

NEWSLETTER

FEBRUARY TOUR & DINNER – REFRIGERATION NIGHT

TOUR AT THE ENERGY CONVERSION CENTRE AT THE UNIVERSITY OF WINDSOR, FOLLOWED BY DINNER & PRESENTATION BY IBRAHIM SEMHAT

**Presentation: "Steam Turbine Chillers & Decarbonization of Heating
Initiatives"**



Date: Tuesday, February 20th, 2024

Location: University of Windsor (Tour starts at Energy Conversion Centre)

Tour Topic: New Hybrid Chiller Installation at the Energy Conversion Centre

Presentation: Steam Turbine Chillers & Decarbonization of Heating Initiatives

Speaker: Ibrahim Semhat, P.Eng, LEED AP

Time: Tour starts at 5:00 PM at ECC, Dinner & Speaker to follow (at Alumni Hall)

Registration Deadline: Friday, February 16th, 2024

Cost: \$55 for ASHRAE Windsor Members, \$65 for Non-Members, \$25 for Students

Registration Link: <https://ashraewindsor.simplesignup.ca/13713>

Or contact Syed Hassan at: 519-562-1881, E-mail: syed.hassan@enbridge.com

**FEBRUARY TOUR – UNIVERSITY OF WINDSOR ENERGY
CONVERSION CENTRE HYBRID CHILLER**

Hybrid Chiller a First for Canadian Universities



The University of Windsor reaffirmed its commitment to fostering a culture of environmental sustainability on campus and beyond with the installation of a new dual drive, electric-steam turbine chiller — the first of its kind at a Canadian university.

The chiller, which drives the heating, cooling, and ventilation systems of about 30 buildings across campus, was unveiled Wednesday alongside University leadership, students, staff, and Enbridge Gas representatives. The project denotes one of the largest sustainability initiatives undertaken by the University this year and is part of an ambitious plan to reduce greenhouse gas emissions by 45 per cent in seven years and net zero by 2050.

Located within the Energy Conversion Centre on Patricia Street, the York YST chiller uses energy-efficient electricity, complemented by alternative steam energy. By seamlessly combining these two energy sources, the advanced hybrid technology will reduce the equivalent of 8,300 tonnes of carbon dioxide emissions each year by minimizing natural gas usage and saving an estimate of over \$1 million annually.

The reduction in emissions is equivalent to removing 2,000 cars off the roads in a single year. This measure alone will achieve 82 per cent of the University's 2030 emission reduction target.

