaurant

348 Dundas St., London
(to follow after the building tour)

Meeting - MONDAY FEB 29/2016
Research Promotion Night

5:30pm - Building Tour
dinner to follow tour

ADVANCED PAYMENT BEFORE MEETING
by using PAYPAL
use the chapter web site to register and pay
<http://LondonCanada.AshraeChapters.org>

location:

LONDON DISTRICT ENERGY
301 Colborne St., London (at Bathurst)

Dinner: Budapest Restaurant
348 Dundas Street, London (near Waterloo)

President's Message

Greetings,

I would like to thank the Past President's for participating in our Past President's/Student night at the January meeting. I would also like to thank our speakers for doing a great job educating everyone, especially the students, on the technology of heat exchangers.

This month we will be visiting the London District Energy plant for a tour of the facility followed by a meal at the Budapest downtown. Our theme for the night will be related to ASHRAE Research. We are getting closer to the end of the 2015/2016 fiscal year and everyone is encouraged to donate to the campaign once again. If you have any questions related to ASHRAE research, please feel free to get in touch with James Scudamore (RP chair), myself or anyone on the board of governors.

I was able to attend this past month's ASHRAE Society meeting in Orlando. It was my first Society meeting and it really was an eye opening experience and I would encourage anyone active in the industry to attend future society meetings. In general the Society meeting and AHR expo were one of the most successful in the history of the event outside of the Chicago venue. One of the great benefits for me was being able to attend practical training courses offered through the ASHRAE learning institute and having a chance to walk the floor of the Expo. If you want more info on this years show please refer to the AHR wrap up later in the newsletter.

In the next few weeks we will be sending out registration information for our very popular golf tournament. Be sure to reserve your spot as soon as you can.

We still have a few meetings to go before the end of the Society year. Take a look on our website for all the details and be sure to join us. I look forward to seeing you all at our upcoming chapter meetings. If you know someone who would be interested in attending please invite them out.

Thank you.
Jordan Foster
Chapter President 2015/2016
ASHRAE London Canada Chapter

Upcoming Chapter Meetings

Monday Mar 21/2016 - Designing Displacement Ventilation
ASHRAE Distinguished Lecture, Dr Jerry Sipes, Ph.D., P.E.
GBCI Approved | 1 CE Hour | 0920002729
AIA Approved|1LU/HSW|SIPES02

Thursday Apr 21/2016 - **Webcast:** Realistic Commercial Net Zero Building Design through Energy Conservation and Renewables

Monday Apr 25/2016 - Tour: Western University, Music Building

Monday June 4/2016 - Golf Tournament

Other Meetings

March 16 to 18, 2016 = CMPX - Canadian Mechanical & Plumbing Exposition
www.cmpxshow.ca

ASHRAE Learning Institute Training Learn more and register at:
www.ashrae.org/cmpxcourses

May 9 to 11, 2016 = HVAC Design: Level 1 - Essentials, Halifax, Nova Scotia
see the chapter web site for more information

June 25 to 29, 2016 = ASHRAE Annual Conference - St. Louis, MO

Jan 28 to Feb 1, 2017 = ASHRAE Winter Conference - Las Vegas, NV



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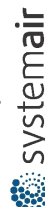
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TOUR

London District Energy

301 Colborne St., London

London District Energy, a division of Veresen, supplies heating, cooling and other energy services to businesses in downtown London Ontario (capacity of approximately 100 MW of combined thermal & electrical generation).

Customers include commercial office towers, hotels, hospitals, hospital linen service, Budweiser Gardens, City Hall, the London Convention Centre, London Public Library, Museum London, London Courthouse.

District energy supplies heating, cooling and energy supply options and services to businesses and institutions at the community level. Veresen's district energy systems offer a cost-competitive, cleaner and greener alternative to heating and cooling buildings currently using in-house boilers and chillers.

Veresen has also has district energy system located in Charlottetown, and Prince Edward Island. Together these locations have approximately 172 megawatts (MW) of thermal capacity. These stable, long-term investments provide reliable operational service and excellent growth opportunities for providing steam and chilled water to new and existing customers.

Commercial Operation at London started on December 31, 2008

The London Cogeneration Facility is a natural gas-fired 17.2 MW combined heat and power facility. In addition to electricity production, steam from the cogeneration facility will be used to provide space heating and cooling to nearby commercial, government and residential buildings.

On site, the building house a gas turbine, generator, and a heat recovery steam generator (HRSG) with supplementary gas firing. Back pressure steam turbine-generators will be provided for low pressure steam and electric power generation.

Coming Monday Mar 21/2016

Designing Displacement Ventilation

ASHRAE Distinguished Lecture, Dr Jerry Sipes, Ph.D., P.E.

