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ASHRAE LONDON CANADA CHAPTER #116

TOPIC:

Fume Hood Containment

Presenter:

Deni Antonecchia, P.Eng Executive Vice President Preston Phipps

Monday February 26, 2024

5:00pm to 6:00pm = Social; 6:00pm to 7:00pm = Dinner; 7:00pm = Presentation

The Clubhouse at The Factory 100 Kellogg Lane



Registration Link:

https://forms.gle/3JB6rFaK3VpL2wUr8

\$85 - Members | \$25 - Students



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February Topic

Fume Hood Containment

Fume Hood Containment: understand how hoods perform in dynamic environments and the importance of certification and validation.

February Presenter

Deni Antonecchia, P.Eng Executive Vice President Preston Phipps

Deni Antonecchia is a mechanical engineer and a member of the Québec Order of Engineers having obtained his undergraduate Mechanical Engineering degree from Concordia University (Montreal, QC) as well as his graduate diploma in Management from McGill University (Montreal, QC)



As Executive Vice-President for Institutional Sales at Preston Phipps Inc., Deni leads and supports the sales activities from coast-to-coast and is responsible for all product offerings for the Canadian institutional market. He is also heavily involved in the day-to-day financial and operational activities of the business.

Deni has been involved in the laboratory market since 2005. With significant experience in critical air applications and HVAC systems, his expertise now includes lab environment functionality, more specifically with regards to fume hoods and casework. With this, he has been involved in several high-profile lab projects across the country and continues to lend his expertise in designing the "labs of tomorrow" with a sustainable approach in mind. From 2015 to 2022, Deni was heavily involved within the Montreal chapter of Sustainable Labs Canada and served as vice-president of that committee for 2 years. Today, he continues to be engaged in the organization as an active member.

Outside of the "lab world", Deni is knowledgeable in HVAC and thermal systems, more particularly when it comes to ventilation systems, steam/condensate management and hydronic loops. With almost 20 years of experience in the field, he can design, troubleshoot, and provide sound input when it comes to numerous thermodynamic and heat transfer applications. Deni strongly believes in knowledge sharing.

For over 15 years, he has been vital contributor to Preston Phipps' accredited Steam, Hot Water and Laboratory Seminars by continuing to play a key role in developing the course content and by participating as a presenter.



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2023-2024 Chapter President's Message

To our local membership,

The 2024 ASHRAE winter conference was just concluded and saw a large gathering of industry professionals with thousands in attendance! There was a heavy theme on topics such as decarbonization, climate change, and AI use in the HVACR world. The Hamilton chapter won a decarbonization initiative challenge for a project on a multi-plenum fan array coupled with double skin facades and advanced carbon bio-fixation, this is an exciting prize for them and all of us in the region are excited for them, congratulations Hamilton!

Decarbonization, a central theme of the conference, remains at the forefront of ASHRAE's mission. It is imperative that we continue to explore and implement technologies and strategies that minimize our carbon footprint, contributing to a more sustainable and resilient built environment. We will continue to try and recruit speakers on this topic.

The golf tournament is going to be held in the spring again and we will be returning to Fire Rock Golf course! Stay tuned for details.

We will be gearing up for our research donation drive to support Canada research. If you are an individual or company who would be interested in helping support the advancement of ASHRAE's mission while keeping your donated dollars in Canada, please let us know!

If any members are interested to volunteer for the chapter, please contact me at jeff.armstrong@trane.com or anyone listed on the board!

Jeff Armstrong, P.Eng.



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Professional Development

Need hours for your professional development requirements? Be sure to attend a chapter meeting. Professional Engineers Ontario requires members to have yearly professional development training recorded through the Practice Evaluation and Knowledge (PEAK) program. Other groups may also require continuing education.

Chapter Upcoming Meetings

Monday February 26th - Chapter Technical Meeting

Topic: Fume Hood Containment Speaker: Deni Antonecchia, P.Eng

Monday March 18th

*** be sure to check web site for latest information ***

http://LondonCanada.AshraeChapters.org

ASHRAE Society Engineering Job Board

The ASHRAE society Engineering job is a publicly accessible job board where all companies can create job postings for HVACR related jobs. The resource is available at https://jobs.ashrae.org/





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ASHRAE RESEARCH

Hello ASHRAE London Members,

My name is Glenn Kernaghan and I am the Chapter Research Promotion Chair for this year. Our Research Promotion goal for this year is \$10,000 and look forward to reaching this goal through your continued support.

