

DATE:

Tuesday April 19, 2022 16:30 – 21:00 Hrs EST

LOCATION: Centurion Conference and Convention Center

PROGRAM: District Energy Systems in the Energy Services Acquisition Program (ESAP)

DESCRIPTION:

The Energy Services Acquisition Program (ESAP) is a major crown project at Public Services and Procurement Canada (PSPC) supporting the Government of Canada's goal to reduce greenhouse gas (GHG) emissions from its buildings and fleet to reach net-zero carbon operations by 2050.

In the National Capital Region 80 buildings are heated and 67 are cooled through ESAP's District Energy Systems (DES). However, this existing infrastructure is reaching the end of its service life. The investment in modern technology will result in an estimated cost avoidance of more than \$400 million over the next 35 years.

The modernization will involve the conversion of the DES's to low temperature hot water for heating, and electric chillers for cooling. It also involves the implementation of the ISO 50001 Energy Management System, as well as Smart Buildings and Smart Plants programs, which will pinpoint opportunities for operational efficiencies. In addition, ESAP is undertaking the conversion of user buildings to accommodate the low temperature hot water technology.

The potential construction of a facility at a site in Gatineau will provide fuel-switching to hydro-electricity as the preferred carbon-neutral energy source enabling 92% GHG emission reductions on a system basis. Future projects include the expansion of the DES network in downtown Gatineau as well as new geo-exchange installations in Ottawa and Gatineau.

ESAP has already cut GHG emissions by over 30% since 2005 with the goal of 63% reductions by 2025 and will be net-zero by 2030.

SPEAKER: Adam Kurz, P.Eng.

Adam is a Professional Engineer with 25 years experience in the public and private sectors, including facility management, leading HVAC retrofit projects in government laboratory facilities, development of environmental regulations for the oil and gas industry, and most recently district energy systems at Public Services and Procurement Canada (PSPC).

Adam has held various roles in the private sector early in his career, gaining experience in oil and gas well logging, gas turbine overhauls, installation and commissioning, as well as gas turbine test facility design and construction. He joined the public service about 15 years ago, first at Environment and Climate Change Canada before moving to PSPC. Adam holds a B.Sc. in Mechanical Engineering from Queen's University and has been an ASHRAE member since 2011. His current role within the Energy Services Acquisition Program (ESAP) at PSPC is manager of the Smart Energy Program, which is responsible for the implementation of the ISO 50001 Energy Management System as well as the Smart Buildings and Smart Plants programs.

April Meeting Agenda

- 4:30PM-5:30PM Tech Session Topic: Back to Basics: Hydronics Speaker: Joel Primeau
- 5:30PM-6:30PM Social Hour
- 6:30PM-7:30PM Dinner
- 7:30PM-9:00PM Program Topic: District Energy Systems in the Energy Services Acquisition Program (ESAP) Speaker Adam Kurz, P.Eng. Theme Research Promotion

Please register online at link below (below prices for VIRTUAL attendance)

ASHRAE Associate/Affiliate/Membe	er: \$5	ASHRAE Member Guest:	\$10.00
ASHRAE Student:	\$0	Non-Member:	\$10.00

Below prices for IN PERSON attendance

ASHRAE Associate/Affiliate/Member	: \$48	ASHRAE Member Guest:	\$48.00
ASHRAE Student:	\$35	Non-Member:	\$65.00

Meeting 7 - April 19, 2022

TECH SESSION: Back to Basics: Hydronics

 DATE:
 Tuesday April 19, 2022

 16:30 - 17:30 Hrs EST



Governor Joël Primeau 2021-2022 OVC Research Promotion Committee

LOCATION: Centurion Conference and Convention Center

SPEAKER: Joël Primeau, P.Eng., ing., LEED AP, HBDP

DESCRIPTION:

Understanding flow and static pressure in a hydronic system. Sizing pipes. Calculating head loss in a system. Analyzing pump curves and pump selection.



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President's Message

We had a great well attended in person meeting in March with our own Evans Mutua presenting on the City of Ottawa controls system and how they are implementing and using the BACnet standards within our City. We had many new guest and if you know anyone who might enjoy technical topics or is looking for a way to network in industry, please forward the invites or our Social media addresses or direct them to talk with the membership chair Josh Bourbonniere or any of the executive.



