

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

LONDON CANADA CHAPTER #116

http://LondonCanada.AshraeChapters.org

Mon Nov 30/2015

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Newsletter Tom Pollard

Region 2 Assistent Regional Chair Ibrahim Simhatl Topic Odour Control Through Oxidation and Activated Carbon

<u>Speaker</u> **Dan Glendon** Engineered Air TriMed Product Manager



Meeting - MONDAY NOV 30/2015 Research Night

5:15 pm Social 6:15pm Dinner 7:15pm Speaker

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

location:

FOUR POINTS BY SHERATON 1150 Wellington Rd. S. London, Ont



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President's Message

I would like to thank all of the students who made the effort to attend last month's student meeting at the Ivey Spencer Leadership Centre. We had a great turnout. Last month's meeting received some mixed reviews. I would personally like to express my apologies to any students that may have been offended by the presentation. I assure anyone that was offended that the presentation was given with only good intentions in mind. I believe the presentation was not aimed at criticizing members of generation Y but more at encouraging members of other generations to embrace members of generation Y. I too am a member of the so called generation Y so I can understand how the presentation might have been perceived as offensive. However I encourage you not to let the last meeting be your last ASHRAE experience. Keep coming! Doug Zentz, our October speaker, will receive all feedback that was provided.

This month we are happy to welcome Dan Glenden who will be sharing with us a presentation titled, "Odour Control Through Oxidation and Activated Carbon". Our meeting theme this month is Research Promotion. I have been greatly encouraged by the enthusiasm of our Research Promotion chair this year, James Scudamore. It is his first year on the Board of Governors and he was thrust into a position that is usually reserved for the past president. He has not skipped a beat and has taken the role by the scruff of the neck so to speak.

One of our goals this year is to try and spread our research promotion campaign throughout the fiscal year and not leave 90% of the leg work to the last month. Expect an email or a call from James a little sooner than you got the call last year. Please continue your valuable support of ASHRAE Research Canada! We very much appreciate your continued support! Thank you...

As a reminder, there will not be a regular monthly meeting in December. We have tentatively scheduled Monday, December 7th @ Palasad (Oxford/Adelaide) at 5:30 pm as our chapter social gathering to celebrate the Holiday Season. More details will be made available on the website and in an email closer to the date. We would love to have you there! Please join us.

Our January chapter meeting will be a joint past presidents/student night. Please save the date, January 18th.

I look forward to seeing you at the chapter meeting, if not sooner.

Best Regards, Jordan Foster Chapter President 2015/2016 ASHRAE London Canada Chapter

Upcoming Chapter Meetings

Monday Dec 7/2015 - Social Event = Palasad North, 775 Adelaide Street North, London Monday Jan 18/2016 - Heat Transfer Methods, David LaDoucer, Delta T Heat Exchangers Monday Feb 29/2016 - Tech Tour, London District Energy 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

Jan 23 to 27, 2016 = ASHRAE Winter Conference - Orlando, FL Jan 25 to 27, 2016 = AHR Expo, Orange County Convention Center, Orlando, FL March 16 to 18, 2016 = CMPX - Canadian Mechanical & Plumbing Exposition www.cmpxshow.ca 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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Dan Glendon Engineered Air TriMed Product Manager

Originally form Sarnia, Ontario Dan's career has focused on Indoor Air quality in Commercial, Industrial Industries. Primarily with health care, automotive manufacturing, commercial towers and waste water facilities.

In 2013 he relocated to Desoto. Kansas to work for Engineered Air at the US headquarters and production facility where the TriMed product line is manufactured.

Current projects involve a contaminant program that uses ASHRAE 62.1 VRP and IAQP guidelines to calculate outside air reduction and energy savings. Also a unique technology that regenerated activated Carbon while in service in HVAC equipment.

Dan has a Marketing Diploma from Seneca collage and numerous certificates from the air filtration industry.



TOPIC Odor Control using Oxidation and Activated Carbon

How to deal with contaminates with activated cardon and oxidation will be presented.

