ASHRAE Rocky Mountain Chapter

34th Annual Technical Conference:

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Healthy Buildings: Designing For Life

Friday May 8th, 2026

Register and pay at www.rockymtnashrae.com

Sheraton Denver West Hotel
360 Union Boulevard
Lakewood, CO 80228

GBCI Continuing Education Hours provided by:

Western Mechanical Solutions, LLC

34th Annual Technical Conference:

Healthy Buildings: Designing For Life

For Whom:

Presentations for entry level and senior level engineers, architects, designers, students, salespersons, manufacturers, contractors, building officials, building owners, and building managers and operators.

When & Where:

Friday, May 8th, 2026, at the:

Sheraton Denver West Hotel
360 Union Blvd.
Lakewood, CO 80228

Professional Development Hours (PDH):

The sessions eligible for GBCI credit are indicated on the Certificate of Attendance. If you would like GBCI credit, please sign the attendance sheet located in these sessions. In addition to signing in, credits must be self-reported to GBCI.

Thank-you:

We would like to thank all our sponsors for this event. Sponsor names are listed below and will be on signage at the conference. Without everyone's support, this conference would not be possible.

Your Cost:

Prices before April 24th

$275 Member Full Day Ticket (Includes Lunch)
$325 Non-Member Full Day Ticket (Includes Lunch)
$255 5 or More Tickets - Full Day (Includes Lunch) - Price is Per Ticket
$60 Keynote Presentation and Lunch Only Ticket (Member / Non-Member)

Prices After 5:00pm April 24th

$295 Member Full Day Ticket (Includes Lunch)
$345 Non-Member Full Day Ticket (Includes Lunch)
$275 5 or More Tickets - Full Day (Includes Lunch) - Price is Per Ticket
$75 Keynote Presentation and Lunch Only Ticket (Member / Non-Member)

Prices Day Of:

$345 Flat Fee for Full Day (Includes Lunch)
$75 Keynote Presentation and Lunch Only

Register at www.rockymtnashrae.com

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Luncheon Keynote Address:

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Healthy Buildings: Designing For Life

Shelter is one of the most fundamental human needs, providing physical protection, emotional stability and a foundation for communities. "Healthy Buildings: Designing for Life" highlights the vital connection between indoor environmental quality (IEQ) and human well-being, emphasizing that buildings should do more than provide shelter—they should enhance health, comfort, and safety. This theme explores how design, operation, and maintenance strategies can balance energy efficiency with occupant well-being, creating high-performing, sustainable spaces. By integrating IEQ principles, the built environment can minimize environmental impact while fostering healthier, more resilient communities.

Speaker: Jonathan Smith PE, CEM, LEED AP, is the Global Director of Mechanical Engineering for HDR. HDR is the 7th largest engineering firm in the world. Jonathan's role at HDR is to lead the global teams, ensuring they stay at the forefront of engineering design. Throughout his career of 23 years, Jonathan has gained experience in design engineering, building automation systems, energy management, and business development, all while continuing to grow his leadership skills through ASHRAE. This background has provided him with the ability to lead HDR into the future. This is accomplished through constantly improving solutions offered to clients, and by refining engineering best practices, standards, and culture.

Jonathan is currently the Director and Regional Chair of ASHRAE Region IX and serves on various committees throughout the ASHRAE society. These additional committees include chairing the DEI Board Subcommittee (soon to be a Standing Committee under the Members Council), chairing TC 1.6: Terminology, and chairing TC 9.13 SPACE: Extraterrestrial and Deep Space Environmental Control Systems. He is also a member of Guideline 13: Specifying Building Automation Systems and Guideline 36: High Performance Sequences of Operation for HVAC Systems. Jonathan has also been selected as an ASHRAE Distinguished Lecturer beginning July 1, 2026. In his spare time, Jonathan enjoys spending time with his wife Heather and two girls Emerson (8), and Jolene (6). He is an avid Disney fan. The family goes to Disney multiple times a year. He is fascinated by how the whole operation works and the engineering behind it.

His dedicated service to ASHRAE has positively impacted our industry. One of the contributions to our industry that Jonathan is most proud of is the PE Study Program he created to help engineers pass the PE. This program has been replicated numerous times in ASHRAE chapters around the world. It has helped countless engineers prepare for and pass the PE test. This program has inspired Jonathan to continue volunteering his time in service to others and our industry.