GBCI Approved | 1 CE Hour | 0920002729
 AIA Approved|1LU/HSW|SIPES02

Coming Thu April 21/2016 - WEBCAST

Making Net Zero Net Positive: Solving the Efficiency & Cost Paradox

Save the date for the **April 21, 2016 ASHRAE Webcast** - Making Net Zero Net Positive: Solving the Efficiency & Cost Paradox. This webcast will feature industry experts who will define the importance of, and why we should strive for, net zero in the built environment. Viewers will be able to identify behaviors that create more effective ownership, design and construction teams, and will recognize the value of a collaborative process in building design and the impact on costs. With a strong emphasis on real-world applications, the program will also discuss the primary technical and financial challenges in achieving net zero buildings, and where this design approach can best be applied.



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AHR EXPO - Orlando

see the item in the newsletter about the Jan 2016 AHR EXPO in Orlando

January Chapter Meeting Highlights

Heat Transfer Methods

David LaDoucer - Delta T Heat Exchangers

* see chapter web site for a PDF copy of the presentation

STUDENT EVENTS

Airia Brands hosted a plant tour. We had a good turnout of students and we got to see how residential and small commercial HRVs work and are manufactured.

ASHRAE Toronto Chapter has arranged for the 6th Annual Career Fair
Ryerson University - Kerr Hall Gymnasium, 379 Victoria Street, Toronto
WED MARCH 9, 2016

see flyer in newsletter

HVAC Design Training www.ashrae.org/hvacdesign

2 Training Courses, 5 Days of Intense Instruction

see flyer in the newsletter



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ASHRAE RESEARCH

The following have contributed to ASHRAE Research
Honor Roll level contributors will be listed in the ASHRAE Journal.

Individual Donors - \$100+ (Honor Roll Level)

Tom Pollard

Ibrahim Semhat

Jordan Foster

Karl Gilroy

James Scudamore

Philip Cook

Khalid El-Kadri

John Freeman

Peter Golem

Scott Edmunds

Jerald Lavender

Corporate Donors - \$250+ (Honor Roll Level)

Baymar Supply Limited

Drennan Refrigeration Incorporated

Mechanical Contractors Association of London

Corporate Donors - Up to \$250

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Bayview Sheet Metal

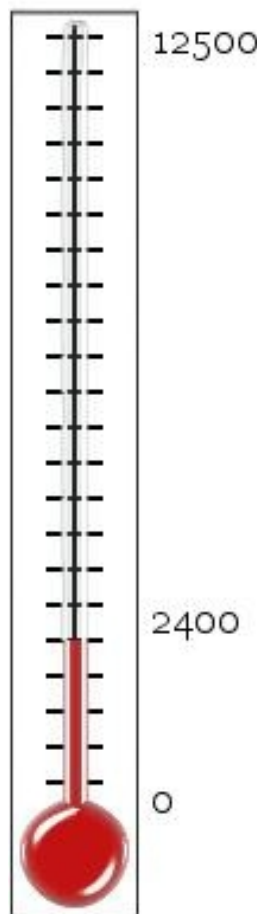
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Please assist ASHRAE Research and the London Canada reach it goal.

<http://www.ashrae.org/contribute>

ASHREA London Canada

James Scudamore - RP Chair



Chapter Goal
\$12,500

Current Research
contributions
\$2,400

(19.2% of goal)

ASHRAE JOB BOARD

Having trouble finding the time to search through all of the available jobs on ASHRAE Job Board? Let ASHRAE do the work for you! Create a personal job alert and new jobs that match your search criteria will be emailed directly to you.

Our Job Alerts will: match jobs to your customized criteria; notify you when potential opportunities become available; allow you to focus on other career-building activities, such as networking

Sign up for job alerts today on ASHRAE Job Board and you will be notified as soon as the jobs you want are posted!



Halifax HVAC Design Training

May 9 - 11, 2016

HVAC Design: Level I - Essentials

training provides participants with instruction that accelerates their transformation into effective members of a design, construction or facilities maintenance team. Developed by industry-leading professionals selected by ASHRAE, the training provides attendees with the fundamentals and technical aspects of HVAC design. Attendees will gain practical skills and knowledge to design and maintain HVAC systems that can be put to immediate use.

In addition to gaining in-depth knowledge and understanding, attendees will receive real-world examples of HVAC systems based on the renovated ASHRAE Headquarters building. The training also teaches a systematic approach to guide a design team to a solution that optimally meets the client's expectations. Engineered drawings of the ASHRAE Headquarters renovation will also be discussed so participants are exposed to plan reading and visual understanding of system design.