E-mail: adrianne.mitani@smithandandersen.com

ASHRAE Society is coming to Canada this summer, see the Annual Conference below but we are very excited to have the summer conference in Toronto this year and we are looking forward to seeing you there in June!

Many people may not be aware, but the Chapter applied for Federal Incorporation November 2020, which does not change most of our day to day of the chapter and provides insulation to the volunteers and board as we have grown over the years to a level that falls under taxation as a not for profit. This has meant a few changes that will be coming but also changes our requirements of how we audit our financials, present them to the chapter and likely rolling the May meeting into our Annual General Meeting potentially with a formal vote to meet our bylaws. If you have any comments or questions, feel free to reach out to me to discuss further. We have a new email address in order to reach the current president so feel free to use: president@ashrae.ottawa.on.ca

Our theme for April is Research Promotion, led by Joel Primeau, who has been reaching out to many people about donation for the year and we are looking forward to recognizing the past year's donors at the meeting for our RP recognition night. RP is a wonderful way to give back to our industry to help with research that is used for updating our standards and handbooks. RP Canada donations also stay with projects within Canada, so you are funding Canadian projects and the development of local technical expertise. Interested in finding out more about local projects? Contact Joel for more information!

As always, a reminder if you are looking at ways to support the chapter and the industry, consider donating to the ASHRAE Research campaign online at any time!

https://ashraeottawa.simplesignup.ca/en/9710/index.php?m=eventSummary_

Take care everyone, and I look forward to seeing you all soon, either virtually or in person!



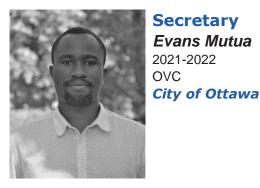
Capital Communiqué

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What You Missed

March 15th, we had the highest in person attendance since March 2020, with 35 in person attendees turning up at the Centurion Conference & Event Center. This was a hybrid meeting with some members attending online.

The tech session was hosted by Joel Primeau, whose topic was 'Integrated Building Design', a holistic approach to building design. Mr. Primeau went on to explain that ultimately, design should be driven by owners, and it is the responsibility of consultants to present the owner with innovative E-mail: Evans.Mutua@ottawa.ca solutions that best meet the owner's requirements. Beyond that, designers



should make to the owner a convincing case for their design intent such that he defends the design through hurdles such as value engineering, which might dilute or altogether defeat sound ideas. If the cost of good engineering design is compared to the cost of building and running a building over its lifetime, and not compared to a potentially less appropriate lower bid, this context could help owners avoid a low-cost design controlling the course of a much greater lifetime expense. Mr. Primeau analogized this to a ship's rudder, which though small in size compared to the vessel, ultimately determines the direction the ship will take. Another great analogy involving a dog and its tail was met with laughter from the audience, but you would have to watch the video on the OVC YouTube channel to find out more.

Chapter President Adrianne Mitani conducted the business session during which she informed attendants of some recent developments among which was a rebranding of 'Women in ASHRAE' to 'Diversity Equity & Inclusion' Committee. She also introduced the Board of Governors and the Executive and as well as providing updates for events including the annual curling bonspiel which didn't happen this year due to the facility being used as a vaccination center. Golf will however proceed as planned on June 21st.

Celine Baribeau welcomed guests to the chapter and Josh Bourbonniere welcomed two new members and encouraged quests who weren't members already to sign up. Joel Primeau gave an update on Research Promotion and Elizabeth Primeau gave an update on Technology Awards. Steve Moons gave an update on nominations, announcing that the chapter will be filling the chapter secretary role as well as two governor positions.

President Adrianne gave an informational presentation titled 'This is ASHRAE', describing ASHRAE's history and functions for new members but also existing members to familiarize themselves with the organization. Before the program speaker took to the stage, the draw for the night's raffle to raise funds for Research Promotion was done and the winner was Joel Primeau, who won 4 tickets to the Ottawa Senators and Winnipeg Jets hockey game on April 10th.