FEBRUARY SPEAKER – STEAM TURBINE CHILLERS & DECARBONIZATION OF HEATING INITIATIVES

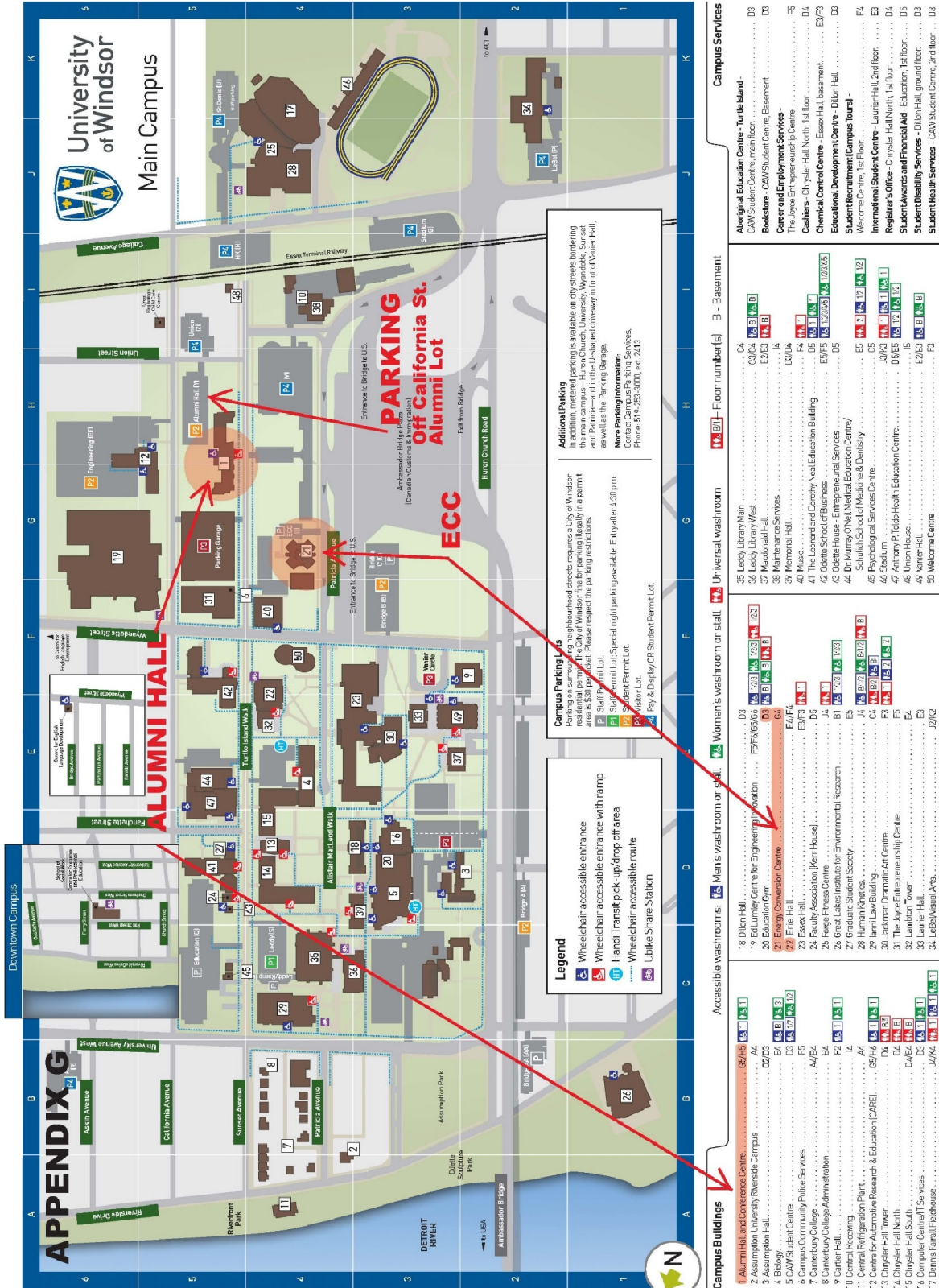
Speaker: Ibrahim Semhat, Peng, LEED AP



Ibrahim graduated from Western University with Mechanical and Materials Engineering degree. He started his professional career in the automotive sector, before switching to HVAC industry with an Account Executive position at Johnson Controls London office, servicing Southwestern Ontario.

He has a professional designation with province of Ontario and LEED certification with CAGBC. Ibrahim is proficient with HVAC system design and focus on Building Automation Systems and HVAC Equipment Selections. Ibrahim has been involved with ASHRAE London Chapter and Region II Board of Director for many years, including president of the London ASHRAE Chapter, Regional Assistant Chair (ARC) and Regional Vice Chair (RVC) for Research Promotion.

UWINDSOR CAMPUS MAP



Campus Buildings	Accessible washrooms: 15	Men's washroom or stall: 16	Women's washroom or stall: 17	Universal washroom: 18	Floor numbers: B - Basement	Campus Services
1. Alumni Hall and Conference Centre	15	16	17	18	B1, B2, B3, B4, B5, B6, B7, B8, B9, B10, B11, B12, B13, B14, B15, B16, B17, B18, B19, B20, B21, B22, B23, B24, B25, B26, B27, B28, B29, B30, B31, B32, B33, B34, B35, B36, B37, B38, B39, B40, B41, B42, B43, B44, B45, B46, B47, B48, B49, B50, B51, B52, B53, B54, B55, B56, B57, B58, B59, B60, B61, B62, B63, B64, B65, B66, B67, B68, B69, B70, B71, B72, B73, B74, B75, B76, B77, B78, B79, B80, B81, B82, B83, B84, B85, B86, B87, B88, B89, B90, B91, B92, B93, B94, B95, B96, B97, B98, B99, B100	Alumni Education Centre - Turtle Island CAW Student Centre, main floor Bookstore - CAW Student Centre, Basement Career and Employment Services The Joyce Entrepreneurship Centre Cashiers - Chrysler Hall North, 1st floor Chemical Control Centre - Esser Hall, basement Educational Development Centre - Dillon Hall Welcome Centre, 1st floor International Student Centre - Laurier Hall, 2nd floor Registrar's Office - Chrysler Hall North, 1st floor Student Awards and Financial Aid - Education, 1st floor Student Disability Services - Dillon Hall, ground floor Student Health Services - CAW Student Centre, 2nd floor
2. Assumption University Riverside Campus						
3. Assumption Hall						
4. Biology						
5. CAW Student Centre						
6. Campus Community/Pollie Services						
7. Centre for Career Development						
8. Centre for College Administration						
9. Centre Hall						
10. Centre for Research						
11. Centre for Refrigeration Plant						
12. Centre for Automotive Research & Education (CARE)						
13. Chrysler Hall Tower						
14. Chrysler Hall North						
15. Chrysler Hall South						
16. Computer Centre/T Services						
17. Dennis Farrell Fieldhouse						
18. Dillon Hall						
19. Ed Lumley Centre for Engineering Innovation						
20. Education Gym						
21. Energy Conversion Centre						
22. Erie Hall						
23. Esser Hall						
24. Faculty Association (Kerr Hall)						
25. Great Lakes Institute for Environmental Research						
26. Grad. Lakes Institute for Environmental Research						
27. Graduate Student Society						
28. Human Kinetics						
29. Human Law Building						
30. Jackson Dramatic Art Centre						
31. The Joyce Entrepreneurship Centre						
32. Landon Tower						
33. Laurier Hall						
34. Lebo/Vespa Arts						
35. Looby Library Main						
36. Looby Library West						
37. Macdonald Hall						
38. Multicultural Services						
39. Multicultural Hall						
40. Music						
41. The Leonard and Dorothy Neal Education Building						
42. Odette House - Entrepreneurial Services						
43. Odette House - Entrepreneurial Services						
44. Dr. Murray O'Neil Medical Education Centre/School of Health, Education & Dentistry						
45. Psychological Services Centre						
46. Psychology						
47. Anthony P. Toledo Health Education Centre						
48. Union House						
49. Venter Hall						
50. Welcome Centre						

