

# ASHRAE TC 10.7

## Commercial Food & Beverage Refrigeration Equipment 2017 ASHRAE Winter Meeting Agenda for Monday, January 30, 2017, 2:15 pm - 4:15 pm Forum 4 Caesars Palace (Pool)

Note: The ASHRAE Code of Ethics is to be adhered to by those doing ASHRAE business whether or not they are an ASHRAE member. <https://www.ashrae.org/about-ashrae/ashrae-code-of-ethics>

### 1. Welcome & Introductions – Sign-In Sheets

### 2. Review and Revise Agenda

### 3. Determination of Quorum

### 4. Review Scope / MBO's

TC10.7 Scope: TC 10.7 is concerned with the application and performance of equipment and systems for the refrigeration of food and beverages in commercial operations. This includes commercial equipment such as refrigerated merchandisers and storage cases, walk-in freezers and coolers (<3000 sq. ft.), beverage vendors and dispensers, commercial ice makers, and water coolers.

TC10.7 MBO's (Objectives):

- The pursuit of technological advancement of commercial food and beverage equipment and systems to enhance overall performance through improved food safety, food quality, energy efficiency, and reduced environmental impacts.
- To provide engineering design, application knowledge, and technical expertise to effectively support research and the Refrigeration handbook chapters and standards for which we are responsible.

### 5. Recognition of Liaisons & Announcements:

Committee Liaisons:

- Section Head ..... Jim Tauby
- Program Committee Liaison ..... Kevin Gallen
- Research Committee Liaison ..... John Shonder
- Handbook Committee Liaison ..... Scott Fisher
- Chapter Technology Transfer Committee Liaison ..... Gerald Hartford
- Standards Committee Liaison ..... Cecily Grzywacz
- Refrigeration Committee Liaison ..... Cesar Luis Lim
- ALI/PDC Liaison ..... Hugh McMillan
- MTG Low GWP Liaison..... Brian Fricke

Announcements

### 6. Membership:

Current TC10.7 Management Team

- Chair ..... Charles Hon (VM 6/17)
- Vice Chair ..... Timothy Anderson (VM 6/18)
- Secretary ..... Lauren Zelinski (VM 6/18)
- Research Subcommittee Chair ..... Shitong Zha (VM 6/19)
- Standards Subcommittee Chair ..... Van Baxter
- Program Subcommittee Chair ..... Caleb Nelson (VM 6/18)
- Handbook Subcommittee Chair ..... Dave Demma
- Webmaster ..... Kyle Larson
- Additional Voting Members:...Jon Murray (6/18), Carl Roberts (6/18), Pradeep Bansal (6/19), Patti Conlan(6/19), Cesar Lim (Non-Quorum 6/19), Gustavo Pottker(6/19), Daryl Erbs (6/20) and Massoud Neshan (6/20)

Charlie Hon's term as a voting member will expire after the summer meeting 7/1/2017. Are there non-voting members interested in moving to Voting Member status?

## 7. Review Draft Minutes from the 2016 Summer Meeting in St. Louis MO

### 8. Subcommittee Reports:

#### A. Program Subcommittee (Caleb Nelson)

Meeting: Sunday 5:15pm-6:00pm, (Pisa Prom Level)

Two new categories besides seminars and papers will be available for submissions in Long Beach CA. These two areas will be Panel Discussions and Debates. The committee can consider submissions for these categories.

#### B. Research Subcommittee (Shitong Zha)

Meeting: Sunday, 6:00pm-6:45pm, (Pisa Prom Level)

Project 1467 – Balancing Latent Heat Load between Display Cases & Store Comfort Cooling (under review)

RTAR 1706 – Minimum Refrigerant Charge Attainment for Commercial Refrigeration Systems

RTAR 1722 – Optimizing Air Curtains for Refrigerated Display Cases with Glass Doors

RTAR 1779 - Optimization of air curtains in vertical display cases, incorporating horizontal air stream.  
RTAR to be rewritten prior to suggestion for resubmittal.

RTAR 1786 MOT to determine pump load of secondary CO2 system

This RTAR was accepted. WS needs to be completed by August 15th for submission. Tim and Shitong to submit Work Statement for committee review and address the comments received on the RTAR.