The program meeting was delivered by yours truly. I had the honor of presenting a synopsis of the City-Wide Building Automation System that the City of Ottawa has developed over the course of more than a decade. Based on the principles of ASHRAE Standard 135 (BACnet), the Building Engineering and Energy Management (BEEM) department has managed to connect most city buildings to a modern BAS system that works hard to keep occupied spaces comfortable, save energy dollars and extend mechanical equipment life. I gave a quick history of how the system came to be, the challenges that were faced in the outset, how they were addressed and where we are today. Despite Mr. Primeau being quite the tough act to follow, the audience was keen and attentive, and some interesting (and challenging) guestions were asked and answered. Thanks to Joel for the presentation tips. If your appetite for BAS is already whetted, please visit our YouTube channel to see the rest of the presentation.



Membership Update

I would like to introduce and welcome the following new members:

- Dr. Mitra Bahri
- Maxime St-Jacques

At any time, if you have any questions or comments regarding your ASHRAE membership, please do not hesitate to contact me. Thank you all for the continued support and participation with your local ASHRAE chapter during these times. Wishing everyone a safe and happy holiday season. Looking forward to seeing everyone at the next ASHRAE meeting in April.



Committee Chair Josh

Bourbonniere 2021-2022 OVC Membership Committee Chair TRANE

E-mail: josh.bourbonniere@trane.com

Student Activity

This year has not been without its challenges. Student activities were severely hindered by the pandemic and related restrictions. With that in mind, we've been keeping in touch electronically with our students and keeping them informed regarding upcoming activities and learning opportunities.

Recently, ASHRAE OVC took part in a career fair. The career fair took place virtually and we are waiting for the final data on number of attendees from our area.



Committee Chair Noah Goddard 2021-2022 OVC Student Activities Chair Longhill Energy

E-mail: noahg@longhill.ca

Mark Fly also hosted a special student's presentation prior to the previous chapter meeting. Due to campus restrictions, the meeting was also held virtually. There was a good amount of interest, but it would have been nice to see a few more people in attendance.

Next on the list for student activities is the Ottawa Region Science Fair taking place this week and next. It has been a tradition for the OVC to take part in the judging. This year will be no exception. Jayson Bursill and Noah Goddard will continue to represent our chapter in the local science community.



News Update

Check out ASHRAE's Call for Abstracts for the 2023 HVAC Cold Climate Conference:

Abstracts are being accepted for the ASHRAE and SCANVAC HVAC Cold Climate Conference 2023, to be held in Anchorage, Alaska, March 6 – 8, 2023, at the Marriott Anchorage Downtown.

This conference will address unique challenges and solutions for climate change in cold and arctic communities.

"Net-zero energy and sustainability goals pose special challenges for cold climates, climates with large swings in temperature and where shifting weather patterns result in colder temperatures in areas where winters are typically mild," said Erich Binder, HVAC Cold Climate Conference 2023 chair. "Harmonizing human comfort with the climatic realities of these environments is a balancing act, and strategic design is key to building, commissioning and operating efficient and long-lasting cold-climate structures."

Find out the topics and subtopics that are being focused on here:

ASHRAE Issues Call for Abstracts for 2023 HVAC Cold Climate Conference

YEA Update

Calling all ASHRAE Members. It's been long overdue to get people together in person. With mask mandates being lifted we wanted to get people back in the social spirit. Thursday April 21st we will be throwing it back to Tailgators like it's 2018.

Show up for friendly faces, drinks, appetizers, and pool. Come on out between 4:30pm and 7:30pm to Tailgators at 1642 Merivale Rd. \$10 for ASHRAE members, \$15 for Non-members.



Committee Chair Jeremy Strong 2021-2022 OVC YEA Johnson Controls

E-mail: jeremy.strong@jci.com

Proceeds will go to cover the costs of pool and appetizers, any profits will go to ASHRAE research. We have yet to secure a sponsor for this event, please reach out if your company is interested.

Please see below link for registration. Hope to see lots of you out there.

https://ashraeottawa.simplesignup.ca/en/11228/index.php?m=eventsList





E-mail: elikem.wotortsi@stantec.com

Research Promotion

THANKS TO ALL OUR DONORS TO DATE!

Thank you all for your continued support and donations towards our annual RP campaign. Many of you have agreed to increase your donation amount from previous years to reflect the rising costs and our ever-growing need for better research in our industry.

