

**UAA Professional Development Seminar Series** 

## **Variable Refrigerant Flow Technology**

Presented by Elena Hartford, Mechanical Sales, Inc.

Variable Refrigerant Flow (VRF), also known as Variable Refrigerant Volume (VRV), technology uses refrigerant rather than air or water as the cooling and heating medium for compact and efficient space conditioning. This technology has been around for over twenty years, but only in more

recent years has it taken off in the United States. Besides providing a convenient cooling or heating solution, VRF, in combination with three-pipe heat recovery technology, has the potential to save energy and reduce the cost of comfort air conditioning in both residential and commercial applications. This presentation will cover the history of VRF and its development, fundamentals of VRF systems, and design considerations for using VRF systems in cold climates.

**Elena Hartford** earned her bachelor's degree in Mechanical Engineering at the University of Alaska Anchorage in 2015. She worked as a mechanical consulting engineer for four years, designing HVAC and plumbing systems for commercial and residential buildings ranging from restaurants to assisted living facilities. Recently, Elena made the transition to sales, where she assists with the design and specification of LG brand VRF systems and helps engineers and contractors with the application of other air-side HVAC equipment. An active member of ASHRAE since 2011, Elena is a committed member of the HVAC industry who is proud to maintain her local Chapter involvement as the Young Engineers in ASHRAE (YEA) Chair and foster the next generation of HVAC engineers.

Friday, February 28, 2020 11:45 am-12:45 pm UAA College of Engineering, EIB 211