Registration Fees

(Register 30 days prior to training date, for Early Bird pricing)

Level I - Essentials	Mbr	Non-Mbr	Group 3+
Early Bird	\$959	\$1,214	
Standard	\$1009	\$1,264	\$909

Fee Covers: Course admittance, course materials, publications, break refreshments, lunches, and reception.

Company Discount Fee: Enroll 3 or more participants from the same company at the same time and save.

Instructor

Joel Primeau, P.Eng., ASHRAE Member, HBDP, LEED®AP

Web Site

<https://www.ashrae.org/education--certification/hvac-design-training/halifax-hvac-design-training-may-2016>

User's Manual to ASHRAE/USGBC/IES Green Standard Available

ATLANTA – A newly published User's Manual clarifies the intent and implementation of the building industry's foremost green building standard by explaining its requirements and providing example applications. The User's Manual to ANSI/ASHRAE/USGBC/IES Standard 189.1-2014, Standard for the Design of High-Performance, Green Buildings Except Low-Rise Residential Buildings, is intended to help engineers, architects, and contractors understand and comply with the standard and to help code officials and others enforce its requirements. This new version of the User's Manual updates the version published in 2010, which covered the content of Standard 189.1-2009.

Standard 189.1 addresses the areas of site sustainability; water-use efficiency; energy efficiency; indoor environmental quality; the building's impact on the atmosphere, materials and resources; and construction and plans for operation. The standard is published by ASHRAE, the Illuminating Engineering Society of (IES) and the U.S. Green Building Council (USGBC). For complete information on the standard, including a readable copy, visit www.ashrae.org/greenstandard.

"The 2014 standard updates the 2011 standard through 67 individual addenda that modified all sections of the standard," Andrew Persily, chair of the Standard 189.1 committee, said. "The User's Manual is vital in helping the industry understand these updated provisions, which will help further reduce building energy and environmental impacts through high performance design, construction and operation while providing indoor environments that support the activities of building occupants."

Among the many changes in the 2014 edition of Standard 189.1 that are addressed in the User's Manual are:

- Change of all site requirements to mandatory, with the previous prescriptive and performance options moved to the mandatory requirements.
- Addition of minimum storm water management requirements for minimizing the impact of storm water discharge from the project site.
- Inclusion of new requirements for bicycle parking; preferred park for low-emission, hybrid and electric vehicles; and a predesign assessment of native and invasive plants.
- Adjustment of minimum on-site renewable energy requirements to provide two clear prescriptive paths for including on-site renewable energy in a project.
- Establishment of two performance options for demonstrating compliance with the minimum energy efficiency requirements.
- Addition of lighting quality to the scope of the indoor environmental quality section as well as requirements for lighting controls in specific space types.
- Clarification of the requirements for air sealing of filtration and air-cleaning equipment; and new requirements for preoccupancy ventilation.
- Addition of minimum moisture control requirements to reduce negative impacts associated with unintentional moisture migration through the building envelope.
- Addition of new requirements for multiple-attribute product declaration or certification and maximum mercury content of certain types of electric lamps.
- Update of requirements related to the environmental impacts associated with the idling of construction vehicles and new requirements to reduce the entry of airborne contaminants associated with construction areas.

The cost of the User's Manual is \$105 (\$89, ASHRAE members). To order, visit www.ashrae.org/bookstore or contact ASHRAE Customer Contact Center at 1-800-527-4723 (United States and Canada) or 404-636-8400 (worldwide) or fax 678-539-2129.



ASHRAE LONDON STUDENT AWARD

The chapter presents 2 awards each year at Western University. The most recent winner is Matthew Kyle, a fourth and final year student of Mechanical Engineering at Western.

While completing Thermodynamics I with Professor Straatman, Matthew developed a deep interest in Thermodynamics and received a grade of 81%. It was suggested by Professor Straatman that if any students are interested, they enroll in the fourth year HVAC courses for one reason in particular: no matter where you are, all buildings require HVAC and thus those trained in HVAC are particularly employable. This logic resonated with Matthew, who attended Western in order to become an employable engineer. After completing Matthew's second year, he earned an 85% weighted grade average with a full course load.

While completing Thermodynamics II, Matthews interest and understanding of the topic grew and received a grade of 92%. He was drawn to the possible advancements in increasing efficiencies and reducing environmental impacts, one of his personal interests. At this point, Matthew would complete both HVAC courses in his final year. After completing the third year, he earned a 93% weighted grade average with a full course load.

Having worked in different offices and buildings during co-ops and while studying at Western, Matthew have become cognizant of the effect that air quality and temperature can have on ones comfort and ability to focus. He is currently enrolled in both HVAC I and HVAC II, and his next goal, after graduating, is to work towards my Professional Engineer designation in London, Ontario and eventually purchase a property in rural London.

