



Building Commissioning Association
1600 NW Compton Drive, Ste. 200
Hillsboro, OR 97006

OCTOBER 16-17, 2018

NASHVILLE, TENNESSEE



Register Today!
BCxA Conference
Visit us online for more information www.BCxA.org

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BCxA Conference

OCT 16-17, 2018 | Nashville, Tennessee

Get Ready for a **Double-Platinum Event** in Music City!

The BCxA Conference is an exceptional training event and fun every year – and 2018 is no exception. This year in Nashville, we'll be hitting all the high notes as we celebrate with BCxA's 20th Anniversary. And as always, we'll send you home with fresh Cx and building performance content that plays no second fiddle in the building industry.

Join Us for continuing education, networking, and fun in the great city of **NASHVILLE, TENNESSEE!**

WHAT YOU WILL TAKE WITH YOU:

- Building Systems & Advanced Technology Integration
- Commissioning Applications
- Industry Trends
- Project Team Building
- Inspiring New Relationships
- Learning Experiences for All Knowledge Levels
- And Much More!

WHO ATTENDS BCxA CONFERENCE?

- Architects
- Code Specialists
- Commissioning Providers
- Construction Contractors
- Controls Contractors
- Design Engineers
- Energy Managers
- Facility Managers
- Mechanical Contractors
- Owners' Representatives
- Policymakers
- Systems Manufacturers
- Utility Representatives

Full-Day Workshop

MONDAY, OCTOBER 15, 2018 | 9:00 AM – 5:00 PM

Assessing and Optimizing Central Chilled Water Plant Load and kW per Ton Profiles

PRESENTER: David Sellers, PE - Facility Dynamics

If you missed David Sellers' sold-out workshop last year – and even if you didn't – here's your chance to join this year's hands-on event focusing on the techniques and steps in the process you would go through to perform chilled water plant analysis. You will participate in a mentored working group and, in addition to getting hands-on with spreadsheets and equipment data, you will get a plant tour of a working chilled water plant – a really big working chilled water plant. The experience will provide you with an opportunity to learn about how the machinery in a large central plant works and what it looks like, plus learning about load profiles, turn down ratios, and kW per ton profiles. You will be more confident about your central chilled water plant knowledge. In addition, you will likely find that you have some insight into the other types of central plants you will encounter as you work with building systems. After all, with building systems, $F = ma$ (Newton's second law of motion), no matter if it is the principle behind a chiller, a boiler, a pump, or a cooling tower.

This full day workshop is approved for 7 learning units. Attendees will receive access to all online materials needed for this class.

BCxA Member

REGISTER - \$400.00 (Early Bird) | **\$475.00** (After September 27, 2018)

Non-Member

REGISTER - \$550.00 (Early Bird) | **\$625.00** (After September 27, 2018)

Half-Day Workshop

MONDAY, OCTOBER 15, 2018 | 1:00 – 5:00 PM

Testing Adjusting and Balancing (TAB): What Owners, FMs and CxPs Need to Know

PRESENTER: William McMullen - Dewberry

What's the relationship between TAB and Cx? This interactive workshop will compare and contrast distinguishing elements of these two professional processes. The speaker will also provide the basics of the TAB process and what you as the building owner, facilities manager and commissioning provider need to look for and expect from the TAB contractor. Training is focused on tools, processes, and techniques used by TAB professionals, engineers, architects and contractors to achieve a balanced, high performing building. You will gain an understanding of how HVAC systems are properly tested and balanced from specifications, and coordination that results in quality delivery. Attendees will learn how to evaluate a TAB report and compare it to building conditions, and how a proper and complete TAB process can save energy.

This half-day workshop is approved for 4 learning units. Attendees will receive a notebook with all the materials from the presentation.

BCxA Member

REGISTER - \$250.00 (Early Bird) | **\$300.00** (After September 27, 2018)

Non-Member

REGISTER - \$300.00 (Early Bird) | **\$350.00** (After September 27, 2018)



Sponsors

PLATINUM



Sponsorship Opportunities are still available.

Contact Sheri Adams at **877.666.2292**.

GOLD



Horizon Engineering Associates LLP



SILVER



BCxA Scholarship Foundation Golf Tournament

MONDAY, OCTOBER 15, 2018 | 8:00 AM – 2:00 PM

The Annual BCxA Scholarship Foundation Golf Tournament will take place at the Gaylord Springs Golf Links. This course is consistently recognized among Golf Week's best courses you can play in Tennessee. Carved from the banks of the meandering Cumberland River, the Scottish links-style, par-72 layout offers 18 holes bordered by limestone bluffs and wetlands. From tee to green, no matter your skill level, you'll be inspired by the beauty that surrounds you while helping to build the Foundation's scholarship fund to support a new generation of Commissioning Providers.



The emphasis is on FUN while raising money for the BCxA Scholarship Foundation. Please join us for a lively event in a magnificent setting for this worthwhile cause. Morning coffee and lunch are included with the cost of golf and, of course, your contribution to the scholarship fund.