Wind, Solar Energy Tripled in the U.S. Over the Past Decade



In 2022, the United States produced more than three times as much solar, wind and geothermal power than it did in 2013, with growth in all 50 states. That's according to Renewables on the Rise 2023, an online dashboard unveiled on October 11 by the Environment America Research & Policy Center and Frontier Group. The dashboard compiles

information from various sources to detail progress over the past decade in six areas—wind, solar, electric vehicles, electric vehicle charging, energy efficiency and battery storage—that will be key to transitioning to a future powered entirely by clean and renewable resources.

Study Aims to Clear the Air on the Effects of Air Quality in School Classrooms



Across Colorado, thousands of classroom air quality monitors and portable air cleaners were installed as part of a Centers for Disease Control and Prevention-funded study through the Colorado Department of Health and Environment and the University of Colorado Boulder. A follow-up study, also funded by

the CDC through the Colorado School of Public Health at the CU Anschutz Medical Campus and CU Boulder, aims to evaluate the impact of the portable air cleaner operations on the classroom environment.

With new CDC support of \$2.2M, a multidisciplinary team will answer questions that are vital to environmental health: is the quality of indoor air in classrooms associated with

student absenteeism and with the presence of viruses responsible for respiratory diseases, including SARS-CoV-2, influenza, and respiratory syncytial virus (RSV).

Sustainable Police HQ in Hong Kong



The new Kowloon East Regional Police Headquarters and Operational Base cum Ngau Tau Kok Divisional Police Station (KERHQ) was designed for high energy efficiency with reference to ASHRAE Standard 90.1. To achieve a green government building with emphasis on building energy efficiency and sustainability, many sustainable elements including energy efficiency features (EEFs) and renewable energy technologies (RETs) were adopted.

An analysis of energy data indicated that various EEFs and RETs adopted in KERHQ were effective for the purposes of energy conservation and reduction of building operation cost. The annual electricity consumption of KERHQ in 2021 was about 20% less than the estimated electricity consumption of the building simulation model.

ASHRAE Research Promotion

Please join us at our January meeting where James Smith will be delivering a special message regarding ASHRAE research promotion. We look forward to seeing you all there. ASHREA Research Promotion (RP) raises funds for six areas: research, education and ASHRAE learning institute, endowed research through ASHREA Foundation, YEA programs, ASHRAE scholarships, and a general/unrestricted fund. Research is the backbone of ASHRAE, if you would like to be part of our Chapter RP Donors please contact Amanda Forest at amanda.forest@jasel.ca or James Smith at james.smith@jasel.ca

MEETINGS AND EVENTS FROM 2023-2024:

Sept. 11, 2023	Golf Tournament	Membership Promotion
Oct. 17, 2023	DL: Hoy Bohanon	CTTC Night
Nov. 21, 2023	DL: Darryl Boyce	GAC Night
Dec. 12, 2023	Christmas Social	Research Promotion
Jan. 23, 2024	DL: Jamie Smith	Research Promotion
Feb. 20, 2024	Tour: U of W Chiller	Refrigeration Night
Mar. 19, 2024	TBD	
Apr. 16, 2024	Past President's Night	Historian
May 21, 2024	Student Presentations	Student's Night

CHAPTER OFFICERS

<i>President:</i>	Jamie Smith	(519) 890-8684	James Smith, P.Eng.	(519) 737-5725
<i>President-Elect:</i>	Syed Hassan	(519) 562-1881	Dan Castellan, P.Eng.	(519) 253-3000 x 2164
<i>Treasurer:</i>	Dave Dufour	(519) 816-8974	Paul Greff	(519) 969-8025 x332
<i>Secretary:</i>	Ryan Bisnett			

