

ASHRAE TMU Student Branch Event Highlights 2023-2024

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Members (2023-2024)

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1. Design Charette





On October 21st, 2023, the 6th Annual Design Charrette, hosted by Emerging Green Professionals (EGP), provided a platform for students to exhibit their exceptional design skills. Teams of three were tasked with reimagining the Downsview Park Bridge in accordance with Northcrest Development's five pillars of development. This challenge offered participants a dynamic opportunity to harness their creativity and teamwork to solve real-world design problems, fostering innovation and practical application of their academic knowledge.



2. ASHRAE Student Promotion Night



A Promotion Night was held to celebrate the remarkable achievement of receiving two prestigious awards: Student Branch of the Year and Best Student Branch Award. The event honored the hard work and dedication of the members, highlighting their outstanding achievements and significant contributions. It was a night of recognition and pride, marking a significant milestone in the history of our student branch.



3. TRCA Fall 2023





On November 6th, a tour of the Sustainable Archetype Houses was conducted. These homes, designed with cutting-edge eco-friendly technologies, are exemplary models of maintaining indoor air quality and energy efficiency. The tour showcased various sustainable living practices, demonstrating how these innovative approaches can create comfortable and practical living environments.



4. ASHRAE Winter Conference





Our VP Operations, Suha Shadab, received sponsorship from the ASHRAE Toronto Chapter and the ASHRAE TMU Chapter to attend the ASHRAE Winter Conference in Chicago. This sponsorship provided an invaluable opportunity for Suha to interact with students from other institutions, fostering collaboration and the exchange of ideas. Participation in student-focused events further enhanced



the sense of community and engagement within ASHRAE, highlighting the organization's commitment to supporting and connecting its student members.



5. EnergyPLUS Workshop



On February 20th and 21st, Edward Vuong, a researcher at Natural Resources Canada (NRC) Canada, hosted an intensive two-day workshop focused on the simulation of energy and HVAC systems in typical residential buildings. The workshop offered participants valuable insights into advanced simulation techniques, emphasizing practical applications in sustainable building practices. Attendees had the opportunity to engage in an immersive learning experience tailored to current and aspiring field professionals by signing up via the website.



6. TMU Open House



An Open House for incoming students at TMU took place, with active participation from ASHRAE members representing the organization. They engaged with new students, offering information about ASHRAE's mission and activities. Additionally, the ASHRAE members distributed merchandise, creating a welcoming atmosphere and fostering interest in sustainable practices and building technologies.



7. TRCA Winter 2024



On March 27th, students participated in a tour of the LEED Platinum Archetype Sustainable Houses, showcasing state-of-the-art sustainable building technologies. As the second TRCA tour of the year, this event provided participants with a unique opportunity to explore innovative practices in sustainable construction. Through this experience, students gained valuable insights into advanced eco-friendly technologies and their application in modern housing.



8. OpenStudio Workshop



In the Spring, students attended a workshop hosted by Biruk Workneh, where they learned to build energy models supporting guidelines for preventing overheating in buildings. This free, HVAC software-focused workshop provided an opportunity for students to use OpenStudio/EnergyPlus to deepen their understanding of thermofluids. Through hands-on experience, participants gained valuable insights into energy modeling and its application in maintaining comfortable indoor environments. This workshop followed a previous session held in the Winter semester, continuing the series of practical learning opportunities for students.



9. The Power of Emotional Intelligence Workshop



On May 29th, ASHRAE TMU collaborated with the ASHRAE Toronto Chapter to organize a workshop focused on leadership in the dynamic world of Heating, Ventilation, and Air Conditioning (HVAC). The workshop, offered by ASHRAE Distinguished Lecturer Karine Leblanc, provided attendees with valuable insights into effective leadership within the HVAC industry. The event was held at the Toronto Metropolitan University campus, fostering a collaborative and educational environment for all participants.



10. Future Energy Innovators Competition





Between July 22nd and 25th, ASHRAE TMU hosted the inaugural Future Energy Innovators event as part of the 9th International Building Physics Conference in Toronto. The event proudly welcomed students from institutions across Canada,

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the US, Europe, and Australia and featured a distinguished panel of judges from institutions such as the Massachusetts Institute of Technology (MIT), the University of Lyon, and Toronto Metropolitan University. In collaboration with Resource Innovations Company, the event focused on fault detection in a real-world HVAC system located in downtown Toronto, providing participants with a valuable opportunity to address practical challenges in the field.