



2024 ASHRAE WINTER CONFERENCE

CHICAGO, JAN 20-24 | AHR EXPO, JAN 22-24

STUDENT PROGRAM



#myashrae

Find more information visit ashrae.org/conferences

Saturday, January 20th

1:00 PM–3:00 PM | STUDENT WELCOME

Marriott Marquis McCormick Place West, W183ab (1)

Hear welcoming remarks from ASHRAE President Ginger Scoggins followed by an awards ceremony and keynote presentation from Benjamin Skelton and Frank Kohout from Cyclone Energy Group. Come learn about 340 On The Park, an eco-friendly residential tower that was the first in Chicago designed to meet the U.S. Green Building Council's certification standard.



Benjamin Skelton P.E., LEED AP, CxA

Benjamin founded Cyclone Energy Group in 2012, after working as a design consulting engineer for ten years, with a vision of making the world more efficient. Over his career, he has helped create some of the most energy efficient and unique buildings in the world. Projects include supertall high-rise buildings, net-positive energy designs, LEED Platinum Certified buildings and an Internationally award winning design for the Walgreens Net Zero Energy Store. In 2015 he was named 40 under 40 by Consulting Specifying Engineer Magazine and he frequently shares lessons learned from his work in seminars and presentations.



Frank Kohout P.E., LEED AP BD+C, BCxA

As Director of Engineering at Cyclone Energy Group, Frank is responsible for leading the projects and initiatives requested by our clients that do not fit into any of the other core areas of Cyclone's expertise and that typically require innovative approaches and creative solutions.

Prior to joining Cyclone, Frank was with McDonald's Corporation for 16 years where his role was being their mechanical building systems leader. A native of Chicago's suburbs, Frank holds a BS in Mechanical Engineering from Southern Illinois University at Carbondale.

3:15–5:30 PM | PLENARY SESSION

Marriott Marquis McCormick Place, Grand Horizon DEFG (4)

The Plenary will feature a keynote from Chris Turner, a well-known figure in Canada for his expertise on climate change solutions and the global shift towards clean energy. The Plenary Session also features presentations from the Honors and Awards programs, including the First Place winners of the Student Design Competition.

6:30–8:30 PM | WELCOME PARTY

Old Post Office in downtown Chicago (\$75 ticket)

Students are encouraged to attend.



2024 ASHRAE WINTER CONFERENCE

CHICAGO, JAN 20-24 | AHR EXPO, JAN 22-24



Sunday, January 21st

8:00 AM–3:30 PM | STUDENT PROGRAM

Marriott Marquis McCormick Place West, W183ab (1)

8:00–9:00am

Technical Talk #1: Psychrometrics Deconstructed 101

Presented by Dan Hahne



Dan Hahne has a BFA degree from University College London and an MFA from Boston University. He has been in the HVAC industry for 38 years, beginning his career as an estimator for the Norman S. Wright Co. SW in 1985 before transitioning into outside sales. In 2000, Dan joined Air Specialty Products as an outside salesman. In 2008 he assumed the role of engineering sales and became ASP's proponent and educator for high-performance HVAC systems. In 2016, he took a position with Varitec Solutions, Arizona, in the capacity of Director of High-Performance HVAC Solutions and educator for sustainable HVAC system concepts, products, and applications. In 2020,

and the advent of the COVID pandemic, he became a regional advocate and resource for applying HVAC products and design strategies to enhance indoor air quality (IAQ) and to create healthier more risk free environments.

9:00–10:00am

Basics of Building Control System Engineering

Presented by TC1.4's Jim Coogan and Michelle Shadpour



Jim Coogan, P.E., is a Principal in product development at Siemens Smart Infrastructure. In 40 years of designing controls for mechanical systems, he has contributed to products ranging from room controllers to Internet-based interfaces. Jim has chaired several ASHRAE committees. Publications include technical papers on room pressurization and laboratory ventilation. Jim earned his SB in mechanical engineering at MIT.



Michelle Shadpour, CPD is a Senior Design Engineer at SC Engineers with over seven years of engineering experience primarily in the pharmaceutical and healthcare sectors. A graduate of the University of Southern California, Michelle's expertise includes engineering assessments, design, construction, and project management. Michelle has been recognized industry wide as one of the leading engineers of the future being named DiscoverE's "2017 New Face of Engineering", Plumbing Engineers 2018 "Top 10 in Their 20s", and Engineered Systems' 2020 "20 to Watch: Women in HVAC". As the chair of the ASHRAE TC 1.4 YEA committee, she has extensive expertise in building automation systems and the sequence of operation for HVAC systems for high-tech facilities. Michelle also serves as the President Elect of ASHRAE San Diego Chapter.

10:00–11:00am

K-12/STEM Group Activity

11:00am–12:00pm

Technical Talk #3: 5 Essential Soft Skills for Engineers

Presented by Pam Duffy



Pam Duffy, P.E. is the co-founder and COO of Powerhouse Consulting Group, which provides software and business operations consulting services for the skilled trades. Pam has a mechanical engineering degree from the University of Central Florida where she first joined ASHRAE as a student member. She has over 15 years of experience in the HVAC industry with roles in mechanical design, application support, technical training, product development, and product marketing. In ASHRAE, Pam is the Chair of T.C. 1.7 and has served as a Distinguished Lecturer since 2017. Pam is the recipient of ASHRAE's Distinguished Service Award. Outside of ASHRAE, Pam is a Life Member of the Society of Women Engineers (SWE), has been named to the Consulting-Specifying Engineer's 40 under 40 list, and serves on the AHR Expo Industry Council.