Afternoon Break Sponsored by: Annexair and Shamrock Sales

ANNEXAIR

SHAMROCK SALES

Open Bar Sponsored by: AAON, Automated Logic, Chillmaster and Trane

7:30 – 8:00: Check-In / Registration

Breakfast Sponsored by: The Air Purification Company, Bosch, EBTRON, Klimor and TM Sales

TRACK 1 – HVAC&R FUNDAMENTALS

Sponsored by: Western Mechanical Solutions

8:00 – 8:55: An Introduction to ANSI/ASHRAE Standard 55

ANSI/ASHRAE Standard 55 defines the range of indoor thermal environmental conditions acceptable to the majority of occupants. An understanding of this standard is integral to the design of a new building or renovation, as it accommodates a variety of comfort solutions that contribute to sustainable building. The purpose of this presentation is to provide an introduction to ANSI/ASHRAE Standard 55, which explains occupant thermal comfort requirements and how they affect design, and consider changes incorporated in the 2023 version of the standard.

Speaker: Christian Taber, P.E., Member ASHRAE, HBDP, BEMP, LEED AP, CEM , is a senior engineer at Big Ass Fans, working on building codes/standards and fan test standards that impact the fan industry. Taber is an ASHRAE certified High-Performance Building Design Professional, a Certified Energy Manager, and a committee member of ASHRAE Standards 90.1.

He is also a member of the review committees for AMCA 230, 214, 211, 208, and 11. He holds an M.S. in mechanical engineering and B.S. in chemical engineering from Iowa State University, and an M.S. in biosystems engineering from the University of Kentucky. He is a former member of the USGBC Energy and Atmosphere Technical Advisory Group. Prior to Big Ass Solutions, Taber worked at Trane as a Marketing Engineer and Applications Engineer, where he developed a LEED specific energy modeling course that he taught to design professionals nationwide. Taber has been involved in several high profile energy efficient projects. His articles on air movement and energy efficiency have been published in multiple publications, and he has presented at ASHRAE and AIA conferences nationally.been the north section (Fort Collins) chair since 2008.

9:00 – 9:55: Stay out of Trouble with Psychrometrics

This presentation will cover the basics of psychrometrics and the psychrometric chart and preventing mistakes. Terminology, chart layout, and uses will be discussed. How to use a psychrometric chart for system design and formulas will also be discussed.This will help you brush up on or introduce you to the refrigeration cycle as well as teach you what are the typical causes of refrigeration trips so you can better troubleshoot problems.

Speaker: Michael Fulton, P.E. founded Western Mechanical Solutions to focus on minimizing the energy use of buildings through innovative application of engineering. WMS represents various energy recovery products. Mike has over 30 years of experience in equipment sales, consulting, and construction. He graduated from the University of Maine with a degree in Mechanical Engineering. He is actively involved with ASHRAE, past president of the Rocky Mountain Chapter (2002-2003), has been involved with the local ASHRAE tech conference since 1996, and has been the north section (Fort Collins) chair since 2008.

10:25 – 11:30: Pumping and Hydronics 101

This presentation provides a practical review of centrifugal pumps and hydronic system fundamentals, covering key system components and pumping strategies. Topics include comparing and specifying pump construction options, interpreting pump curves, understanding NPSH and cavitation, troubleshooting and applying field verification methods, and identifying best practices in hydronic system sizing and air management.

Speaker Debbie Ridder, P.E. is a Sales Engineer at Blackmore and Glunt, Inc. Debbie has been a part of the industry for 13 years having experience primarily as a design and consulting engineer. She now specializes in hydronic equipment and solutions. Debbie graduated from Kansas State University with a degree in Architectural Engineering.

1:15 – 2:10: How Submittals, RFIs, CA, & Value Engineering Reshape Your Design

Why design intent evolves after CDs, where things typically break down between engineers, architects, contractors and show how post-design processes strengthen the final product, not undermine it.

Speaker: Andrew Estrada is a mechanical engineer and project manager at MDP Engineering Group. Andrew has experience working for both MEP design firms and Mechanical contractors in Denver and his native state of Texas. In his role, Andrew oversees projects in a wide array of new build and tenant finish market sectors, including hospitality, multi-family, education, and office. He graduated from Texas A&M University with a degree in Manufacturing & Mechanical Engineering. In his current role, he combines his experiences and expertise to reshape his approach to mechanical design. He combines engineering principles with practical application to strengthen the final product of his design.

