We welcome you to join us for our technical meeting at the Hotel Biltmore in Santa Clara for an evening of sharing knowledge, fun, and networking.

**Date:** October 9th, 2019  
**Location:** Hotel Biltmore  
2151 Laurelwood Rd, Santa Clara, CA 95054

**Time:**  
Check-in and Social: 5:30PM  
Dinner 6:30PM - 8:15PM  
YEA Mixer 8:30PM – Last Call

**Cost:**  
Early bird Registration fee: $ 50/- (by Midnight Oct 2nd)  
Late Reg/Walk-ins/Non-Members: $ 60

**RSVP:** [https://sjashrae.org](https://sjashrae.org)
Don Betts is a Product Sales Manager at Cleaver Brooks located in Milwaukee, WI. Don has over 30 years of experience in engineering and sales involving heat transfer equipment. Don’s product experience includes incineration, waste heat recovery, hot water and steam systems. In addition, Don has management experience as the general manager of a hot water, ASME Code, and heat exchanger manufacturing facility. Don is from the Milwaukee area and graduated from Marquette University with a B.S. in Mechanical Engineering.

Presentation Summary
This presentation will cover optimization of system design and control strategies for hydronic systems with condensing boilers. The presentation begins by covering the science of condensing, and discussing how condensing boilers are able to achieve higher efficiencies by capturing latent heat from the boiler flue gas. Next, the presentation will address different methods for controlling and staging boilers, and discuss how to optimize controls for condensing boiler systems given the inverse efficiency characteristics of condensing boilers. Finally, we will compare primary variable and primary/secondary systems, and discuss the pros and cons of these two system designs when utilizing condensing boilers.