This year we will be recognizing donors at a RP Donor Recognition meeting by displaying individual and company donors prior to one of the technical presentations. Donors will also be recognized in the monthly newsletter and on the London Chapter website. To donate online please visit: http://www.ashrae.com/donate

Current Donors:

Glenn Kernaghan, Aaron Hampel, Tom Deslippe, Richard Hammond

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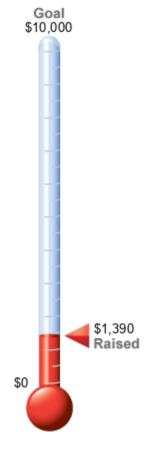
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Contribution Levels	Individual	Company
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Major Donor (Silver)	\$1000 - \$2,499	\$1000 - \$2,499

If any questions, please contact:

Glenn Kernaghan

glennkernaghan@gmail.com





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<u>ASHRAE Concludes Chicago Winter Conference and AHR Expo With Impressive Attendance and</u> Accelerated Decarbonization Action

ATLANTA (January 26, 2024) – The 2024 ASHRAE Winter Conference proved to be a dynamic convergence of HVAC&R industry leaders, experts and professionals with a central focus on critical topics such as decarbonization, climate change, artificial intelligence and more.

Held from January 20-24 in Chicago, the conference saw a robust gathering of industry professionals with nearly 3,800 people registered to attend. The conference included 458 committee meetings, 125 technical sessions and numerous engaging social events and activities. The AHR Expo, spanning an expansive 527,000 net square feet of exhibit space at McCormick Place, played host to more than 1,860 exhibitors, including 344 international exhibitors, unveiling cutting-edge HVAC&R technologies, products and services. An estimated 50,000 people attended the Expo over the course of three days.

The top three most attended Winter Conference sessions are detailed below:

Seminar 13: Thermal Energy Storage: A Critical Strategy for Decarbonization

Seminar 19: LIVESTREAM: Beneficial Electrification

Seminar 8: The Logical Way to Tap Into Decarbonization: Hydronic District Energy Systems

At the Conference, 2023-24 ASHRAE President Ginger Scoggins shared updates pertaining to the Society's current theme, "Challenge Accepted: Tackling the Climate Crisis" during her State of the Society address.

"We built on a declaration to be a collective body of problem solvers in tackling the global climate crisis," Scoggins said. "ASHRAE regions and chapters showed an exemplary commitment not only to understanding how climate change affects building planning, design, construction and operation, but they volunteered IMMENSE time and expertise to develop resources to support actionable, wide-scale building decarbonization practices. YOU recognized the challenge and YOU found ways to accept responsibility for making changes in your activities to make a difference. Big or small, all changes help our efforts and we appreciate you."

Among many topics, Scoggins spoke on the expanding interest in ASHRAE's decarbonization conferences, as well as support from the U.S. federal government for ASHRAE's recently published updated energy efficiency standard for existing building, Standard 100.

Scoggin's full State of the Society address manuscript and presentation can be found at ashrae.org/president.

ASHRAE welcomed Dr. Carolyn Snyder, Deputy Assistant Secretary for Buildings and Industry for the U.S. Department of Energy to the President's Luncheon. Dr. Snyder spoke on ASHRAE's building decarbonization leadership.

"I want to share my deep gratitude and appreciate from the DOE for all of the work that ASHRAE does and for your longstanding close partnership with our agency," Snyder said. "Last November, our Deputy Secretary announced our new national building decarbonization strategy for the United States. We need to prioritize and center around equity, affordability and resilience — all key themes that we see throughout this conference and areas where you have been leading for decades. It's going to require energy efficiency gains estimated at 35% by 2035 and 50% by 2050. Despite all the massive energy efficiency savings we have to date in our country, there's so much more that we need to do to achieve these targets. It's as if we wrote this blueprint looking at your conference agenda for this week. You are already leaders across those topics. What you're doing here today in your organization is making a real impact for our country today, but more importantly it's making an immense impact in our buildings, in our communities and in our homes for decades to come and for our children and grandchildren."