2:30 – 3:25: Do You Know The Reverse Carnot?

The Reverse Carnot Cycle extracts heat from one system and transfers it to another. To properly explain this process in detail, our presentation will dive into Thermodynamics, Pressure-Enthalpy diagrams, the Gas Compression Process, and Conservation of Energy as we break down the refrigeration cycle. Whether specifying, installing, maintaining, or purchasing equipment, it's important to know the principles that drive how air conditioning equipment operates.

Speaker: Nathan Ducey, P.E., LEED AP BD+C, WELL AP is a Sales Engineer at Western Mechanical Solutions. He has been active in the HVAC industry for nine years, with experience in both equipment sales and equipment design at a manufacturer. Nathan graduated from Gonzaga University in 2017 with a degree in Mechanical Engineering. He is an active ASHRAE member and serves as a junior board member for the Rocky Mountain Chapter.

TRACK 2 – HVAC&R SYSTEMS & APPLICATIONS

Sponsored by: CFM Company

8:00 – 8:55: High-density Cooling Systems

High-Density cooling technologies – Industry Standard, Cutting Edge, and Future. A review of capabilities, applications, and limitations of high-density cooling systems. This will include CRAC units, hot aisle containment, IRCs, Rear-Door (Active and passive), but will spend most time exploring Direct to Chip and Immersion cooling technologies.

Speaker: Eric Collins is a Project Manager and Project Development Specialist at Maxson Engineering, bringing over a decade of experience in mechanical engineering and project leadership. He has contributed to projects including data centers, laboratories, high-tech research facilities, secured environments, cleanrooms, and aerospace manufacturing facilities. Eric drives project growth and delivery by leading project acquisition efforts, shaping technical scopes, and guiding critical technical discussions, helping turn complex engineering challenges into successful, high-impact solutions.

9:00 – 9:55: Electrical Considerations for Mechanical Systems

This presentation will cover electrical considerations that mechanical engineering should examine while designing and laying out HVAC systems. Topics include: Fault Currents (SCCR and KAIC), Phase Monitors, NEC (National Electric Code) Clearances, Phase Monitoring for VFDs, VFD Harmonic Filtering, FLA vs MCA, and Electrification Requirements.

Speaker: Korey Kirschenmann is a principal at ME Engineers with over 20 years of experience. He is a registered professional engineer who specializes in power distribution system design from medium to low voltage, site utility coordination, lighting design, and life-safety systems. Korey designs various project types across North America, including convention centers and commercial developments, while also providing worldwide electrical event overlay

Speaker: Matt O'Boyle is a principal at ME Engineers. He is a registered professional engineer with over 20 years of experience in the construction industry that specializes in developing electrical distribution systems, lighting design, fire alarm systems, and design of lighting control systems. Matt designs a variety of project types, ranging from professional/collegiate sports venues and museums to commercial buildings across North America.

10:25 – 11:20: IRA Tax Incentives for HVAC Systems

As electrification, geothermal, and thermal storage systems become more common in commercial buildings, many project teams are leaving significant federal dollars on the table. In this session, Jacob Goldman breaks down how the latest Investment Tax Credits under the Inflation Reduction Act directly impact HVAC and building system decisions—often earlier in design than most engineers realize.

Drawing from real-world projects across K-12 schools, higher education, municipal facilities, and transit centers, Jacob walks through how technologies like ground source heat pumps, thermal energy storage, solar, and standalone storage can qualify for base credits, bonus credits, and direct cash payments through Elective Pay. He will explain how credit values can scale from 6% to 50% (or, in some cases, 6% - 70%) depending on system size, labor compliance, domestic content, and project construction timelines and locations.

The presentation focuses on practical coordination between engineers, construction teams, and financial teams. Topics include beginning-of-construction rules, prevailing wage and apprenticeship requirements, energy community bonuses, and how recent legislative changes affect project timing through 2026 and beyond. Attendees will also gain insight into Foreign Entity of Concern (FEoC) rules and how they may influence equipment selection and procurement strategies.