Social Event - Monday Dec 7

Christmas Social booked at Palasad North 775 Adelaide Street North London

Monday December 7th from 5.30 until midnight.

More details to follow

ASHRAE London Canada - New Members

The following are new members to ASHRAE and the London Canada Chapter Please make them feel welcome at a chapter meeting

Mr. Henry A Vens Mr. Richard J Gerada Mr. Anthony Chen Mr. Matt Moore

Ms. Soheila Bahrami Mr. Jason L Slusarczyk Mr. Adam K Hedden



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2016 Winter Conference Registration NOW Open!

Register for the 2016 Winter Conference in Orlando, Florida. Members only pay \$395 through November 2, 2015. Download our Sample Letter requesting employer support to attend the 2016 ASHRAE Winter Conference.

Learn more about the conference and registration details on the Society web site

<u>Coming April 2016 - Making Net Zero Net Positive: Solving the Efficiency & Cost Paradox</u> Save the date for the <u>April 21, 2016 ASHRAE Webcast</u> - 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.

IBRAHIM M. SEMHAT P.ENG, LEED® AP BD+C Account Executive, Building Systems & Services Building Efficiency

Johnson Controls Canada LP 90 Bessemer Road London, ON N6E 1R1 Canada Direct 519-691-3138 Mobile 519-852-1470 Fax 519-681-9322 Ibrahim.Semhat@jci.com www.johnsoncontrols.com

Business Card Ads

Place your business card HERE contact: Tom Pollard <tpollard@execulink.com> or Phil Cook <pcook@ehprice.com>

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

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

Baymar Supply Limited Drennan Refrigeration Incorporated Mechanical Contractors Association of London

Corporate Donors - Up to \$250

Trane Sales Agency London Callidus Engineering

As the cold weather nears remember to thank ASHRAE Research for keeping your family warm at night! In fact there's currently 20 research projects underway to do just that; see the list below. At any given time ASHRAE is supporting over 150 different research projects totaling over \$14 million. These projects not only directly support our industry, but continually progress it forward.

In Ontario alone there are 11 projects with over \$700,000 worth of funding underway. You may notice updates in the climatic data in the next Fundamentals Handbook, this is thanks to a recently completed project in Waterloo Ontario. These projects are directly funded with the donations to ASHRAE Research Canada. Our goal as a chapter this year is to raise \$11,500 and we are currently 15% of the way there. When choosing where to donate this holiday season, keep in mind the one donation that not only benefits your family's well-being, conserves the environment and protects out future, but also directly accelerates the industry we rely on to make our living. http://www.ashrae.org/contribute

ASHREA London Canada James Scudamore - RP Chair

<u>Halifax HVAC Design Training</u> <u>May 9 - 11, 2016</u>

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 realworld 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

Jan. 25-27

Be sure to look at the SOCIETY web site for the latest conference information

ASHRAE LowDown Showdown Modeling Challenge Highlights Industry's Creativity

ATLANTA – When the smoke cleared and the dust settled at the ASHRAE "LowDown Showdown," organizers declared the overall "winner" to be the building industry, which will reap the benefits of knowledge shared at the event. ASHRAE's LowDown Showdown was featured at the Society's "Energy Modeling Conference: Tools for Designing High Performance Buildings," held Sept. 30 to Oct. 2, 2015, in Atlanta, Ga. Eight teams with 45 people participated in the modeling challenge and presented their models to conference attendees. "While it wasn't exactly the Wild West, there were a lot of ideas flying around and impassioned discussion among attendees," Dennis Knight, Conference chair, said. "The LowDown Showdown proved to be a big draw and a big success. Hopefully attendees will take the knowledge learned back to their jobs and use it to further the industry in energy modeling." The LowDown Showdown complimented the conference's focus on the practical application of high performance building modeling. The Showdown challenged teams to model a net zero or better than net zero building. It gave team members the opportunity to work with the vendor/developer of their choice to showcase their abilities using the vendor's simulation tools, innovative workflows and creative problem solving to model a high performance building while having fun. The teams participating in the LowDown Showdown were: Autodesk, Carrier HAP, DesignBuilder, EnergyPlus, eQuest, IES, Sefaira, Trane TRACE.