BOARD OF GOVERNORS

CHAPTER COMMITTEES

<i>Research Promotion</i>	Amanda Forest, P.Eng. & James Smith, P.Eng.	(519) 984-5696 (519) 791-6291	<i>Government Affairs Committee</i>	Paul Greff	(519) 969-8025 x332
<i>Membership Promotion</i>	Nathan Cook, P.Eng. & Syed Hassan, P.Eng.	(519) 948-5000 x3223 (519)562-1881	<i>Student Activities Chair</i>	Jamie Smith	(519) 890-8684
<i>Chapter Technology Transfer Committee</i>	Dan Castellan, P. Eng.	(519) 253-3000 x 2164	<i>Student Branch Advisor- University of Windsor</i>	Dr. David Ting, P. Eng.	(519) 253-2871
<i>Historian</i>	Andy Hrutka	(519) 978-3903	<i>Newsletter Editor</i>	Kenten Puryk	(519) 737-5725 x227
<i>Refrigeration Chair</i>	Jon Palmer	(519) 256-7922	<i>Reception</i>		
<i>YEA Chair (Young Engineers in ASHRAE)</i>	Amanda Forest, P.Eng.	(519) 984-5696			

Advertising and Promotion

Actively participating in ASHRAE events is a great way to network and discuss potential projects and applications. Chapter meetings provide a captive audience and exposure to a group actively involved in our industry. Promotion opportunities are available during our chapter meetings, through the monthly newsletter and the new website.

TABLETOP DISPLAY

What better way to present your product, or share great ideas than to have a tabletop display at our monthly chapter meetings.

The fee to provide a Tabletop Display is \$250.00 (CAD). In addition to the presentation, the fee also includes the cost of the presenter's meal (1 meal) at the event. If interested in providing a Tabletop Display at a future meeting to promote product lines or technologies, please contact Jamie Smith or Syed Hassan to schedule.

BUSINESS CARD PROMOTION

The monthly newsletter is distributed to all of our ASHRAE Windsor members as well as several others that are involved in our industry. Inclusion of your business card in the newsletter would provide a great opportunity to introduce your name and company to those members who may not know you personally. Business cards may also be displayed on the new website.

The fee to include your business card in the newsletter is \$100.00 (CAD) for the year ending June 30, 2024. If interested in having your business card information included in the monthly newsletter, please contact Jamie Smith.

ASHRAE Chapter Involvement

It is a welcome sight to see Chapter members and non-member guests alike attend the monthly meetings and events. The time and effort put forth by all individuals to attend these events is greatly appreciated as it not only helps to strengthen and develop our Chapter as a whole, it also expands the knowledge and understanding of our industry.

As it takes time and effort to attend these meetings, it also takes a great deal of time, effort and dedication to organize and prepare for these events so that they are informative and enjoyable for everyone.

It is a goal of the Windsor Chapter to increase the number of participating members. Involvement in Chapter operations is not limited to the Board of Governor and Chapter Committee positions. All individuals interested in getting involved with ASHRAE at any level are encouraged to volunteer in any capacity they are willing and able to. Any efforts to help the Windsor Chapter continue to develop and improve would be greatly appreciated.

If anyone is interested in volunteering for general involvement or to assist with any specific task, please contact Jamie Smith.

windsorashrae141@gmail.com
Jamie Smith – (519) 890-8684

ASHRAE – Serving our Members, and more

ASHRAE Newsletters

There's a lot of newsletters available. Some are automatic when you become an ASHRAE Member, such as the following:

[ASHRAE Journal Newsletter](#)

[ASHRAE Insights](#)



You can also connect to other publications from the ASHRAE Website.

[HVAC&R Industry News](#)

[Government Affairs Updates](#)

[High Performing Buildings Newsletters \(HPB\)](#)

[Standards Action Newsletters](#)

Click the following link to review these newsletters, and others!

<https://www.ashrae.org/about/marketing-central/email-newsletters>

Training and Certifications

While ASHRAE has some great videos (accessed [here](#)), they also have Instructor Led Training and Certifications:

Training: <https://www.ashrae.org/professional-development/all-instructor-led-training>

[Health Impacts of Indoor Air Extraction, Ventilation and Filtration](#)

[Evaluating Your HVAC System's Readiness to Mitigate the Spread of SARS-CoV2](#)

(note – check the website for specific times)

Certifications: <https://www.ashrae.org/professional-development/ashrae-certification>

[Building Design Certifications](#)

[Building Performance Certifications](#)

[Building Operations Certifications](#)