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President Scoggins announced the winners of the 2023 Decarbonization Challenge, a grant program to assist ASHRAE chapters in implementing decarbonization projects in their communities. An impressive 43 applications were submitted and nine chapters will receive grants ranging between \$2,000 to \$10,000 for a total of \$65,850, with additional matching funds from partnering organizations of the selected projects. The projected carbon savings will be on the order of 2.3 million kilograms of CO2 over the life cycles of the selected projects based on submitted calculations.

Decarbonization Challenge winners and photos can be found at ashrae.org/DecarbChallengeFund.

Further emphasizing the Society's commitment to solving the technical challenges of building decarbonization, the board of directors approved the transition of the ASHRAE Task Force for Building Decarbonization from an ad hoc committee (TFBD) to the permanent Center of Excellence for Building Decarbonization.

ASHRAE signed a memorandum of understanding with Dubai-headquartered district cooling service provider Empower for the development of a unified and globally approved district cooling standard. The Society also signed a new agreement with OzonAction under the United Nations Environment Programme (UNEP) for a 2024-2025 Work Plan, themed "Refrigerant Management for Climate Protection and Energy Efficiency in Developing Economies." The plan's emphasis is on making tools and programs for sound management of refrigerants available and accessible to stakeholders in developing countries.

The remarkable accomplishments of ASHRAE members took center stage at an honors and awards program. ASHRAE's Executive Vice President and Secretary, Jeff Littleton, also provided updates on the Society's ongoing initiatives, highlighting its 130 years of service to the built environment.

"In the year 2150, 130 years into the future, how will ASHRAE members judge our Society's work today? Will this decade be the tipping point for building decarbonization? Will buildings truly protect occupants from indoor and outdoor health threats? In 2150, will ASHRAE's vision of healthy and sustainable built environment for all be realized? I believe the answer is a resounding yes. We have the talent, we have the wisdom, we have the passion. In 2150, ASHRAE members will look back on you — on us here today — and marvel at the pace of progress," said Littleton.

ASHRAE Learning Institute (ALI) offered 20 courses. New courses were as follows:

Starting the Path to Net-Zero Buildings Using ASHRAE 90.1-2022

Understanding ASHRAE Standard 241 Control of Infectious Aerosols – Background, Overview, and Key Requirements V in HVAC – Health and Energy Improvements Using the Indoor Air Quality Procedures

Is Your Building Ready? Applying ASHRAE Standard 241 Control of Infectious Aerosols – Facility Assessment, Planning, and Implementation

All registered attendees, both in-person and virtual, will have access to the virtual conference platform during the conference and 12 months post-conference.

The 2024 ASHRAE Annual Conference will take place June 22-26 in Indianapolis, Indiana. The 2025 Winter Conference will take place February 8-12, 2025 and the AHR Expo, February 10-12, 2025 in Orlando, Florida.

ASHRAE Announces Nominees for 2024-25 Slate of Officers and Directors

ATLANTA (January 22, 2024) – ASHRAE is pleased to announce its nominees for the 2024-25 slate of officers and directors.

Nominations for officers and directors were made by the ASHRAE Nominating Committee from a list recommended by individual members and from Chapters Regional Conferences.

The 2024-25 nominees are as follows:



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President-Elect:

Bill McQuade, P.E., Fellow ASHRAE, LEED AP

Treasurer:

Sarah Maston, PE, BCxP, LEED AP

Vice Presidents:

Devin Abellon, P.E.

Ken Fulk, P.E., Life Member ASHRAE

Directors and Regional Chairs:

Charles Bertuch, P.E. (Region I)

Genevieve Lussier (Region II)

Sherry Abbott-Adkins (Region III)

Rob Craddock (Region XI)

Bassel Anbari, P.E. (Region-at-Large)

Directors-at-Large:

Carrie Brown, Ph.D.

Patrick Marks, P.E.

David Yashar, Ph.D.

Alternate Director-at-Large:

Suzanne LeViseur, P.E., HBDP, Fellow ASHRAE

ASHRAE members will vote on the nominees via electronic ballot in May. M. Dennis Knight, P.E., BEMP, Fellow Life Member ASHRAE, will serve as ASHRAE President for the 2024-25 Society Year.

For more information on the 2024-25 slate of officers and directors, visit ashrae.org/2024-2025slate.

ASHRAE Releases Guide on the Role of Grid Interactivity in Decarbonization

ATLANTA (**November 2, 2023**) – ASHRAE has released a new guide focusing on the critical role of grid interactivity in the decarbonization process.