"From the very beginning, the Steering Committee's intent when creating the challenge was to encourage participation, demonstrate tools' usage in modeling buildings and have the teams present their models before their peers and colleagues within a 'fair play' environment for the benefit of all participants and vendors," Knight said. "I really want to acknowledge all of the participants for their time and leadership that they devoted to their models – they are all to be commended for their successful projects."

The modeling challenge included four categories for "judging" the models by live polling from the audience and the Steering Committee. Knight said, "In retrospect all of the teams could have been recognized but it was decided to recognize the following:

Best Energy Use Results – TEAM IES;

Mest Innovative Workflow - Team DesignBuilder;

Best Team Work – Team Trane TRACE;

Most Creative – Team eQuest."

Team's models are highlighted at www.ashrae.org/emc2015. "We learned a lot in doing this for the first time," he said. "The extremely positive feedback from the LowDown Showdown participants and the conference attendees leads us to decide to organize another modeling challenge at the next ASHRAE conference."

Design Build Sessions Offered by ASHRAE at AHR Expo

ATLANTA – Four sessions focused on design build are being offered for free at the AHR Expo as part of the ASHRAE 2016 Winter Conference. The Conference takes place Jan. 23-27, Orlando Hilton, while the ASHRAE co-sponsored AHR Expo takes place Jan. 25-27, next door at the Orange County Convention Center. To register for the ASHRAE Conference, which includes free access to the Expo, visit www.ashrae.org/orlando. Information about the Expo can be found at www.ahrexpo.com.

The Technical Program features eight tracks, some 100 sessions and more than 300 speakers. It runs Sunday, Jan. 24 through Wednesday, Jan. 27, and offers over 200 Professional Development Hours, as well as Continuing Education Units, which can be applied toward a Professional Engineering license in many states, including the state of Florida. Four sessions are being offered at no cost at the AHR Expo. The three seminars and one workshop are all part of the Design Build track.

"ASHRAE is always looking for opportunities to improve the Technical Program, and at the same time, to include the theme of the Society president," Jennifer Leach, Conference chair, said. "ASHRAE President David Underwood spent much of his career as a design-build contractor and suggested the Design Build track. Offering these programs at the Expo is a win-win given its close proximity to ASHRAE Conference at the hotel next door. ASHRAE gets an opportunity to reach out to its contractor members and engineers now have another reason to attend the Expo."

The sessions are:

Don't Call it a Comeback! The New and Improved Design-Build Survival Guide, 11 a.m.- noon, Tuesday, Jan. 26. ASHRAE published its "Survival Guide to Design-Build" in 2004. Since that time, the design build delivery method has exploded. In this seminar, speakers provide a first look at the new, improved and updated Design-Build Survival Guide.

Avoiding Pesky Pitfalls Integrating Seismic and Sound Control, 1-2 p.m., Tuesday, Jan. 26. This session addresses the advantage of integrating seismic compliance and sound control early in the design build process. Design of building systems for seismic, wind, sound and vibration control generally occurs later in the project, with the feeling that it is not essential to the design of the HVAC, controls, electrical or other system. However, when this seemingly non-essential item is overlooked, the cost to meet code compliance and/or owner demands often becomes more than budgeted. Speakers discuss how to avoid these pitfalls.

Design-Build for DDC: Yes, It Works! No, It Doesn't! A Healthy Debate by Two Experts, 2:30-3:30 p.m., Tuesday, Jan. 26. Those who recommend design build for every situation need to be careful. When it comes to direct digital controls (DDC), design build may not be the best solution. Some general contractors claim that the controls subcontractor is no different than the drywall subcontractor, and if a design build delivery method works for one, it should work for all. One speaker in this session feels strongly that a design build scenario is the best solution for today's DDC systems, while the other speaker begs to differ.