In the past, we had distributed plaques and coins to our special donors. With Covid and the

interruption of in-person monthly meetings, our usual process has been disrupted. We have received the coins from two years ago and should be receiving last year's coins shortly, and we will ensure that you receive them. A special invitation to the May in-person monthly meeting will be sent to our last two years' donors to come collect their RP awards. If you cannot attend the meeting, we will arrange to deliver the coins or plaques.

Our campaign is nearing its end and we have many more dollars to collect to reach our ambitious goal; canvassers will continue our phone calls, we thank you for your generosity in advance.

ASHRAE Partner \$5000 - \$9999	ASHRAE Associate \$2500 - \$4999	Major Donor Silver \$1000 - \$2499		
	DILFO Mechanical Longhill Energy	Ainsworth TotalHVAC Trane EH Price		
Major Donor Bronze \$500 - \$999	Major Donor Antique \$250 - \$499	Honor Roll Individuals \$100 - \$249		
Clément Marchand O'Dell & Associates Parson Refrigeration LTD.	Engineered Air TA Morrison Joël Primeau Terry Vivyurka	Céline Baribeau Jayson Bursill Joe Della Valle Ryan Dickinson Carolyn Kerr Adrianne Mitani Matthew Moore Steve Moons Evans Mutua Abbey Saunders Mike Swayne Trevor Thomson Frank Bann		
Special Thanks to the following donors for their contribution: Ross McLaren, Elizabeth Primeau, Jean-Yves Côté, Richard Lemelin, David Fanset, Chris Brown, Jeff Jarvis, Stephen Harrison				

\$37,500 \$14,890 Raised

Goal

Joel Primeau

ASHRAE RP Chair

ASHRAE Society link: https://xp20.ashrae.org/secure/researchpromotion/rp.html

ASHRAE OVC link: <u>https://ashraeottawa.simplesignup.ca/en/9710/index.php?m=eventSummary</u>

ASHRAE Research to address COVID-19: <u>https://xp20.ashrae.org/secure/foundation/covid.html</u>

DRS TO DATE!



ASHRAE Best Ball Golf Tournament

Location:

The Marshes Golf Club 525 Legget Drive Ottawa, Ontario K2K 2W2

Date:

Tuesday, June 21, 2022

Registration & Check In – 11:00 AM Tee Off - 12:00 PM - Noon shotgun start Dinner - 6:00 PM

Costs:

Golf Foursome - Includes Golf with Cart, lunch & Dinner - \$800 Standard Sponsorship - Includes sign on course - \$200 Premium Sponsorship - Includes sign, hole sponsorship and name on the premium sponsor banner in clubhouse - \$1,000 Dinner Only - \$60

Note that we will be following the Ontario Public Health guidelines for the event. Please get in touch if you have any questions or concerns. Please see below link for registration:

https://ashraeottawa.simplesignup.ca/en/11118/index.php?m=eventSummary

Awards & Nominations

As chairs of the Awards & Nominations Committee, Abbey Saunders and I want to address the members of ASHRAE OVC for the nominations period. The nomination committee is responsible to build the chapter leadership of tomorrow. We help to shape the direction of the chapter, in that we try to ensure the very best people are in position to advance our local chapter and respond to the needs of its members.

Typically, at the April meeting we announce next year's Executive, Board of E-mail: steve.moons@totalhvac.com Governors, and Committee Chairs. While we have many positions filled, as of this

writing, we are still determining some key positions, notably the Secretary position and Governors.

This past year has been a tremendously challenging one for everyone, and this extends to the ASHRAE OVC. I would like to ask that anyone who is able to volunteer to help at the board level to please contact me directly to discuss what positions are available. As I'm sure many of you do, I'm hoping for a return to a normal chapter year starting September 2022. To keep our chapter strong, we need volunteers to help organize and put in the work. Now more than ever, the chapter needs your support. I hope to be able to introduce the new leadership of our chapter at the May meeting with all positions filled. Thanks very much.



E-mail: rod.lancefield@hts.com



Committee Chair Steve Moons 2021-2022 **OVC Nominations** Committee Total HVAC Inc.





Committee Chair Elizabeth Primeau 2021-2022 OVC Membership Committee Chair Total HVAC Inc.