REGISTER - \$125.00 (per person)

REGISTER - \$450.00 (per foursome)

NOTE: Club rental available on first-come, first-served basis.

BCxA Annual Meeting and Dinner

TUESDAY, OCTOBER 16, 2018 | 5:30 – 9:30 PM

We're Celebrating BCxA's 20th Birthday in a Big Way! Dinner, Awards, and a Show!

You'll have time to kick up your heels, and then sit back, take it easy, and enjoy the show! The BCxA Annual Meeting and Dinner will be held at The Opry House, one of Nashville's iconic buildings. Dinner and awards will be in Studio A at The Opry, home to Hee Haw and scenes from the TV series, Nashville. It will be an evening of cocktails, real Southern food, industry awards, and a salute to "Celebrating the Best in Commissioning." After dinner, we will be escorted to a live headliner show (not BCxA Board Members!) at the world-famous Grand Ole Opry.

Register early for the Annual Meeting and Dinner – due to the location and BCxA-reserved seating at the show, a limited number of tickets are available, and we don't want to celebrate without you!

Registration fees include dinner and the live show at The Grand Ole Opry.



BCxA Member REGISTER - \$140.00

Non-Member REGISTER - \$160.00

Conference Registration

BCxA MEMBER RATES

\$650.00 (Early Bird) | **\$700.00** (After September 27, 2018)

NON-MEMBER RATES

\$800.00 (Early Bird) | **\$850.00** (After September 27, 2018)

Exhibitor Showcase and Reception

OCTOBER 15-16, 2018

Join Exhibitor Reception from 5:30 pm - 7 pm.

New this year! We will open the conference this year with an Evening Reception in the Exhibitor Hall. Arrive Monday the 15th for the pre-conference workshops or the Scholarship Foundation Golf Tournament then join the Exhibitors as they showcase products and services that advance commissioning and building performance. This is a great opportunity to discover tools and services, and network with your colleagues.



Escape Room

OCTOBER 16-17, 2018

Building Chaos Virus Threatens Planet

According to recently uncovered blog postings, an engineer and commissioning provider has created a computer virus that is designed to shock the populace and inspire immediate action in response to global warming concerns. The engineer, using the pseudonym "Mr. X", developed the virus as part of a plan to spike carbon emissions and the warming of the planet with the ultimate goal of scaring policy makers to action. After validating the legitimacy of the virus and its potential to rapidly increase emissions, climate scientists' fear that once implemented the impact will be irreversible. This contradicts Mr. X's published objective of a short term spike that leads to long-term reductions in emissions and average global temperature. Most experts are not convinced, and the few that are not panicking are working every conceivable strategy to stop the virus.

Can you stop the virus days before this headline is printed? You'll be given the opportunity at the BCxA Conference in Nashville. The scenario is part of a building-commissioning-based escape room activity. Gather a team of ten or fewer people and take on this collection of puzzles that all lead to your ultimate objective: stopping the building chaos virus.

How to sign-up: When you register for the conference make sure you select the time you want to attempt to stop the virus. Then let your smart friends know when you are scheduled so they can register during the same time slot. Each group will have 10-12 guest working to save the day and become the heroes of the plant!



Hotel Registration

Gaylord Opryland Resort & Convention Center

2800 Opryland Drive, Nashville, Tennessee 37214
1.615.889.1000

Special Rate: \$195.00 (Single/Double)

NOTE: Special conference rate is available until September 27, 2018 and is subject to availability.

DAY 1 TUESDAY, OCT 16TH

7:30 AM – 5:00 PM • **Registration**

7:30 – 8:30 AM • **Breakfast in the Exhibit Hall – Ryman Hall B1-2**

8:30 – 10:00 AM • **BCxA Conference Master of Ceremonies:**
John Villani, BCxA President, PE, CCP - Grumman/Butkus Associates; **Tom Poeling**, President-Elect, PE, CEM, CCP - US Engineering Company
Keynote Address: Major General Mike Walsh (Ret.), Vice President - Dewberry
Presentation: SMART Analytics Awards
Presentation: Smart Energy Analytics Campaign Awards - Liz Fischer, Executive Director - BCxA