How Does the Criterion Engineer's Role Affect the Design Build Contractor's and Design Build Engineer's Roles during All Phases of a Design Build Project?, 3:45-5:15 p.m., Tuesday, Jan. 26. Building owners often retain a criterion engineer to establish the initial design criteria for a project. The engineer creates documents that are handed off to a design build contractor. After this, the role of the engineer can vary. This seminar discusses issues that can arise as the owner and design build contractor interpret the bridging documents and how open or closed a line of communication is with the engineer during all phases of a design build project.

ASHRAE Celebrates Future of Engineering Innovation as Solar Decathlon Sponsor

ATLANTA – Innovative systems and interaction with future leaders of the built environment industry were among the highlights for ASHRAE members who took part in the recent U.S. Department of Energy Solar Decathlon. As a sponsor, ASHRAE helped fund events at the Decathlon, which took place Oct. 8-18, 2015, at Orange County Great Park in Irvine, Calif. ASHRAE has been involved in the event for some 10 years. The Decathlon challenges collegiate teams to design, build and operate solar-powered houses that are cost-effective, energy-efficient and attractive. Stevens Institute of Technology won top honors overall, sweeping all four juried categories, by designing, building, and operating the most cost-effective, energy-efficient and attractive solar powered house. ASHRAE provided a judge on the engineering jury, with other juries focused on architecture, market appeal and communications. Ginger Scoggins, P.E., is ASHRAE Region IV director and regional chair on the Board of Directors. Michael J. Brandemuehl, Ph.D., P.E., a former director-at-large on the ASHRAE Board of Directors also served as a judge.

"It was extremely enjoyable," Scoggins said. "The enthusiasm of the students and the systems that they included in their houses were very innovative! These kids worked on these houses for two years and raised money to cover the costs of construction and shipment, which ran in the \$300,000 range for most of the homes."

Scoggins said some of the innovative systems she saw included:

- Houses designed to withstand natural disasters (100 percent waterproof up to 4' above grade)
- Windows with the same thermal resistance as typical building walls
- Grey water and rainwater collection and treatment systems, some with heat recovery
- Radiant heating and cooling systems both floors and ceilings
- Evaporative cooling systems that displace and enhance conventional air conditioners
- Lots of heat pump technologies for both water heating and space conditioning
- Phase change material for energy storage
- Thermal energy storage using water tanks, including one integrated with rainwater collection
- A freeze tolerant solar water heating system
- Integrated solar PV and water heating equipment
- PV cells integrated into awnings and building glass
- A forward looking electrical system with both AC and DC distribution
- A variety of smart home energy monitoring, control, and dashboard systems

ASHRAE also sponsored a lunch for teams based in its Region X, which included the University of California, Irvine; Chapman University; Irvine Valley College; and Saddleback College.

New Course on Legionella Standard among ASHRAE 2016 Winter Conference Courses

ATLANTA – Guidance on how to reduce the risk of Legionnaires' Disease via a recently published standard will be shared in a new course from ASHRAE at its 2016 Winter Conference. The course is one of 20 courses being presented at the Conference and AHR Expo.

"We've already seen the real-life application of this standard when sections of it where adopted by the New York City Council following a deadly outbreak there," Bill Pearson, course instructor who serves on the Standard 188 committee. "This course is designed to help prevent future outbreaks by showing the industry how to navigate the standard."

The Conference takes place Jan. 23-27, Orlando Hilton, while the ASHRAE co-sponsored AHR Expo takes place Jan. 25-27, next door at the Orange County Convention Center. To register for the ASHRAE Conference, which includes free access to the Expo, visit www.ashrae.org/orlando. ASHRAE Learning Institute (ALI) is offering 20 high-quality, authoritative Professional Development Seminars and Short Courses. ALI courses provide training with real-world experiences for immediate application. Attendees can earn continuing education credits. For more information or to register, visit www.ashrae.org/orlandocourses. The new half-day Short Course, ASHRAE Standard 188-2015 – Successfully Managing the Risk of Legionellosis, focuses on ANSI/ASHRAE Standard 188-2015, Legionellosis: Risk Management for Building Water Systems, which establishes the minimum legionellosis risk management requirements for the design, construction, installation, commissioning, operation, maintenance and service of centralized building water systems and components. Michael Patton, a member of the Standard 188 committee, also is an instructor of the course.