This session is designed to help engineers and decision-makers understand how tax incentives can support better system choices, improve project economics, and reduce first-cost barriers—without having to turn engineers into tax experts..

Speaker: Jacob Goldman, LEED, AP has a Bachelor of Science in Chemical Engineering from the University of Buffalo and an MBA from the University of Maine at Orono. He is the co-author of numerous articles published in Building Operating Management, Worship Facilities Magazine, UNIT Magazine, Green Lodging News, International Parking Institute, Corporate

Business Taxation Monthly, and Thomson Reuters (now Cerifi). He is a nationally recognized, award-winning speaker on the subject and has presented to hundreds of corporations, architectural firms, engineering firms, accounting firms, local chapters of the AEE, USGBC (Green Schools Conference), IGSHPA, BOMA, and NFMT, as well as national conferences of NALMCO, IFMA, PIMA. Mr. Goldman is a co-presenter at a myriad of industry events throughout the country alongside other industry leaders.

1:15 – 2:10: Outside the White Space: Heat Rejection Solutions

As data centers continue to scale rapidly, driven by AI workloads and increasing rack densities, cooling strategies outside the white space are becoming just as critical as those inside it. This presentation explores how evolving compute demands are reshaping data center cooling and why heat rejection system selection plays a significant role in energy efficiency, water stewardship, and overall facility performance.

The presentation compares dry, evaporative, hybrid, and adiabatic heat rejection technologies, outlining how each approach impacts energy use, water consumption, footprint, and process temperatures. Through clear visuals and real world context, it demonstrates the inherent tradeoffs between water and energy—and how hybrid and adiabatic systems can provide flexibility to optimize both.

Speaker: Adrienne Lowke Stoinoff is the Strategic Account Manager, Data Centers with BAC, where she brings more than 30 years of experience in the HVAC industry to support clients in the selection and application of heat rejection equipment for demanding mechanical systems. Her work focuses on system performance, redundancy, energy and water considerations, and how design decisions translate into long term operational outcomes. She is known for bridging the gap between manufacturer capabilities and real world engineering design. She is a graduate of Texas Tech University, Past President of the Dallas ASHRAE Chapter as well as recipient of four ASHRAE Region VIII Awards. She is a member of ASHRAE, USGBC and LEED AP BD+C certified.

2:30 – 3:25: Mixing it Up: Mixing Box Performance Analysis and Impacts on AHU Operation

Air stratification inside air handling units is a subtle but often overlooked design consideration that can significantly affect system performance, energy efficiency, and occupant comfort. This presentation focuses on understanding the fundamental airflow dynamics that lead to uneven velocity and temperature layering and how this develops throughout AHU components.

It highlights key operational impacts, including reduced efficiency, sensor inaccuracies, coil freezing risks, and inconsistent building comfort. Attendees will learn to recognize common symptoms and explore practical design and operational strategies to improve air mixing and prevent these issues.

Speaker: Dave Dorste, President, Blender Products Inc. is an Engineer with over 41 years' experience in the HVAC industry in design, product management, sales, and executive roles with Blender Products Inc., a Denver based manufacturer of components for commercial air handling units and prior to that Sporlan Valve Division of Parker Hannifin a Missouri headquartered division of a global refrigeration controls manufacturer.

Mr. Dorste received his Bachelor of Science in Engineering Management from Missouri University of Science and Technology and was an active member of ASHRAE from 1985 until 2016 serving on various TCs, SPCs, and Handbook committees. He also served on refrigerant component technical committees with AHRI.

Track 3 – SUSTAINABILITY

Sponsored by: Blackmore and Glunt

8:00 – 8:55: Electric Swing Tanks

As electrification and natural gas restrictions expand, heat pumps are replacing gas systems but face challenges such as slow recovery, reduced efficiency in cold climates, and recirculation temperature management. The swing tank addresses these issues by maintaining recirculation loop temperature without returning hot water to the heat pump, preserving COP and system efficiency.

Speaker: James Lemens, has been involved in the plumbing and heating industry since 1986 where he worked in family rep agency, then moved into positions in the Manufacturing side of the business. James enjoys the challenges of staying abreast of

the latest technology and their applications in various market segments. His background has allowed him to be involved with Pex Plumbing application and system design, Geo Source ground loop heat exchanger design, proper Design and uses of Radiant Floor Heating systems, sales of various smaller boiler and water heating systems.