Potential request for cosponsor from AHRI or DOE. **(ACTION 2)**

WS 1615 (TC7.5, with TC 10.7 co-sponsor) - Fault Detection and Diagnostic Methods for Supermarkets  
**(Action 1)**

**New Project Ideas:**

RTAR- Study of Penalty of Frost Formation and Defrost On Refrigeration System.

There is not much currently published on defrost and this would be beneficial to the industry. Ramin and Daryl to provide draft RTAR **(ACTION 3)**

RTAR - DOE test according to ASHRAE Standard 72 and how instrument accuracies and input tolerances can affect the outcome of the test results and repeatability.

This could involve both analytical and testing. It was noted that ASHRAE 37 may be doing something similar and this should be considered when developing this RTAR. SPC 37 should be contacted and SSPC 72 should propose an RTAR for this. Lauren will reach out to the chair of SPC 37 to determine the status of this project and then report back to SSPC 72 and TC 10.7 **(ACTION 4)**

Ad-Hoc Group – New technology assessment and application for energy efficiency in display cases (J. Murray, C. Roberts, R. Faramarzi)

The Ad Hoc Group's report will be circulated to the committee for review. Chairman Hon will circulate the report to the committee for review and comments and additions if the members feel there are areas not fully covered by the suggested topics. **(ACTION 5)**

Development of a new infiltration model for walk-in openings

Method of test for secondary fluids with two phase flow entering and/or leaving a display case

Demand profile characterization for heat and service hot water in supermarkets

Optimization of air curtains in vertical display cases, incorporating horizontal air streams

Standard for rating evaporators with high glide refrigerants (with TC 8.4)

**Others Ideas?**

**C. Handbook Subcommittee** (Dave Demma)

Meeting: Sunday, 6:45pm-7:30pm, (Pisa Prom Level)

Refrigeration, Chapter 15 – Retail Food Store Refrigeration and Equipment

Refrigeration, Chapter 16 – Food Service and General Commercial Refrigeration Equipment

**D. Standards Subcommittee** (Van Baxter)

TC10.7 is the Cognizant TC for the following standards:

SPC 18 no actions at this time.

Standard 29-2009, Methods of Testing Automatic Ice Makers (Daryl Erbs)

Standard 32.1-2004, MOT for Rating Vending Machines for Bottled, Canned and Other Sealed Beverages (Scott Mitchell)

Standard 32.2-2004, MOT for Rating Pre-Mix and Post-Mix Beverage Dispensing Equipment (Daryl Erbs)

Standard 72-2005, MOT Open and Closed Commercial Refrigerators and Freezers (Jon Murray)

Standard 210-Method of Testing for Rating Commercial Walk-in Refrigerators and Freezers (Lauren Zelinski)

SPC 220P: Method of Test for Small Commercial Blast Chillers, Chiller/Freezers, and Freezers (Joe Sanders)

## **Meetings**

SPC-32.2 Meeting *MOT for Rating Pre-Mix and Post-Mix Beverage Dispensing Equipment* (Daryl Erbs)  
Meeting: Tuesday (1/31/) 8:00 am – Noon Forum 13 Pool Level

SSPC-72 MOT Open and Closed Commercial Refrigerators and Freezers (Jon Murray)  
Meeting: Sunday (1/29) 1:00 pm – 5:00 pm Venice, Emp Level

(Informational) SSPC-147 Reducing the Release of Halogenated Refrigerants from Refrigerating and Air-Conditioning Equipment Meeting: Monday (1/31) 8:00 am to Noon Forum 23 Pool Level

SPC 210 Meeting MOT/for Rating Commercial Walk-in Refrigerators and Freezer  
Meeting: Monday (1/30) 8:00 am – Noon Forum 11 Pool Level

SPC 220P Method of Testing for Rating Small Commercial Blast Chillers, Chiller Freezers and Freezers  
Meeting (1/30) 5:15 pm to 6:15 pm Forum 6 Pool Level

TC10.7 Website Address: <http://tc107.ashraetcs.org>

## **9. New Business**

### **Notes:**

ASHRAE Annual Meeting June 24-28, 2017 Long Beach CA

ASHRAE Winter Meeting Jan. 20-24, 2018 - Chicago, IL

ASHRAE Annual Meeting June 23-27, 2018 - Houston, TX

ASHRAE Winter Meeting Jan. 12-16, 2019 - Atlanta, GA

ASHRAE Annual Meeting June 22-26, 2019 - Kansas City, MO

## **10. Adjournment**