Attendees will learn how to use and comply with the standard; where Legionella propagates and who is at high risk for legionellosis; how to create a workable Legionella water management plan; and the responsibilities of project engineers and designers. The five full-day Professional Development Seminars being offered are:

Commercial Building Energy Audits Commissioning Process in New & Existing Buildings Designing HVAC Systems to Control Noise & Vibration Energy Modeling Best Practices and Applications (Co-sponsored by IBPSA-USA) Operations and Maintenance of High-Performance Buildings

The 15 Half-Day Short Courses are:

Laboratory Design: The Basics and Beyond Troubleshooting Humidity Control Problems Understanding & Designing Dedicated Outdoor Air Systems Variable Refrigerant Flow System Design & Application Air-to-Air Energy Recovery Applications: Best Practices Application of Standard 62.1-2013 (ANSI/ASHRAE Standard 62.1-2010, Ventilation for Acceptable Indoor Air Quality): Multiple Spaces Equations & Spreadsheets Building Demand Response & the Coming Smart Grid Energy Management Best Practices Avoiding IAQ Problems

Commissioning Process & ASHRAE Standard 202 (ANSI/ASHRAE Standard 202-2013, Commissioning Process for Buildings and Systems)

Complying with Standard 90.1-2013 (ANSI/ASHRAE/IES Standard 90.1-2013, Energy Standard for Buildings Except Low-Rise Residential Buildings): HVAC/Mechanical

Evaluation and Control of Legionella in Building Water Systems Exceeding Standard 90.1-2013 to Meet LEED Requirements IT Equipment Design Evolution & Data Center Operation Optimization Designing High-Performance Healthcare HVAC Systems

ASHRAE's HVAC Design Training

HVAC Design: Level I—Essentials

ASHRAE's *HVAC Design: Level I — Essentials* training provides intensive, practical training ideal for recent technology or engineering school graduates, engineers new to the HVAC field, those who need a refresher in new technologies, and facility managers, sales representatives and others who need to gain an understanding of HVAC systems.

In three days, gain practical skills and knowledge in designing, installing and maintaining HVAC systems that can be put to immediate use. The training provides real-world examples of HVAC systems, including calculations of heating and cooling loads, ventilation and diffuser selection using the renovated ASHRAE Headquarters building as a living lab. Engineered drawings of the ASHRAE Headquarters renovations will be incorporated to expose attendees to plan reading and a graphical understanding of system design.

Training Topics:

- · Fundamentals
- Heating/Cooling Load Calculation
- · System Selections
- · HVAC System and Components
- · Cooling System
- · Basic Design of Hydronic Systems
- · Basic Design of Air Systems
- Control/BAS
- Sustainable Design
- · Project Management and Other Soft Skills
- · Introduction to Technical Sales

HVAC Design: Level 1—Essentials

When: Feb. 22-24, 2016 | Houston, TX

Cost: \$1,264 (ASHRAE Member: \$1,009)

Company Discount: Enroll 3 or more participants from the same company at the same time and SAVE!

REGISTER

Your Instructor

ASHRAE Learning Institute

Seminars & Courses at ASHRAE's Winter Conference in Orlando, FL

2 WAYS TO REGISTER

Internet: www.ashrae.org/orlandocourses

Phone: Call 1-800-527-4723 (US and Canada) or 404-636-8400 (worldwide)

Full-Day Professional Development Seminars

\$485/\$395 ASHRAE Member -- Earn 6 PDHs/AIA LUs or .6 CEUs

Commercial Building Energy Audits

Saturday, January 23, 2016 – 8:00 a.m. to 3:00 p.m.