9:00 – 9:55: Introduction to Ground Source Heat Pump Design

What is ground source, and how do these systems work? Learn the differences between low, medium, and high-grade geothermal; we'll focus on low-grade geothermal, aka ground source heat pump systems. Learn the basics of these systems, when you might want to apply them, and some pros and cons to help with decision-making.

- Types – different forms of ground source, what options we have, and how each works. Gain an understanding of the different types of conventional ground heat exchangers. Understand where you might apply each type.
- Design Parameters – what to know and how it will impact your design. Gain an understanding of the variables that go into the system design and the effect each has. This includes evaluating heating and cooling loads on the system, ground thermal properties, and ground heat exchanger type and configuration.
- Design Details – finalizing the design. We'll review ground heat exchanger layout and calculations, piping layout and sizing, pump sizing, and expansion tank sizing.

Speaker: Walker L. Jones, PE, CGD is a Senior Mechanical Engineer at IMEG Corporation and has over 20 years of experience in HVAC consulting. He has experience with the design of multiple sustainable energy-efficient HVAC and plumbing systems. As a Certified GeoExchange Designer, Walker has a high level of experience in the practice of geothermal heat pump design. He has performed numerous projects utilizing these skills involving the design of LEED Platinum facilities.

10:25– 11:20: Repurposing Infrastructure for Sustainability: The Future of District Energy in Denver

How does a major US city decarbonize the oldest continuously operating steam system in the country – and not break the grid in the process? The City and County of Denver has concluded a pilot feasibility study showing that conversion of the downtown chilled water district to a cooling and heating capable ambient loop with in-building water-source heat pumps can make this transformation a reality without having to rebuild our grid – and significantly reducing overall energy, emissions, and water consumption in the process. This session will explore how the team analyzed building and district-wide loads, electrical impacts, emission reductions, and financial feasibility of the system.

Speaker: John Goodin PE, CxA is with CMTA

1:15 – 2:10: Large-scale Commercial Heat Pump Water Heaters

This presentation explains the advantages of large-scale commercial heat pump water heaters work and where they are best applied. Learn about system design, stratified storage, practical piping layout and how to stage and control the system for most efficient operation.

Speaker: Bart Ransom has been with Colmac since 1995 and has been in application engineering for Colmac WaterHeat since 2011. Bart has spent countless hours training and working with engineering groups and consulting companies pioneering heat pump water heating applications across the U.S and world. Prior to tackling the Waterheat application position, Bart work as a engineering designer in the laundry division and was responsible for many Machine and controls design for that division, transitioning into sales. Bart studied Mechanical Engineering at Seattle University, and worked prior to Colmac as a manufacturing engineer at Boeing.

2:30 – 3:25: How to Save Energy in Commercial and Industrial Air Systems

Fans, dampers and louvers seem like simple machines - blades affixed to rotating hubs driven by motors with a speed controller; fixed or moveable blades directing air in, out, or through a distribution system. However, these are all complex equipment that require engineering acumen to properly size, select, and place them so they fulfill their operational requirements with efficiency and long service life. The stakes are high - not only in terms of long-term energy costs and environmental impacts, but in health, comfort, and even the economic value of the building.

And for green, high-performance buildings, the expectations are even higher. Drawing upon AMCA International's 100 years of experience with air-system equipment, this presentation will cover eight tips for high-performance air systems.

Speaker: Michael Ivanovich has been a director at AMCA International since 2011, leading global advocacy for the Association and its members on fan-efficiency regulations and helping launch AMCA professional development and credentialing programs. Mr. Ivanovich has been a member of ASHRAE since 1999. Prior to joining AMCA, he was editor-in-chief of HPAC Engineering and Consulting-Specifying Engineer magazines, and a senior research scientist at Pacific Northwest National Laboratories in the fields of information technology and building science. He has a graduate building-systems engineering degree from the University of Colorado at Boulder, and an undergraduate degree in mathematics and computer science from Utica College of Syracuse University.

Track 4 – Critical Environments

Sponsored by: LONG

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Long live your building!

8:00 – 8:55: Optimizing Laboratory Airflow for Safety and Performance

Focus on how precise airflow and room pressure control protect researchers while ensuring compliance with ANSI Z9.5 and OSHA guidelines. Include fume hood containment strategies, sash sensing technologies, and case examples of maintaining safety in high-demand lab environments.