12:00 – 12:30 pm Lunch

Continued on next page...

Sunday, January 21st continued...

12:30 – 2:00 pm Career Panel: Learn about what jobs may await with a career related to ASHRAE! This is an open forum for you to ask questions to professionals spanning multiple industry sectors. Q&A Session with Devin Abellon, Ghina Annan and Stet Sanborn.



Devin Abellon, P.E. is the Vice President of Engineering Sales at The Pyure Company. He has close to 30 years of experience in the HVAC and plumbing industries with a focus on high-performance and sustainable building design and construction. He holds a Bachelor of Science degree in Mechanical Engineering from the University of California at Santa Barbara and is a registered professional engineer in California and Arizona. He is an active member of ASHRAE, and has served at the chapter, regional and society levels, most recently serving on the ASHRAE Board of Directors as the 2020-23 Region X

Director and Regional Chair. He is also co-host of "The Flourish Podcast," focused on helping high-performing professionals thrive while balancing their personal and professional lives.



Ghina Annan is an expert in the field of sustainability and decarbonization, currently serving as the Decarbonization Business Lead for Stantec in Ottawa. With over 12 years of experience in high-performance building design, Ghina's focus is on achieving a net positive regenerative approach, ensuring both human and planetary health and fostering a better world for all. Her deep knowledge of building science and design solutions enables her to play a pivotal role in advancing sustainable practices. As the ASHRAE committee chair for the Building Decarbonization Whole Life Design Guide, she actively contributes to the development of guidelines focused on whole life carbon considerations for building

systems. In 2022, Ghina was honored with the International Young Energy Professional of the Year 2022 Award from the Association of Energy Engineers and Climate Action Leadership Award for the 2023 Women in Energy Awards, a testament to her dedication and impact within the energy industry.



Stet Sanborn co-leads SmithGroup's national PACT (Performance, Analytics, and Climate Impact Team) as well as the San Francisco office Engineering Discipline. Stet has a passion for Decarbonization, Electrification, and High-Performance Buildings. Along with sitting on ASHRAE's Taskforce for Building Decarbonization Executive Committee, he has helped develop reach codes and ordinances across the country targeting reduced greenhouse gas emissions. In addition, he serves as a technical resource for the US Department of Energy's Better Climate Challenge and Design and Construction Allies and serves on the San Francisco Mayor's Taskforces on Zero Emissions New Construction and Existing Buildings.

He has previously taught at both University of California-Berkeley as well as the California College of the Arts. With an undergraduate degree in Mechanical Engineering as well as a Master's Degree in Architecture, his career has taken many twists and turns, but always with a focus on deep sustainability and integrated design.

1:30 – 3:30 pm Poster session and Mixer with winners of the Design Competition and recipients of ASHRAE's Undergraduate Program Equipment Grants. Mix and mingle with (YEA) Young Engineers in ASHRAE members while competing in a poker run activity. Prizes will be available along with free food & drinks.

1:00-3:00 PM AND 3:00-5:00 PM | STUDENT TOUR (\$25 TICKET)

340 On The Park

Built in 2007 and earning the first Silver LEED certification for a residential building in the state of Illinois, this building is 672 feet tall and sixty-five stories. Originally connected to local district cooling it was one of the first properties in the Midwest to disconnect from district cooling and build its premium chiller plant that included (2) 500 ton water-cooled screw chillers in a series-counter-flow configuration, for which it won a local Illinois ASHRAE Excellence in Engineering Award in 2016. In addition, it is also host to a tank-less cascade domestic hot water system that is one of the biggest tank-less applications in the world that creates a combined capacity of four million BTUs.



Monday, January 22nd

10:00 AM–12:00 PM STUDENT ROUNDTABLE

Marriott Marquis McCormick Place West, W182 (1)

Student branch officers are selected to participate in this two-hour session to provide ASHRAE leaders with feedback and guidance on student activities.

10:00 AM–12:00 PM | STUDENT BRANCH ADVISOR ROUNDTABLE

Marriott Marquis McCormick Place West, W177 (1)

Student Branch Advisors are invited to discuss student activities with Regional Student Activities Chairs.

12:00 PM–3:00 PM AHR EXPO CAREER PANEL & TOUR

Registration required! Come have lunch with some manufacturers from the AHR Show and learn about their work, followed by a guided tour of the tradeshow floor. This event is put on by the ASHRAE Student Activities Committee and AHR.



RECOMMENDED TECHNICAL SESSIONS

Sunday, January 21

8:00 AM–9:00 AM

Panel 1: Are Variable Refrigerant Flow (VRF) Systems Viable In An A2L World?

Monday, January 22

8:00 AM–9:30 AM

Seminar 23: Speed Seminar: Load Calculations in 50 Minutes!

8:00 AM–9:30 AM

Seminar 20: Best Practices of a Mentor-Mentee Relationship

3:15 PM–4:45 PM

Debate 1: College of Fellows Debate: Using AI is Cheating!

Tuesday, January 23

8:00 AM–9:30 AM

Seminar 33: Defining and Creating Buildings That Truly Perform at 'Net Zero'

1:00 PM – 1:30 PM

Seminar: TC Special Session: The Winning Numbers: 13, 36, 135, 195, 223P, 231P. Understanding TC 1.4's Standards and Guidelines for YEAI!

