

Programs for the Orlando Meeting (February, 2020):

Seminar 3 (Intermediate)

Sunday, February 2, 2020, 8:00 AM-9:00 AM

Keeping up with the Mouse: Orlando International Airport Expansion Commissioning and Energy Management

Sponsor: TC 7.9 Building Commissioning

Room: Orange B

Track: High Efficiency Design and Operation

Chair: Wade Conlan, P.E., BCXP, CPMP, Member, Hanson Professional Services, Maitland, FL

The Orlando International Airport is developing a new South Terminal Complex, including landside and 26 airside gates. The 2 million square ft. addition costs approximately \$3 billion. The existing North Terminal is being renovated with energy optimization in mind. The Airport is conscious of its energy consumption and employs tactics through its sustainability management plan. This session discusses the challenges encountered by team members from the perspective of the owner's director of planning and construction, M/E/P systems' commissioning, and building envelope commissioning authorities. Commissioned systems included all major building envelope, mechanical, plumbing, electrical and life safety systems.

1. Touch and Go: Commissioning Issues for Large Airport Expansion

Robert Knoedler, P.E., Member, Hanson Professional Services, Raleigh, NC

2. Energy and Sustainability Management for Aviation Facilities

Davin Ruohomaki, Greater Orlando Aviation Authority, Orlando, FL

Seminar 25 (Intermediate)

Monday, February 3, 2020, 8:00 AM-9:30 AM

ASHRAE Guidelines: The Path to Optimization of HVAC&R Systems and Equipment

Sponsor: Chair: Mina Agarabi, P.E., Member, Agarabi Engineering PLLC, New York, NY

Room: Orange G

Track: High Efficiency Design and Operation

Chair: Mina Agarabi, P.E., Member, Agarabi Engineering PLLC, New York, NY

This seminar provides an overview of the latest revision of Guideline 32 and newly developed Guideline 1.3. For young engineers and those new to the guidelines, these presentations highlight how the guidelines can aid in optimization of HVAC&R systems

and training on specific-building system and assembly operations and maintenance. Lastly, findings are presented on ASHRAE RP-1650 on the current focus of training material and industry practice in the U.S.

1. Building Operations and Maintenance Training for the HVAC&R

Commissioning Process

Walter Grondzik, P.E., Fellow Life Member, Ball State University, Muncie, IN

2. Guideline 32: Management for High Performance Operations and Maintenance

Orvil Dillenbeck, P.Eng., Member, Canadian Nuclear Laboratories, Chalk River, ON, Canada

3. Review of Training Requirements for the O&M of High-Performance Buildings

Jaya Mukhopadhyay, Ph.D., Member, Gilbert Kalonde and Loras O'Toole, P.E., Member, Montana State University, Bozeman, MT

Seminar 56 (Intermediate)

Tuesday, February 4, 2020, 11:00 AM-12:30 PM

The Magical Powers of Integration: An Introduction to the New and Improved Handbook Chapter on Integrated Project Delivery

Sponsor: 7.1 Integrated Building Design, 7.2 HVAC&R Construction & Design Build Technologies, TC 7.9 Building Commissioning

Room: Orlando V

Track: HVAC&R Fundamentals and Applications

Chair: Rachel Romero, P.E., Member, National Renewable Energy Laboratory, Golden, CO

Join us on a tour of the magical world of integrated project delivery. Learn how to use ASHRAE's recently published outline for working as an integrated cross-functional team; the key to the magic of integration. The magic is real. Integrated project delivery reorganizes design and construction tasks in a whole building optimization. Practitioners will learn about their roles as integrated team members; what is expected from them and what can be expected of teammates. Design students will see a structured working method that promotes effective conversations with builders. Team leaders will learn how the chapter guides organizing across professional disciplines.

1. Why IPD, What's the Alternative?

Rachel Romero, P.E., Member, National Renewable Energy Laboratory, Golden, CO

2. What Do You Know When You 'Don't Know Anything' About Integrated Project Delivery?

Stephen Pope, CSV Architects, Ottawa, ON, Canada

3. Stirring up the Enchanting Principles and Practices of Integrated Project Management

Lianne Cockerton, P.Eng., Martin Roy et Associés, Montreal, QC, Canada

4. The Charms of Your Team in an Integrated Project

David Allen, Allen Consulting, Chelmsford, MA

Seminar 74 (Intermediate)

Wednesday, February 5, 2020, 11:00 AM-12:30 PM

Smart Is as Smart Does: Case Studies from Intelligent Florida Buildings, Campuses and Cities

Sponsor: 1.4 Control Theory and Application, 7.5 Smart Building Systems , 7.3, 7.9

Room: Orange F

Track: Big Data and Smart Controls

Chair: Chariti Young, Member, Automated Logic Corp., Kennesaw, GA

Are smart buildings, campuses and cities REALLY smart? Or is it all just hype? The proof is in the results. The speakers present case studies of Florida buildings, campuses and cities designed and operated to take advantage of advanced sequences of operation, novel integration use cases, and IoT data and analytics. Come find out what has worked and what hasn't, and the challenges the industry faces to make every installation smart.

1. Are Smart Buildings a Solution in Search of a Problem, or a Means to an End?

Chariti Young, Member, Automated Logic Corp., Kennesaw, GA

2. A Smart Campus Infrastructure Doesn't Manage Itself

Nathaniel Boyd, P.E., BEAP, Member, University of Central Florida, Orlando, FL

3. Smart City Transformation: What's Required for Success?

Michael Hess, P.E., City of Orlando, Orlando, FL

4. Why Smart Cities Are Good Business

Ian Lahiff, P.E., City of Orlando, Orlando, FL