Registration is open for the ASRHAE Annual Conference held in Toronto in late June 2022. This will be a hybrid experience, offering both in-person and virtual

options for attendees. The in-person conference will be held in Toronto, ON, E-mail: elizabethp@totalhvac.com Canada at the Sheraton Centre and Hilton Toronto.

This is also our regional neighbour's 100th anniversary! Toronto is planning lots to celebrate their 100 years and as OVC members, we should make our way down and celebrate their accomplishments over the last century.

At the annual conference, the incoming ASHRAE President starts their presidential year. This will mark the beginning of Farooq Mehboob tenure as ASHRAE Society President. At the plenary on Saturday afternoon, along side Jeff Littleton, ASHRAE's Executive Vice President, Farooq will provide the Secretary's Report and recognize Society Honours and Awards recipients.

The plenary will also include the keynote presentation by Fredi Lajvardi a nationally recognized STEM Educator and subject of the critically acclaimed documentary, Underwater Dreams, the major motion picture, Spare Parts and the IMAX film Dream Big. Fredi Lajvardi kindles your innate sense of ingenuity with his remarkable firsthand account of how he transformed a group of high school students into a national champion robotics team. With humor and compassion, Fredi brings audiences on his inspiring journey, illustrating the need to embrace diversity and invest in people to help others realize their potential. His incredible real-life tale equips you with the real-life encouragement to maximize your own potential and to work together to solve complex problems.

A few events not to miss:

- Toronto Chapter 100th anniversary celebration on Friday June 24th @ 6pm _
- Plenary session on Saturday June 25th @ 3:15pm
- Welcome Party at the Main Observation Level of the CN Tower on Saturday June 25th @ 7:30pm
- Women in ASHRAE Happy Hour on Monday June 27th @ 4pm

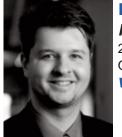
To register please follow this link: <u>https://www.ashrae.org/conferences/2022-annual-conference-toronto</u> We hope to see many of you there to take in the conference and enjoy some in-person events once again!

	Experience the true miniating of service and quality	ESTABLISHED 1996	Glenn Jones B.Eng LEED AP BD+C Sales Manager - HVAC Systems
Frank Picchione Regional Sales Manager IAMCO facutions in Otawa, Onta	Tel: 800-561-3449 Cell: 514-781-8381 Fax: 800-668-8476 frank@tamcodampers.com www.tamcodampers.com	Steve Moons, P.Eng. Principal 4A - 1050 Baxter Rd. P: 613-72 Ottawa, Ontario C: 613-22 Canada, K2C 3P1 E: stevem@totalhva W: www.totalhva	1024 Morrison Drive Ottawa. ON K2H 8K7 613-356-1940 / Cell 514-951-7809 63-4611 613-820-8111 / Fax 613-820-1414 9-5806 gjones@trane.com ac.com www.trane.com
Yorkland Controls	Larry Gravelle Tel: (613) 721-3301 Fax: (613) 721-4906 I = 877 - 733 - 3833 www.yorkland.net		
Honeywell HWCBAS & Vulaan Johnson Controls BIEMEN CIERES	represents leading control represents leading control R systems and component manufacturers. Integrated solutions for Licking Cond Acoust CCTV		

Government Affairs

To stay current on ASHRAE COVID-19 Response resources check out <u>https://www.ashrae.org/technical-resources/resources</u> including guidance's on infection aerosols, position documents and more.

Northern and Southern Alberta ASHRAE Chapters Host COVID-19 Webinar for Schools



President-Elect Ryan Dickinson 2021-2022 OVC GAC Chair V&R Engineering

E-mail: ryand@vreng.ca

On March 1st, the Northern and Southern Alberta Chapters of ASHRAE co-hosted a webinar with the Association of Professional Engineers and Geoscientists of Alberta (APEGA) and the Association of Science & Engineering Technology Professionals of Alberta (ASET). The webinar, "*Understanding and Applying ASHRAE's Core Recommendations for Mitigating Aerosol Infection Risk,"* was moderated by ASHRAE member Robert Bean and included a presentation by William P. Bahnfleth, Chair of ASHRAE's Epidemic Task Force, on key elements of ASHRAE's COVID-19 risk mitigation guidance as summarized in its Core Recommendations. Planning for the webinar was led by ASHRAE members Justin Phil and Saron Zerai, with support from Daryl Collerman as the Government Affairs Regional Vice Chair for Region XI. There were 370 participants in the webinar, including officials from school districts and universities, as well as government officials. There was also significant international participation, with attendees from Turkey, Israel, Bahrain, the United Kingdom, Ireland, Germany, the Philippines, the Dominican Republic, and Mexico, as well as Canada and the U.S.