PEO LONDON - National Engineering Month 2016 Events:

NEM Kickoff Luncheon

Date: Monday, Feb 29, 2016 11am-2pm

Venue: London Hilton, 300 King Street, London, ON N6B 1S2

Cost: \$35/person

How: RSVP to wro@peo.on.ca

Labatt Brewery Tour

Date: Thursday March 3, 2016

Time: Please arrive by 6:15 pm, tour starts at 6:30, Guest Speaker starts at 7:30, finish by 9 pm

Cost: The tour costs \$12 per person (cash only – exact change please – you pay when you come)

Guest speaker: Scott Durnin, P.Eng., Scott is the Assistant Brew Master and has worked for Labatt for over 12 years. The topic this year is: Engineering in Manufacturing from a Brewing Engineer's Perspective.

How: RSVP to wro@peo.on.ca

Parking is free - follow the signs and walkway to the John Kinder Labatt Room.

Women in Engineering (WIE)

When: Saturday March 12, 2016, 12:00pm Networking and socializing, and 12:30pm Guest Speaker

Where: Springs Restaurant (310 Springbank Dr, London, ON N6J 1G5)

Guest Speaker: Marilyn Spink, P.Eng., Lieutenant Governor Appointee to PEO Council, Engineering Manager & Principal at GS Group

Cost: \$12.50/person – two course lunch will be served.

How: Click the link below to register and pay: <https://www.eventbrite.ca/e/woman-in-engineering-2016-tickets-21316570436>

Marilyn Spink's bio can be found here.

London Children's Museum Events

Date: Saturday March 19, 2016, 11:00 am – 2:00 pm

Venue: London Children's Museum, 21 Wharncliffe Rd S, London, ON N6J 4G5

How: RSVP to wro@peo.on.ca

Two innovative activities for museum attendees will be provided, the participants will receive NEM memorabilia (T-shirt or souvenir). This year our activities are tentatively "Ship the Chip" and a structural activity involving some fun building materials. Note: Museum entrance fee for children applies.

EIT Information Night

Date: Tuesday March 22, 2016 at 5:30 pm

Location: University of Western Ontario, Spence Engineering Building, Room 2202

How: RSVP to wro@peo.on.ca

Invited Speaker: Pauline Lebel, P.Eng., Manager of Licensure from PEO will attend to answer questions. Food and beverages will be provided.

This is a session to provide information about the Engineering Intern (EIT) program and path to licensing managed by the PEO. The whole of the engineering faculty is invited to attend.

Tour of Fraunhofer Project Centre

Date: Thursday March 24, 2016 from 3:00 to 4:30 PM

Venue: Fraunhofer Project Centre for Composites Research @ Western, 2520 Advanced Avenue, London, Ontario, N6M 0E1, Web:

<http://www.eng.uwo.ca/fraunhofer/index.html>

How: RSVP to wro@peo.on.ca



2016 CMPX Online Registration is Now Open!

Book your travel today

Registration is now open for CMPX 2016, Canada's national show for the HVACR and Plumbing industries - doors open March 16, 2016 for 3 exciting days!

It's the biggest HVACR and Plumbing show in Canada. Over 500 exhibitors will completely fill the 200,000 square foot Metro Toronto Convention Centre, North Building with an un-equalled display of New Products and the latest technology for every area of the HVACR and Plumbing industries.

<http://www.cmpxshow.com/>

Attendance High for ASHRAE Winter Conference, AHR Expo

ATLANTA – High attendance was reported for the recent ASHRAE Winter Conference and AHR Expo, in Orlando. The 2016 ASHRAE Winter Conference, was held Jan. 23-27, with the AHR Expo held Jan. 25-27.

The Winter Conference had more than 3,000 attendees. Attendance this year was higher than the past eight Winter Conferences, except Las Vegas 2011. Attendees came from 67 countries. The 2016 AHR Expo, co-sponsored by ASHRAE, set a record by being the first show outside of Chicago to break 400,000 square feet of exhibitor space. The Expo featured 2,063 exhibitors, including 561 deemed international. The total attendance for visitors was 42,672, with total attendance of visitors and exhibitors at 60,926.

Best sellers at the ASHRAE Bookstores included the Pocket Guide I-P; "HVAC Design Manual for Hospitals and Clinics," 2nd edition; "Cold-Climate Buildings Design Guide;" Guideline 0-2013, The Commissioning Process; Standard 188-2015, Legionellosis: Risk Management for Building Water Systems; "HVAC Simplified;" and the "Design Guide for Tall, Supertall, and Megatall Building Systems."