Commissioning Process in New & Existing Buildings Saturday, January 23, 2016 – 8:00 a.m. to 3:00 p.m.

Designing HVAC Systems to Control Noise & Vibrations Saturday, January 23, 2016 – 8:00 a.m. to 3:00 p.m. **Energy Modeling Best Practices and Applications** Tuesday, January 26, 2016 – 9:00 a.m. to 4:00 p.m.

Operations & Maintenance of High-Performance Buildings Tuesday, January 26, 2016 – 9:00 a.m. to 4:00 p.m.

Half-Day Short Courses

\$159/\$119 ASHRAE Member -- Earn 3 PDHs/AIA LUs or .3 CEUs

Laboratory Design: The Basics and Beyond Sunday, January 24, 2016 – 3:30 p.m. to 6:30 p.m.

Troubleshooting Humidity Control Problems Sunday, January 24, 2016 – 3:30 p.m. to 6:30 p.m.

Understanding & Designing Dedicated Outdoor Air Systems Sunday, January 24, 2016 – 3:30 p.m. to 6:30 p.m.

Variable Refrigerant Flow System Design & Applications NEW! Sunday, January 24, 2016 – 3:30 p.m. to 6:30 p.m.

Air-to-Air Energy Recovery Applications: Best Practices Monday, January 25, 2016 – 8:30 a.m. to 11:30 a.m.

Applications of Standard 62.1-2013 Monday, January 25, 2016 – 8:30 a.m. to 11:30 a.m.

Building Demand Response & the Coming Smart Grid Monday, January 25, 2016 – 8:30 a.m. to 11:30 a.m.

Energy Management Best Practices Monday, January 25, 2016 – 8:30 a.m. to 11:30 a.m. Advoiding IAQ Problems Monday, January 25, 2016 – 2:45 p.m. to 5:45 p.m.

Commissioning Process & ASHRAE Standard 202 Monday, January 25, 2016 – 2:45 p.m. to 5:45 p.m.

Complying with Standard 90.1-2013: HVAC/Mechanical Monday, January 25, 2016 – 2:45 p.m. to 5:45 p.m.

ASHRAE Standard 188-2015 – Successfully Managing the Risk of Legionellosis NEW! Monday, January 25, 2016 – 2:45 p.m. to 5:45 p.m.

Exceeding Standard 90.1-2013 to Meet LEED Requirements Monday, January 26, 2016 – 9:00 a.m. to 12:00 p.m.

IT Equipment Design Evolution & Data Center Operation Optimization Monday, January 26, 2016 – 9:00 a.m. to 12:00 p.m.

Designing High-Performance Healthcare HVAC Monday, January 26, 2016 – 1:00 p.m. to 4:00 p.m.

ASHRAE HVAC Design Training

2 Courses, 5 Days of Intense Instruction

Atlanta • Halifax • Hong Kong • Houston • Kuala Lumpur

Miami • Minneapolis • San Francisco • Vancouver

HVAC Design: Level I – Essentials - Registration is \$1,264 (\$1,009 ASHRAE Member)

Gain practical skills and knowledge in designing and maintaining HVAC systems that can be put to immediate use. The training provides real-world examples of HVAC systems, including calculations of heating and cooling loads, ventilation and diffuser selection using the newly renovated ASHRAE Headquarters building as a living lab.

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 <u>www.ashrae.org/hvactraining</u> to register.