International Building Decarbonization 2022 Conference

ASHRAE is organizing its first **International Building Decarbonization Conference**, which will take place **October 6-7th, 2022 in Athens, Greece**. The conference will be an information and idea exchange among stakeholders in the built environment industry concerning the reduction of greenhouse gas emissions from buildings. A primary goal of the conference is to bridge North America and Europe collaboration in decarbonization efforts.

Please note that abstracts of proposed papers and presentations for the conference are due **April 4, 2022**.

To find out more, please visit **here**.

Amazon Approaching Tipping Point, Raising Global Climate Implications

The Amazon is approaching a tipping point, data shows, after which the rainforest would be lost with "profound" implications for the global climate and biodiversity-based on research **published in the journal Nature Climate Change**. Computer models have previously indicated mass dieback of the Amazon is possible, but the new analysis is based on real-world satellite observations over the past three decades.

Novel statistical analysis shows that more than 75% of the untouched forest has lost stability since the early 2000s, meaning it takes longer to recover after droughts and wildfires. Another study in 2021, based on data from hundreds of small plane flights, showed the **Amazon now emits more carbon dioxide than it absorbs**, mostly because of fires.

The study does not enable a prediction of when the tipping point could be reached, but the researchers warned that by the time the triggering of the tipping point could be detected, it would be too late to stop it. Once triggered, the rainforest would transform to grassland over a few decades at most, releasing huge amounts of carbon and accelerating global heating further.

Read more **here**.

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Table-Top Display

If you're looking to communicate the value of your product, there is no better way than to invest in a table-top at an upcoming ASHRAE OVC meeting. Highly attended and highly regarded, our monthly meetings can afford you the opportunity to display your new technologies to an eager group of HVAC/R engineers and contractors. If you wish to review the themes of each meeting to find an appropriate topic, please feel free to contact me.

What better way to display a new product, existing line, or share great ideas than to have a table-top display at our local OVC ASHRAE meetings? The OVC



Committee Chair Connor Patterson 2021-2022 OVC Table-Tops JP2G

E-mail: connorp@jp2g.com

meetings provide a captive audience in the industry and exposure to 40+ people. We are currently reserving tapetop openings for the final ASHRAE meeting in May.

Please contact Connor Patterson (<u>connorp@jp2g.com</u>) to secure yours today! Cost for tabletops is \$225.00 and spaces are filling up quickly, so book your table-top today!

Payment is to be made through the online system prior to the date reserved. Follow the link below: <u>https://ashraeottawa.simplesignup.ca/en/10165/index.php?m=eventSummary</u>

For this meeting, we have Master Group presenting a table-top, which is discussed further below.



Electric thermal storage (ETS) technologies allow business owners to generate hydronic electric heat during off peak hours and store the generated heat in a high-density ceramic brick medium. Heat can then be extracted from the ceramic medium and introduced into the building hydronic loop at typical peak heating hours. I have included a link to the manufacturer's website below for your consideration.

https://www.steffes.com/ets/

ASHRAE HVAC Design & Operation Training TORONTO





Level I & II Training Offered – Register for Both and Save

HVAC Design: Level I – Essentials

When: May 9 - 11, 2022 | Toronto, ON Cost: \$1,361 (ASHRAE Member: \$1,089)

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

REGISTER NOW & SAVE

ASHRAE's HVAC Design: Level I – Essentials provides intensive, practical training for HVAC designers and others involved in the delivery of HVAC services. In three days, gain practical skills and knowledge in designing and maintaining HVAC systems that can be put to immediate use.

- · 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

BONUS! Get a FREE copy of *ASHRAE Duct Size Calculator* and *HVAC Fast Facts (I-P)* A \$200 Value!

HVAC Design: Level II – Applications

When: May 12 - 13, 2022 | Toronto, ON Cost: \$936 (ASHRAE Member: \$749)

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

REGISTER NOW & SAVE

Register for BOTH training sessions to save money and fast track your experience level!