The Conference's Technical Program ranked high in attendance, with new tracks focused on design-build practices and residential systems. Individual top-attended sessions in the technical program were related to Cooling with the Sun: Solar Thermal Cooling; Energy Submetering Fundamentals: Benchmarking, Baseline and Beyond!; The Impacts of Operable Windows on Building Performance; Highlights from the 24th IIR International Congress of Refrigeration; The Internet of Everything: How Smart and Connected Sensors Will Transform the HVAC Service Industry; HVAC Pumps: New ECM Motor and Control Technologies; Indoor Air Quality and Energy Efficiency: Measurement and Analysis of Multiple Approaches; Back to Basics: The Science, Application and Art of Load Calculations; Integrating Cutting-Edge Technology: Renewable Energy and Thermal Energy Storage; and Hydronic Systems: Doing More with Less.

Also offered were a combined 20 Professional Development Seminars and Short Courses from ASHRAE Learning Institute. The most popular Short Course offerings were Variable Refrigerant Flow Systems; Complying with Standard 90.1: HVAC/Mechanical; and Designing High-Performance Healthcare HVAC Systems. The Professional Development Seminars that drew the highest number of registrations were Energy Modeling Best Practices & Applications; Commercial Building Energy Audits; and Commissioning Process for New & Existing Buildings.

The 2016 ASHRAE Annual Conference takes place in St. Louis, Mo., June 25-June 29, 2016. The 2017 ASHRAE Winter Conference takes place Jan. 28-Feb. 1, Las Vegas, Nev., with the AHR Expo being held Jan. 30-Feb 1.

ASHRAE Announces Call for Programs and Papers for Conferences

A call for programs has been announced for ASHRAE's 2016 Annual Conference, June 25-29, St. Louis, Mo.

ASHRAE is seeking papers for its 2017 Winter Conference in Las Vegas, Nev., Jan. 28-Feb. 1, 2017.

To see more, visit www.ashrae.org

New ASHRAE Application Automates Compliance Calculations for Standard 90.1-2010

ATLANTA – A new web application from ASHRAE automates the calculations needed to show a building project's compliance with Standard 90.1-2010. The 90.1 ECB web application is a tool for modeling compliance with ANSI/ASHRAE/IES 90.1-2010, Energy Standard for Buildings Except Low-Rise Residential Buildings, using the Energy Cost Budget (ECB) method in the standard.

The application allows users to input project parameters and then calculate the proposed design's projected performance and compliance, with the results exportable in a workable spreadsheet for project use," Drake Erbe, chair of the Standard 90.1 committee, said.

The application is accessible from desktop, tablet or other device. It allows users to store project information in one place for easy reference and comparison.

The app is free of charge to users. To learn more, visit 901ECB.ashrae.org.



FOR IMMEDIATE RELEASE

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**2016 AHR Expo Draws Record-Breaking Crowds in Orlando:
Winter Storm Jonas Proves No Match for World's Largest HVACR Marketplace**

WESTPORT, Conn., February 5, 2016 – The 2016 International Air-Conditioning, Heating, Refrigerating Exposition (AHR Expo), held January 25 to 27 at the Orange County Convention Center in Orlando, Fla., welcomed 60,926 registered attendees to the world's largest HVACR marketplace.

Despite havoc from Winter Storm Jonas, including flight cancellations across the country and travel bans in the Northeast and Mid-Atlantic regions, the 2016 AHR Expo was successful in welcoming tens of thousands of contractors and engineers, OEMs, distributors and plant managers from all facets of the global HVACR industry.

In total, 469,540 square feet of exhibit space was occupied by 2,063 exhibitors, 334 of which participated in AHR Expo for the first time in 2016. This year's 18,254 exhibitor personnel addressed 42,672 visitors, based on a preliminary attendance count by the show's management company, International Exposition Company.

Exemplifying the AHR Expo's global appeal and relevance, a notable 561 international exhibitors, and 3,570 in personnel, participated in this year's show in Orlando. On preliminary count, 9,410 international visitors were also present at the 2016 AHR Expo.

Canadian engagement in AHR Expo remained strong for 2016, with 1,312 exhibitor personnel and 2,218 visitors present in Orlando this year.

"A lot goes into making this show such a valued platform for today's professionals to come together, but I'm proud to be part of making it all happen," said Clay Stevens, president of International Exposition Company. "Based on early feedback, we're already working on several aspects of next year's show to accommodate more attendees and to make the experience even more worthwhile."