The <u>Grid-Interactive Buildings for Decarbonization: Design and Operation Resource Guide</u> is the second in a series of guides developed by the <u>ASHRAE Task Force For Building Decarbonization (TFBD)</u> and provides information on maximizing carbon reduction through buildings' interaction with the electric power grid.

"Grid-interactive buildings actively engage with the energy grid. They utilize smart technologies, renewable energy sources, and energy storage systems to optimize energy consumption and generation. This allows them to respond in real-time to grid signals, thereby reducing overall demand and GHG emissions," said ASHRAE TFBD chair Kent Peterson P.E., Presidential Fellow. "Integrating buildings with the electrical grid is a critical component in the decarbonization process. It's an emerging focus for building professionals, and ASHRAE is thrilled to provide new guidance as we collectively work towards a more sustainable, resilient, and energy-efficient built environment."

Decarbonizing the electric grid necessitates a fundamental shift towards a dynamic, two-way relationship between buildings and the grid. This approach enables buildings to respond flexibly to grid conditions, including time-varying carbon emissions rates. In recent years, the significance of this two-way communication has grown, driven by the integration of renewable energy sources, grid reliability concerns and the impact of extreme weather conditions. These factors have prompted utilities, grid operators and the building community to reassess the role buildings can play in supporting grid reliability and decarbonization by reshaping their energy consumption patterns.



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The guide offers best practices, design considerations and operational guidelines to target the three primary value streams of grid integration:

- 1. **Reduced Carbon Emissions:** Learn how to make significant contributions to reducing carbon emissions through smart building-grid interaction.
- 2. **Cost Savings:** Discover strategies to optimize energy usage and save on operational costs.
- 3. **Resiliency:** Enhance your building's ability to withstand and adapt to changing grid conditions, ensuring uninterrupted operations.

While the guide primarily focuses on commercial and multifamily buildings, it also includes relevant aspects for the residential and industrial sectors. In addition to design guidance, the resource guide provides operational recommendations for both new and existing buildings, empowering them to optimize their available demand flexibility.

The Grid-Interactive Buildings for Decarbonization: Design and Operation Resource Guide can be purchased from the <u>ASHRAE Bookstore</u> or by contacting ASHRAE Customer Service by phone at 1-800-527-4723 (United States and Canada),

The ASHRAE Task Force For Building Decarbonization (TFBD) webpage includes technical resources, information, videos and publications to expedite the adoption of climate change mitigation policies and reaffirms the Society's goals stated in the ASHRAE Vision 2020 report, approved by ASHRAE's board of directors, as well as the <u>ASHRAE Position Document on Building Decarbonization</u>, to achieve net zero GHG emissions in operation for all new buildings by 2030.

ASHRAE will host the seminar "Grid-Interactive Buildings for a Decarbonized World" where the guide, as well as project case studies that helped in the guide's development, will be presented. The seminar will take place at the 2024 ASHRAE Winter Conference, January 20-24, 2024 in Chicago. Conference registration is open now.

ASHRAE Pocket Guide 10th Edition

404-636-8400 (worldwide) or fax 678-539-2129.

Now available in the ASHRAE Bookstore! The ASHRAE Pocket Guide 10th edition serves as a user-friendly, offline reference for engineers without easy access to complete ASHRAE Handbook volumes. This latest edition has been revised to include updates from the four current volumes of the ASHRAE Handbook series, from the 2019 editions of ASHRAE Standards 15, 34, 62.1, 62.2, and 90.1, and the 2020 edition of Standard 55. Learn more about what is included in the 10th edition and purchase your copy today.

https://www.ashrae.org/technical-resources/bookstore/ashrae-pocket-guide-for-air-conditioning-heating-ventilation-refrigeration-10th-ed

New ASHRAE Certification Study Guide

Now available in the ASHRAE Bookstore

The NEW **Certification Study Guide: Building Commissioning Professional (BCxP)** joins the growing suite of ASHRAE Certification tools to help you reach your professional goals.

Looking for something else? Also available are the **Certification Study Guides for Certified HVAC Designer (CHD)** and **Building Energy Modeling Professional (BEMP)**.



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Tune-in to the ASHRAE Journal Podcast

Tune into conversations between leading ASHRAE experts as they discuss what HVAC engineers need to know to design better systems and grow the HVAC&R industry. Available on all podcast platforms.

https://www.ashrae.org/news/ashraejournal/ashrae-journal-podcast