ASHRAE's HVAC Design: Level II – Applications provides instruction on HVAC system designs for experienced HVAC designers and those who complete the HVAC Design: Level I ā?? Essentials training. In two days, gain an in-depth look into Standards 55, 62.1, 90.1, 189.1 and the Advanced Energy Design Guides. Training will focus on a range of topics including: HVAC equipment and systems, energy modeling, designing a chiller plant, and BAS controls.

- Sustainability/Green/LEED/ HPB/NZEB
- Standard 55
- Standard 62.1
- Building Systems: Education Facility
- System Applications: Chiller/Boiler, Air Handlers, VAV Terminals

- Life Cycle Cost
- Building Systems: Multi-story
 Office Building
- Water-to-Water GSHP Option 1
 Chilled Beam with DOAS
- Water-to-Water GSHP Option 2
 UFAD

Your Instructors:



Joel Primeau, P.Eng., Member ASHRAE, HBDP, LEED^î AP



Dennis Wessel, P.E., Fellow/Life Member ASHRAE, LEED^{Å®} AP

Joe

Advertising

Advertising career opportunities on the **ASHRAE Ottawa Valley Website** makes good business sense. We offer a unique way to reach technical professionals and make your ad dollars work hard for you.

To discuss your needs, contact one of our chapter officers, via our "This Year" page. Increase the impact of your advertising through the **ASHRAE Ottawa Valley Website** today.

Rates for career opportunities ads are as follows:

Chapter Member: \$50/month \$80/2 months \$100/3 months

Non-member: \$250/month

Note: Purchase of additional months will only have a discounted rate if purchased up front. Otherwise the standard rate will apply for additional months.

Placement of an Ad

We suggest that you complete and submit our advertisement form to speed up the processing of your request. If you have provided your e-mail address, a confirmation receipt e-mail will be sent to you for reference.

Please note that ads require prepayment made to the treasurer. Please register and pay through the online system and contact **Celine Baribeau** (*cbaribeau@bpa.ca*) with any questions. Follow the link below for payment.

The ads will appear on the website until the end date for publication provided in the submitted form. To extend the ad, please resubmit the form with the new publication dates and the required prepayment amounts.

Link:

https://ashraeottawa.simplesignup.ca/en/9709/index.php?m=eventSummary

Business Card Ads

You can support your chapter and promote your business by placing your business card in the Capital Communiqué. It will also appear on the chapter website.

The cost is \$275.00 for the year. Please contact **Rod Lancefield** at *rod.lancefield@hts.com* for more details.

Payment will be made through the online system. Follow the link below for payment.

https://ashraeottawa.simplesignup.ca/en/9711/ index.php?m=eventSummary

Ads will **now require prepayment**. All last year's ads will appear in the Communique for the first month of this year to allow time for payment for the upcoming year. Ads will be refreshed accordingly in the second Communique.



Publicity Rod Lancefield 2020-2021 OVC Publicity Committee Co-Chair HTS Engineering Ltd.

E-mail: rod.lancefield@hts.com

2021-2022 President Adrianne Mitani **President-Elect** Ryan Dickinson Treasurer Celine Baribeau **Secretary Evans Mutua** Governors Joe Della Valle Mike Swayne Joel Primeau Matt Moore Trevor Thomson **Past President** Joël Primeau Committees Attendance Sandy Taylor Audit Joel Primeau Capital Communiqué Pat Melville CRC Jayson Bursill **Donald Weekes** Connor Ruprecht CTTĊ Elizabeth Primeau GAC Ryan Dickinson Financial Sandy Taylor Greeter Mike Swayne History Zacharie Lanthier Membership Promotion Josh Bourbonniere Nominations & Awards Steve Moons Abbey Saunders **PAOE** Ryan Dickinson Program Elizabeth Primeau Publicity Samir Elchamaa Research Promotion Joël Primeau **Special Events** Colleen Fox Rod Lancefield Abbey Saunders Trevor Thomson Student Activities Noah Goddard Tabletop Connor Patterson YEA Jeremy Strong Website Samir Elchamaa



Celine Baribeau 2021-2022 OVC Treasurer

Treasurer

BPA

E-mail: cbaribeau@bpa.ca