The 2016 AHR Expo show floor encompassed a compelling 20 football fields' worth of exhibits throughout Florida's largest convention center. Many exhibiting companies, including Beloit, Wisc.-based Regal Beloit America, Inc., which develops systems for converting power into motion in climate solutions and other market applications, returned as well-seasoned AHR Expo participants.

"Regal has been exhibiting at AHR Expo for well over 30 years, and I've been coming for 16 of those years in various roles," said Heather Scaggs-Richardson, marketing communications manager at Regal Beloit America, Inc. "AHR Expo is the premier event for HVACR professionals, and one of the few places to see what's happening, live and in person, in our ever-changing industry. It would take a lot to get me to pass up the opportunity to come each year."

In addition to thousands of returning companies, more than 300 exhibitors set up shop for the first time at AHR Expo in 2016. Adam Bowen, first-time exhibitor and partner at ClimaSkinz, commented on the overwhelming scale of the show and ongoing traffic at his company's booth.

"Coming into AHR Expo, we knew it was a huge event that would bring thousands of people past our booth, but we weren't entirely sure what to expect for our company," said Bowen. "We're a relatively small company, but we work hard and care about our customers and I think that showed. We were very pleased with the amount of positive feedback we received, and we're going home with a handful of promising new leads. Before we left I made sure to reserve our spot for 2017 in Vegas."

When asked about the value in attending AHR Expo, many exhibitors shared common sentiments. Both Lindsey Ford, manager of multi-channel communications at Rheem, and Dan Berry, executive vice president of TPI Corporation, remarked on how an influx of international attendees has positively affected both networking and sales efforts.

"Rheem has been exhibiting at AHR Expo for years – it's a great networking opportunity that sets the tone for the year," said Ford. "The show has become much more international lately, allowing us to establish relationships and connections around the world. Admittedly, it's sometimes easier to use technology, but you can't put a price on the face-to-face interaction you get by attending."

"There is always value in attending this show, and in fact I don't see another show with as much value and expertise as AHR Expo," noted Berry. "Holding the show in Orlando this year is one of the best decisions show management has made. South and Central America are enormous markets, but attendees don't typically come to shows in the Northern U.S. Orlando is the perfect place to draw in that big market of international customers."

Several others, including Anthony Quinn, key account manager at Danfoss, and Lindsey Simpson, business development associate at Rinnai America Corporation, noted the importance of keeping up with industry standards and trends.

“Efficiency is a major buzzword on everyone’s minds these days,” said Quinn. “A lot of people are having to redesign systems to meet newly imposed standards. Coming to AHR Expo allows us to scope out what other companies are offering and receive in-person reactions to the solutions we propose. Our new product line meets all of ASHRAE’s new standards, but we want to know what we can be doing even better.”

“We work in an industry that is rapidly changing, particularly in recent years,” said Simpson. “It’s tough to stay on top of the Department of Energy standards. Yes, a lot of us are in competition with one another, but on the other hand, we have to work together to meet these standards to better the world we live in. By exhibiting at AHR Expo, we get names, faces and a better understanding of who’s on our team.”

While there was no shortage of things to see and discover on the show floor, the thousands of AHR Expo attendees and exhibitors also had the opportunity to engage in a full schedule of educational programs. A mix of exhibitors’ new product and technology presentations, ASHRAE Learning Institute courses, certification exams, PM Live seminars and many free programs offered by endorsing associations and other groups filled the Orange County Convention Center’s many conference rooms. Attendees and exhibitors were able to expand their knowledge on a wide range of topics – from how to commission an economizer, to cyber security measures for intelligent buildings, to the latest advancements in China’s indoor air quality market.

“If you have any sort of need in the HVACR industry, AHR Expo is the place to be, but the educational aspect of this show is truly invaluable,” remarked Juliet Pagliaro Herman, Johnson Controls’ director of service marketing for systems and services, North America. “I don’t see why someone would come to this show and not partake in the array of seminars offered. They’re something I look forward to each year as I schedule my time onsite.”

Brent Adams, product marketing manager at Harsco Industrial Patterson-Kelley, echoed Herman’s feelings. “The AHR Expo is the crown jewel of our industry because every additional facet of the show adds that much more value. The breadth of knowledge you gain from walking the show floor and participating in educational sessions and technology showcases is incomparable. Sometimes I can return to my booth and immediately start applying the business practices or information I’d just learned in a session. I love that I can leave the AHR Expo every year feeling more informed than I was when I arrived. It plays a huge role in my decision to return year after year.”

Additionally, Tuesday afternoon’s presentation of the 2016 AHR Expo Innovation Awards, and announcement of Aeroseal’s duct sealing technology as the 2016 Product of the Year winner, drew a standing room only crowd. Companies in ten

product categories – building automation, cooling, green building, heating, indoor air quality, plumbing, refrigeration, software, tools & instruments, and ventilation – also received awards.