ASHRAE RESEARCH: HELPING YOU SURVIVE WINTER

Research Projects Keeping You Warm This Winter

1196-RP - Develop Software to Calculate the Application Seasonal Efficiency of Commercial Space Heating Boiler Systems Based on ASHRAE Standard 155P 1267-RP - Development of an ASHRAE Design Manual for District Heating and Cooling Systems 1322-RP - Productivity and Perception Based Evaluation of Indoor Noise 1385-RP - Development of Design Tools for Surface Water Heat Pump Systems (SWHP) 1458-RP - Modeling Person-to-Person Contaminant Transport in a Mechanical Ventilation Space 1478-RP - Measuring Air-tightness of Mid- and High-rise Non-residential Buildings 1504-RP - Extension of the Clothing Insulation Database for Standard 55 and ISO 7730 to Provide data for Non-Western Clothing Ensembles 1544-RP - Establishing Benchmark Levels and Patterns of Commercial Building Hot Water Use 1550-RP - Thermal Performance of Insulating Coatings on Piping and Ductwork 1564-RP - Measurement of Oil Retention in the Microchannel Heat Exchanger 1613-RP - Update Climatic Design Data in Chapter 14 of the 2013 Handbook of Fundamentals 1624-RP - Effective Energy-Efficient School Classroom Ventilation for Temperate Zones 1646-RP - Measurements of Thermal Conductivity of Pipe Insulations at Below Ambient Temperatures and in Wet Condensing Conditions with Moisture Ingress 1674-RP - Research to Support the Revision to Ground Source Heat Pump: Design of Geothermal Systems for Commercial and Institutional Buildings (ASHRAE 1997) 1699-RP - Update Climatic Design Data in Chapter 14 of the 2017 Handbook of Fundamentals GIA 13-14 - Air-Side Economizer Low-Limits Effect on Energy and Thermal Comfort GIA 13-14 - Assessing the Performance of Buildings Due to Extreme Weather and Climate Change GIA 14-15 - Development and evaluation of novel membrane liquid desiccant air conditioning systems for hot-humid and cold-dry climates GIA 14-15 - Integrating thermal energy storage into hybrid solar assisted heat pump systems for residential houses in cold climate GIA 14-15 - Numerical and experimental investigation of control schemes for small scale ammonia water absorption heat pumps

For more information on these projects, visit:

https://www.ashrae.org/standards-research--technology/research#researchproject

We are looking for an energetic and motivated individual who is looking to make significant contributions to our team!

Company Overview:

We are a rapidly growing and industry leading company in Southwestern Ontario that develops and manufactures HVAC equipment across North America.

Position Summary:

We are looking for a Mechanical Engineer who has HVAC experience with the desire and motivation to work in the design and application of new product, as well as offer sound engineering deliverables, support and leadership within the Engineering Department and throughout the company.

Job Description:

- Aid in the design of quality HVAC equipment using best practice to support long term reliability while also providing economical production costs and maintaining regulatory requirements.
- Provide application engineering support on various projects, providing timely and cost effective results.
- Understand all safety and performance codes and standards such as CSA, UL, ASHRAE and AHRI.
- Provide deliverables- Calculations, specifications, reports, standards, design criteria, etc.
- Perform research for future technologies and product development while applying energy efficient technologies and theories in a practical way.
- Assist in establishing and maintaining engineering standards.
- Aid in the development and maintenance of supporting documentation on performance, efficiencies and specifications.
- Be a leader and valuable team member within the company.
- Complete other duties as directed by the Manager of Engineering.

Qualifications:

- Have P.E. License or HVAC experience as a Mechanical Engineer or Technologist.
- HVAC design experience, with excellent engineering judgment.
- Knowledge of HVAC related codes, standards and certification requirements.
- Team Player with a focus on quality.
- Self-motivated with plenty of ambition and drive.
- Efficient time management and organizational skills.
- Excellent oral and written communication skills.
- Ability to excel in a fast paced, deadline driven environment.

What this job offers:

This job offers a highly skilled, highly motivated person the opportunity of leadership and contribution within a rapidly growing and aggressive company. Already a leader in the target market, we are continuing to focus on engineering with quality and service in mind, and with an emphasis on energy efficiencies and "green" technologies. The candidate will be a part of new ideas and development and will have every opportunity to make significant contributions as the company continues to grow. This is a permanent full time position at our office in Tillsonburg, Ontario. It includes a company paid benefit plan and a competitive wage package.

If you are the type of person we seek, please contact us immediately.

Please forward your resume to Cliff Mabee: cliff.mabee@systemair.net