10:30 – 10:30 AM • **Break**

TRACK	Cx ESSENTIALS: New Construction	HIGHER ED Cx TRENDS	Cx MANAGEMENT	Cx PROGRAMS & TOOLS
10:30 – 12:00 PM	Begin at the Beginning: Design Phase Cx Craig Hawkins, CxA, CCP - McKinstry Sean Whelan, PE, CCP, LEED AP - Columbia University Anthony Avendano, LEED AP BD+C, PE, CCP, LEED AP - Columbia University	Laser & Critical Environment Labs Kurt Matsen, PE, CEM - Grumman/Butkus Associates Kevin Vander Klay, PE, LEED AP, QCP - Grumman/Butkus Associates	Empowering Operations Saverio Grosso, CEM, CEA, EBCP - Edison Energy Jay Tulley, PE - US Army Garrison, Presidio of Monterey Brian Clark - US Army Corps of Engineers	EMIS/MBCx Programs Hannah Kramer, PE - Lawrence Berkeley National Laboratory - Smart Analytics Program Kathleen Rossmann & Tom Moore - University of Iowa Rick Tonielli - ComEd Walid Guerfali - Nexant
12:00 – 1:30 PM	Lunch – Exhibit Hall			
1:30 – 3:00 PM	Project Team Roles & Responsibilities Jim Feeney, PE - Grumman/Butkus Associates David McElroy - Northwestern University	If It's So Smart, Why Can't The Equipment Communicate? Dwight Gray, PE, CCP - Energeering Economics, Inc. L. Scott Henderson, PE, CCP, LEED BD+C - McKinstry Noah Welshans, LEED Green Associate - McKinstry	Say Anything, Write Anything, Do It All? Austin Azzaretto, PE, LEED AP Jessica Corriere, PE - AKF Group LLC Tony Dileonardo, CxA, LEED AP - Wick Fisher White Tracey Jumper, CCP - Jump-Start Building Commissioning LLC	Analytics/MBCx and FDD Keith LaRose - CopperTree Analytics, Inc. Chris McClurg - BuildingIQ, Inc.
3:00 – 3:15 PM	Break			
3:15 – 4:15 PM	How to Write a Functional Test Karl Stum, PE, CCP - Summit Engineering	Bio Research: IAQ Teamwork David Cohen, PE, CCP - Grumman/Butkus Associates David Warner - HTS	Winning Work: Engaging & Contracting with Owners Kathleen Favale Dan Forino, PE, CCP, LEED AP BD+C, WELL AP - Horizon Engineering Associates, LLP	Humidity Control Design Tips R. Mark Nunnally, PE, CxA, LEED AP - Nunnally & Associates, Inc.
5:00 – 9:30 PM	Annual Meeting, Dinner, and Show at The Opry			

DAY 2 WEDNESDAY, OCT 17TH

7:30 AM – 5:00 PM • **Registration**

7:30 – 8:30 AM • **Breakfast**

7:15 – 8:15 AM • **BREAKFAST SESSION: Ethics for PEs**
 Dan Forino, PE, CCP, LEED AP BD+C, WELL AP - Horizon Engineering Associates, LLP

BREAKFAST SESSION: Tax Incentives
 Shane Nault - Building EnergetiCx
 Randy Lucas - Lucas Tax + Energy

Young Professionals Panel
 Evan Wyner, PE, CCP - Collier

TRACK	Cx ESSENTIALS: Existing Buildings	Cx SYSTEMS	CASE STUDIES
8:30 – 10:00 AM	Scoping & Investigating Existing Buildings Robert Austin - Dewberry Kenny Reed, PE, CEM, CxAP - Specialized Engineering Solutions	The Value of BECx for Performance & Risk Avoidance Fiona Aldous - Wiss Janney Elstner Associates Simon Pallin - Oak Ridge National Laboratory Caroline Hazard - CSRA, Inc.	Integrating New & Legacy Systems Candice Rogers, MBA, CCP, CxA, LEED AP BD+C - Paladin, Inc. Kelsey Leslie, PE, CxA, Niagara IV - Paladin, Inc. Jeremy Bartlett - RMF Engineering, Inc. Meghan Reisterer - Oberlin College
10:00 – 10:30 AM	Break		
10:30 – 12:00 PM	Data Analysis Reinhard Seidl, PE - Taylor Engineering Ryan Stroupe - PG&E Pacific Energy Center	Controlling the Air Ryan S. Lean, PE, LEED AP, CCP, EBCP, CEA, WELL AP - Jaros, Baum & Bolles Consulting Engineers, LLP Phillip Tan, PE, CEM, LEED AP, CxA - P2S, Inc.	NCCx - Multi-Use Challenges Harunori Yoshida, Professor Emeritus - Non-Profit Organization Building Services Commissioning Association, Japan Naomiki Matsushita - Aleph Networks Corporation Jose Torres-Coto, PE, CCP, CxA, BECxP, CxA+BE, EMP, LEED AP BD+C - Kitchell
12:00 – 1:30 PM	Lunch Break: Tom Poeling – The Value of Commissioning		
1:30 – 3:00 PM	Energy Calculations: What, When, & Why Tim Shinnick, PE, QCP, CEM - Grumman/Butkus Associates	Cx for Safety & Security of Buildings Wayne Dunn, PE, PEng, LEED AP - E.W. Dunn Developments, Inc. Scott McChesney - Spec-X Solutions	High Performance Labs Javier Navar Payan, MSME, PE, CEM - University of Minnesota Raphael Vitti, PE, BEAP - KW Engineering Chris Weyandt, PE, CEM - Lawrence Berkeley National Laboratory
3:00 – 3:30 PM	Break		
3:30 – 4:30 PM	Closing Plenary: John Villani , BCxA President, PE, CCP - Grumman/Butkus Associates		



Continuing Education Credits

Earn Up To 10.5 AIA Learning Units

The BCxA is a registered provider in the American Institute of Architects (AIA) Continuing Education System. Conference attendees may receive general and HSW education credits based on their individual session or workshop attendance.