“This year was particularly exciting for Plasma Air because we were presented with an AHR Expo Innovation Award for our PlasmaSoft 2.0 IAQ Procedure Software,” said Larry Sunshine, vice president of sales and marketing for Plasma Air, which received a 2016 AHR Expo Innovation Award in the Software category. “As the air purification industry continues to evolve, it has been both fun and challenging to develop new products that assist the industry in its growth. Being recognized specifically by ASHRAE and the HVACR industry as a whole validates our work and shows our customer base and rep network that we’re leaders in product innovation.”

At the close of three action-packed days in Orlando, many 2016 AHR Expo attendees were eager to share their experiences.

“I put a lot of time into researching companies before traveling to AHR Expo, to give myself an idea of who I want to focus on talking to,” said Toby Giberston, partner at a mechanical contracting company based in Montreal, Quebec. “However, one of the most wonderful things about attending is the unexpected finds and connections. AHR Expo and the great variety of people I’ve met over the years have led to applications and products that would have never come to fruition otherwise. Sometimes all it takes is a simple introduction to the right person to create something new, and there’s no place that better facilitates that than the AHR Expo floor.”

According to Michael Ohlander, president at MT Mechanical in Wallkill, N.Y. and winner of last year’s “Fastest Hands in HVAC/R” competition (https://www.youtube.com/watch?v=Ucu_kFxZxKU) held on the show floor by 2016 AHR Expo exhibitor hilmor®, “It’s eye-opening to see what products are out there.”

“While you’re at AHR Expo, you start to remember different issues you’ve had over the past year that seemed insignificant or forgettable at the time, but suddenly you’re presented with all of these innovative and new solutions,” Ohlander continued. “The variety of products and technologies is astounding.”

“When I first thought about coming here, I thought it was just a bunch of vendors showing things that I may or may not use,” said David Perrotta, president/owner of P P C Contractors in Ft. Lauderdale, Fla. “What I’ve learned is that many of the exhibitors are not only willing to talk to you, but are willing to train you and give you very informative demonstrations on their products. You can’t get that over the phone or via email. The in-person meetings are invaluable.”

Exhibitors like John Black, director of marketing at Emerson Climate Technologies, underscored the compelling success of their participation in the 2016 AHR Expo.

"AHR Expo is a very important show in this quickly changing industry," said Black. "We're seeing a dramatic change in the way contractors complete their work as more people demand wifi-connected devices and universal tools. That being said, we could be facing entirely new demands by this time next year, which is why I encourage everyone I meet to attend the 2017 show in Las Vegas. I anticipate even more technology developments and a broader range of attendees there and I can't wait to be part of it."

Next year's AHR Expo, co-sponsored by ASHRAE and AHRI, will be held in Las Vegas from January 30 to February 1, 2017. For additional information, visit **ahrexpo.com**.

About AHR Expo

The International Air-Conditioning, Heating, Refrigerating Exposition (AHR Expo), which began more than 85 years ago as a heating and ventilation show, has now grown into one of the world's largest HVACR events. The Exposition is held annually in key markets and major cities across the U.S., hosting close to 2,000 exhibitors and bringing in crowds of 60,000 industry professionals. The Show provides a unique forum for the HVACR community to come together and share new products, technologies, and ideas. The event is co-sponsored by ASHRAE and AHRI, and is held concurrently with ASHRAE's Winter Conference.

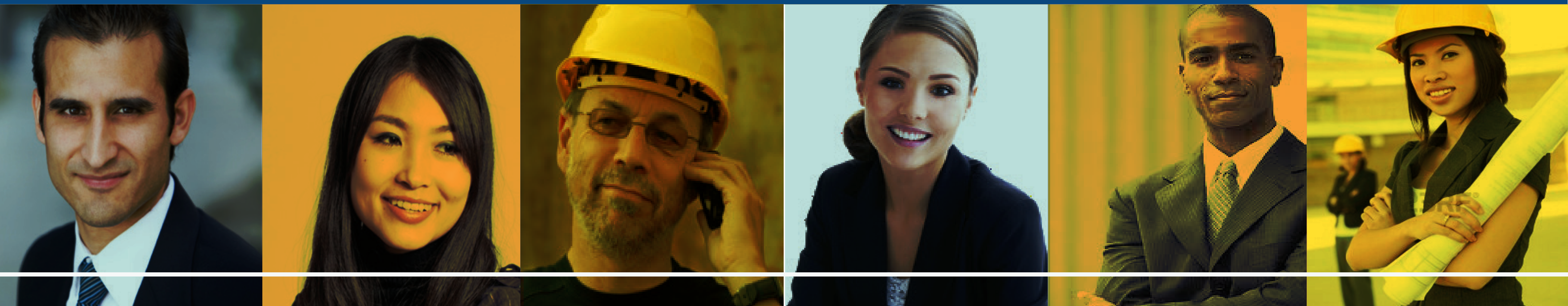
About International Exposition Company, Inc. (IEC)