Speaker: Daniel Evans With 20 years of experience, Daniel Evans has worked for equipment manufactures that focus on specialty applied products to provide support to safety and energy efficiencies in critical environments. This time was spent working to reduce energy consumption while delivering reliable and repeatable variable volume HVAC systems. In his current role at CRC, Daniel is heavily invested in developing knowledge related to laboratory and healthcare applications of air valves, pressure monitoring, controlled ventilation, and measured airflow equipment.

9:00 – 9:55: Intro to Hospital OR Design and Lessons Learned

This will be an interactive discussion on OR design requirements, tips and lessons learned when designing OR spaces. This will drawn from real-world experiences and the changing landscape in OR design here in Colorado. This will be an interactive discussion looking for input from the attendees while also presenting information on OR design quirks.

Speaker: Josh Weigand has been working in the healthcare environment as an engineer for over 25 years. Based in Colorado with Specialized Engineering Solutions (SES), Josh has designed critical hospital environments in 20 states and internationally. Josh believes that the greatest tool an engineer can possess is the ability to communicate and listen within the community, clients, design professionals and fellow engineers.

10:25 – 11:20: Capturing Waste Heat from Manifolded Lab Exhaust and Beyond

This presentation will show methods of manifolding laboratory exhaust in order to effectively recover waste heat. Then it will go over conventional forms of energy recovery from laboratory systems but then explore other unique ways to recover heat including heat recovery chillers, high efficiency intelligent energy recovery and data center heat recovery as part of laboratory buildings. If time allows an update on the I2SL Labs2Zero program will be provided.

Speaker: Sean Convery, is a Principal at Cator, Ruma & Associates and for over 30 years has been designing sustainable laboratory buildings for a variety of clients. Sean is currently the Treasurer for the International Institute for Sustainable Laboratories and is the former President of the Colorado Chapter for I2SL. Sean has designed over 5,000,000 sq.ft. of lab projects in his career with many of them being BSL-3.

1:15 – 2:10: Data Centers Types, Systems, and Cooling applications

This session will cover essential topic regarding data center components and operation.

- An overview of different data center types
- Fundamental components and redundancy of a data center including electrical, mechanical and connectivity basics.
- Different strategies for cooling data centers and the associated factors to consider.

Speaker: **Matt Wiley**, brings extensive industry experience, having spent 5 years at IBM Boulder, seven years at H5 Data Centers, where he served as Director of Operations. He currently holds the role of Vice President of Strategic Operations at RadiusDC. Matt earned his bachelor's degree in mechanical engineering from Colorado State University (go Rams) and later completed a master's degree in industrial management and engineering systems at the University of Nebraska–Lincoln. With a strong passion for teaching and knowledge sharing, Matt offers practical insights drawn from real-world design and operational leadership.

2:30 – 3:25: Sustainable Design of Energy Efficient Laboratory Exhaust Fan Systems

This session breaks down what "high plume / high dilution" means in real-world lab exhaust design. We'll compare high-plume approaches to common alternatives, highlighting where each tends to perform well or struggle.

This discussion focuses on critical-environment realities - diverse exhaust volumes, varying contaminant profiles, intake proximity, roof geometry, and obstruction effects - and how these factors influence both risk and operating cost. We'll also connect dispersion strategy to sustainability outcomes: minimizing re-entrainment-driven overdesign, reducing unnecessary dilution air and fan energy, supporting lower system pressure/horsepower where feasible, and improving overall "right-sized" ventilation performance.

The session closes with practical guidance for specifications and evaluation criteria, plus a framework for comparing solutions on "value per dollar" across performance, risk mitigation, energy, reliability, and lifecycle cost.

Speaker: Mark Gerken is Vice President of Engineering at SPX Technologies-EAM, where he leads engineering strategy and product development across the 'Engineered Air Movement' segment of SPX Technologies. Previously, he held senior engineering and leadership roles across filtration and industrial equipment organizations, including VP-level engineering positions at United Air Specialists and Parker Hannifin.

