



## Call to Order

Chair Joe Karnaz, called the meeting to order at 2:15 pm on Monday, June 30, 2014. The meeting was held in the Washington State Convention Center in Seattle, WA. After the introduction of members and guests, a quorum was confirmed with 7 of 10 members present (including chair).

The Agenda was approved as written.

**MOTION #1** A motion was made by Rob Yost and seconded by Warren Clough to approve the Minutes from the Winter 2014 (NYC) meeting.

**MOTION PASSED 7-0-0 CV**

## **Report on TC 3.0 Chair Breakfast Meeting**

- Reminder to reference ASHRAE Code of Ethics prior to meeting.  
<https://www.ashrae.org/about-ashrae/ashrae-code-of-ethics>
- CEC has requested reviewers for technical and conference papers. A sign-up sheet will be passed around during the meeting.
  - Chicago programs due August 11<sup>th</sup>.
  - Atlanta annual meeting will have a refrigeration track.
  - Was mentioned that a well-defined abstract could be key to acceptance.
- Considering going to an on-line roster procedure.
- Previously ASHRAE was trying to obtain “Employment Discipline” on the member bio. No one was sure why they wanted this so it is being eliminated.
- ASHRAE has options for conducting subcommittee meetings via conference calls and web meetings. Mike Vaughn, Manager of Research and Technical Services is the contact person for this request. Availability is limited.
- Upcoming workshops and conferences endorsed by ASHRAE
  - Purdue Conference July 2014
  - AHR Expo-Mexico September 2014
  - ICR2015 (24<sup>th</sup> IIR International Congress of Refrigeration) August 2015
  - CLIMA 2016 May 2016

## **Liaisons**

Bill Murphy thanked the TC for their work and commented that he will be rolling off as TC Section 3 Head being replaced by Jay Kohler. The TC thanked Bill for all his efforts and support during his time as section head.

## **Sub-Committee Reports**

### **Program – Brad Boggess**

- There were no seminars or conference papers presented at this meeting.
- August 11th is the date for final submittal of Programs for Chicago.
- A Forum scheduled for NYC was declined by ASHRAE, Danny Halel was asked to change the concept to a Workshop “Things to know about CO2 systems” for Chicago. This will be followed up with Danny.
- A Seminar titled “*HVAC&R Systems Material Compatibility with Low GWP Refrigerants*” Chair- Steve Kujak was rejected for Seattle. Steve will consider submitting this as a Conference Paper for Chicago.
- The research that will need to be presented based on the R-40 research project will probably not be ready for Chicago and could be pushed to Atlanta. This subject will be addressed at the Chicago meeting.

- Other program ideas – It was suggested that the different TC 3 sections might want to consider putting together a refrigerant conference track consisting of conference papers, forum and seminars. This will be discussed again in Chicago to pick a time when there is a Refrigerant Track on the schedule.

## **Handbook – Rosine Rohatgi**

The handbook chapter is complete and work will begin to start to identify what is needed for the next revision. Greg Smith is the new Handbook chair and a subcommittee has been formed.

## **Standards –Rob Yost**

- SPC 175 – *“Metal Pressure Vessel Method to Test Materials Used with Refrigeration Systems”*
  - Joe Karnaz – Chair. ASHRAE Standards committee has asked that the draft be reviewed for standard mandatory language and then be ready for public review in summer 2015.
- SPC 97-2007 – *“Sealed Glass Tube Method to Test for Chemical Stability of Materials for Use Within Refrigerant Systems”*
  - Chris Seeton - Chair. The Committee is working on the draft and will meeting to discuss and review recommendations made by ASHRAE Standards.

## **Research – Mark Baker**

- RP-1665 *“Reactivity of R-40”* The work by the contractor is complete and the PMS is in the process of review the final draft report. Once the PMS has made their recommendation the TC will vote most likely by letter ballot.

Additional research ideas include:

- RP1410 Follow Up – RTAR needs to written and maybe this can be done by Chicago for review.
- Follow Up on the Reactivity of R-40 work.
  - In-situ Identification and remediation of by-products of R-40 systems.
  - Detection and mitigation of R-40 contaminants.

Some ideas for RTARs based on some research into the potential issues will be discussed in Chicago. Chris Seeton and Rob Yost volunteered to look into this.
- New research idea to look into system chemistry in CO<sub>2</sub> systems – the potential effect of carbonic acid. Glen Steinkoenig volunteered to draft and RTAR.

**MOTION #2** A motion was made by Rob Yost and seconded by Julie Majurin to Glen Steinkoenig to draft an RTAR on “System Chemistry Effects in CO<sub>2</sub> Systems”.

**MOTION PASSED 7-0-0 CV**

- Alan Cohen requested that TC 3.2 co-sponsor a TC 3.3 research project “Hydrogen Fluoride Capacity of Desiccants.”

**MOTION #3** A motion was made by Rob Yost and seconded by Warren Clough to co-sponsor the research project “Hydrogen Fluoride Capacity of Desiccants”.

**MOTION PASSED 7-0-0 CV**

## Research Breakfast Review

A review of all projects was done,

There 63 active projects totaling \$11 million.

There are additional dollars available, continue to work on submitting RTAR’s

## **Webmaster – Joe Karnaz for Dave Vincent**

Website is up to date. Please submit anything you want posted on the website prior to the meetings.

## **Membership – Joe Karnaz**

The new roster following this meeting will be.

Voting Members – 11 (including one non quorum)

Leadership of the committee:

Joe Karnaz – Chair

Danny Halel – Secretary

Rob Yost – Standards

David Vincent – Webmaster

Scott Gustafson – ALI

Rosine Rohatgi – Vice Chair

Brad Boggess – Program

Mark Baker – Research

Greg Smith – Handbook

## **Old Business**

- MTG Low GWP Refrigerants – Tom Leck commented on the MTG teleconference and the potential to collaborate program presentations among the various TC's involved with low GWP refrigerants for future conferences.

## **New Business**

- The committee honored Shel Rosen and Rich Cavestri who had recently passed away with a moment of silence. Both Shel and Rich provided many years of service and expertise to TC 3.2 and will be missed.

## **Adjournment**

The meeting was adjourned at 3:30 pm by Chair Joe Karnaz.