International Exposition Company (IEC) is a Westport, Conn.-based trade show management company. For more than 100 years, the company has built its reputation on a track record of honesty, respect and fairness for exhibiting companies and show attendees. IEC owns and manages three major trade show events; the annual AHR Expo (International Air-Conditioning, Heating, Refrigerating Exposition), the biennial AHR Expo-Mexico, and the biennial Chem Show. Attendance across the three events totals in excess of 70,000.

###

ASHRAE Toronto Chapter 6TH Annual Career Fair Ryerson University

MARCH 9, 2016



STUDENTS & NEW GRADUATES:

Are you a Job Seeker in one of the following fields...

- Engineering and Engineering Technology
- Building Science and Facility Design
- Green Building Design (LEED)
- Energy Auditing
- Project Management
- Technical Sales (with a focus on HVAC/R products)
- Architecture and Architectural Technology
- Consulting and Consulting Engineering (Facility Design)
- Controls, Automation, Commissioning, etc...
- Licensed Trades (with a focus on HVAC/R equipment and systems)
- Building Operating and Facility Management

**GET YOUR RESUMES UPDATED
& BE READY TO NETWORK!**

EVENT DETAILS:

WHAT

ASHRAE Toronto Chapter 6th Annual Career Fair

WHERE

Ryerson University - Kerr Hall West 271 (KHW 271)

Enter from 379 Victoria Street- 1 level up

WHEN

Wednesday, March 9, 2016 (9:00AM to 1:30PM)

HOSTS

ASHRAE Toronto Chapter & Ryerson University

NEED MORE INFORMATION?

www.torontoashrae.com

Tel: 905-602-4714

Peter Turk • pturk@victaulic.com

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Price: **\$284 (\$219 ASHRAE Member)**; Two-part courses: **\$484 (\$359 ASHRAE Member)**

Note: You may register up to 24 hours prior to an online course. Courses are in US Eastern Time.

Combined Heat & Power: Creating Efficiency through Design & Operations

Mon, March 28, 2016 – 1:00 pm to 4:00 pm EDT

Commissioning Process & Standard 202

Wed, March 30, 2016 – 1:00 pm to 4:00 pm, EDT

IT Equipment Design Evolution & Data Center Operation Optimization

Wed, April 6, 2016 – 1:00 pm to 4:00 pm, EDT

Complying with Standard 90.1-2013: HVAC/Mechanical

Wed, April 13, 2016 – 1:00 pm to 4:00 pm, EDT

Laboratory Design: The Basics and Beyond

Mon, April 18, 2016 – 1:00 pm to 4:00 pm, EDT

Standard 188-2015 – Successfully Managing the Risk of Legionellosis

Mon, April 25, 2016 – 1:00 pm to 4:00 pm, EDT

Air-to-Air Energy Recovery Applications: Best Practices

Wed, April 27, 2016 – 1:00 pm to 4:00 pm, EDT

Fundamental Requirements of Standard 62.1-2013

Mon, May 2, 2016 – 1:00 pm to 4:00 pm, EDT

Variable Refrigerant Flow System Design & Applications

Mon, May 16, 2016 – 1:00 pm to 4:00 pm, EST

The following courses are comprised of two parts. Registrants must attend both parts in order to receive CEU/PDH credits.

Exceeding Standard 90.1-2013 to Meet LEED® Requirements

Part 1: Mon, April 11, 2016 – 1:00 pm to 4:00 pm, EDT

Part 2: Wed, April 20, 2016 – 1:00 pm to 4:00 pm, EDT

Operations & Maintenance of High-Performance Buildings

Part 1: Tue, May 17, 2016 – 1:00 pm to 4:00 pm, EDT

Part 2: Wed, May 18, 2016 – 1:00 pm to 4:00 pm, EDT

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HVAC Design: Level II – Applications - Registration is \$854 (\$699 ASHRAE Member)

HVAC Design: Level II — Applications provides instruction on HVAC system design for experienced HVAC designers and those who complete the HVAC Design: Level I – Essentials training. The training provides information that allows practicing engineers and designers an opportunity to expand their exposure to HVAC systems design procedures for a better understanding of system options to save energy.

Visit www.ashrae.org/hvactraining to register.