Track 5 – Future of HVAC

Sponsored by: The Air Purification Company

8:00 – 8:55: The Future of Refrigerants: Navigating the Transition to Low-GWP Solutions

This presentation is about the shaping the Future of Refrigerants exploring the European Transition Experience and State-Level Momentum Behind R290

Speaker: Massimiliano Manfro Massimiliano holds a master's degree in Energy Engineering from the University of Padua. Since joining Aermec S.p.A. in 2021, he has worked as a Technical Marketing Researcher, focusing on the development and evaluation of new products and refrigerants for both the European and North American markets. He has been actively involved with the European team in addressing recent regulatory changes concerning low-GWP refrigerants across Europe.

9:00 – 9:55: Back to the Basics - HVAC Systems Reliability In The Face Of Ongoing Technology Changes

Campus Facilities leaders and design engineers face rapidly evolving HVAC technologies. While innovations in technology offer clear benefits, they also introduce new reliability challenges. This seminar examines how to anchor design decisions in long-term system reliability while planning flexible, resilient HVAC infrastructure that supports the future of campus design.

Speaker: Jake Blevins is the Co-Founder and Principal of ST+B Engineering, where he leads complex MEP and campus infrastructure projects across the Rocky Mountain region. Originally from Norfolk, Virginia, Jake has called Red Cliff, Colorado home since 2000 and spends his free time skiing, hunting, playing guitar, and exploring the mountains.

10:25 – 11:20: The Role of Artificial Intelligence in Modern HVAC Engineering

Artificial intelligence is rapidly entering the building design world, but what does that actually mean for HVAC engineers? This presentation explores the current AI tools, their real capabilities and limitations, and how the technology is likely to evolve in the coming years. Attendees will gain perspective on how AI may reshape workflows while reinforcing why engineering judgment and expertise will remain essential to the HVAC industry.

Speaker: Evan Brown is the CEO and Co-Founder of Rebar, a building technology company focused on developing innovative solutions for the commercial HVAC industry. Through Rebar, Evan works to modernize how mechanical systems are processed and integrated within the built environment. With a background rooted in the startup and engineering ecosystem at the University of Colorado Boulder, Evan focuses on bringing practical innovation to the HVAC industry and helping the those around him adopt new technologies. Rebar's work has been recognized with an Innovation Award at the AHR Expo for its contribution to advancing HVAC system design. Evan is passionate about collaborating with engineers, contractors, and manufacturers to improve ai integration, industry growth, and drive the next generation of HVAC innovation.

1:15 – 2:10: The Future of Propane as a Refrigerant in the Residential/Light Commercial and VRF Market

This presentation will discuss the status of the A2L transition in North America, current regulations at the state and federal level as well as a future look at where propane / R290 may fit into this complex puzzle.

Speaker: Chris M Forth is a 35+ year HVAC industry veteran who has worked in engineering, product management and most recently in the regulatory and codes space as the Vice President of Regulatory, Codes and Environmental Affairs for Bosch HC Americas. Chris is heavily involved in industry codes and standards development as well as industry advocacy efforts to facilitate the safe transition to Low GWP refrigerants at the state, federal and international levels. Chris currently serves on multiple committees and boards including the Air-conditioning, Heating and Refrigeration Institute (AHRI), the Alliance for Responsible Atmospheric Policy (AREP) and the State Chamber of Oklahoma where he is based. Chris is currently working with industry and the California Air Resources Board (CARB) to finalize California's stationary AC and refrigeration HFC rule as well as working with the Environmental Protection Agency (EPA) in the implementation of the American Innovation in Manufacturing (AIM) Act.

2:30 – 3:25: Using Advanced Analytics and AI to Move

Discover how the latest advancements in data analytics and artificial intelligence are transforming building operations from reactive maintenance to proactive, predictive performance. We will explore how modern HVAC technologies can help facility teams reduce energy waste, lower operating costs, and improve occupant comfort while managing increasingly complex buildings with limited staff. Attendees will learn how AI-driven tools analyze real-time building data to detect faults early, optimize system performance, and act as a "virtual energy engineer" that continuously improves efficiency. Also highlighting real-world success stories showing measurable reductions in energy use and greenhouse gas emissions across large building portfolios. By leveraging intelligent automation and predictive insights, facility teams can move beyond simply fixing problems to actively improve building performance. Join us to see how AI-powered solutions are shaping the future of smart, high-performance buildings.

Speaker: Blake Standen is the Digital Sales Business Development Manager for Trane