

**AMERICAN SOCIETY OF HEATING, REFRIGERATING AND AIR-CONDITIONING ENGINEERS,  
INC.**

**1791 Tullie Circle, N.E./Atlanta, GA 30329  
404-636-8400**

**TC/TG/TRG MINUTES COVER SHEET**

**(Minutes of all TC/TG/TRG Meetings are to be distributed to all persons listed below within 60 days following the meeting.)**

TC/TG/TRG NO 3.2 DATE January 27, 2006

TC/TG/TRG TITLE System Chemistry

DATE OF MEETING January 23, 2006 LOCATION Chicago

MEMBERS PRESENT	YEAR APPTD	MEMBERS ABSENT	YEAR APPTD	EX-OFFICIO MEMBERS AND ADDITIONAL ATTENDANCE
Joe Karnaz	2004	Danny Halel	2002	Bob Doerr
Ken Lilje	2005	Cary Haramoto	2004	
Raymond Thomas	2004			
Scott Gustafson	2003			
Dave Vincent	2005			
Rob Yost	2002			
Alice Riemer	2004			
Jay Field	2003			
Frank Nagy	2003			
Sonny Sundaresan	2004			

**DISTRIBUTION**

*All Members of TC/TG/TRG plus the following:*

TAC Section Head:	<u>David Geary</u>
TAC Chair:	<u>Eckhard Groll</u>
TAC Vice-Chair:	<u>Patricia Graef</u>
All Committee Liaisons As Shown On TC/TG/TRG Rosters:	Don Fenton – RAC Rich Evans – Handbook Sam Cummings – Standards Kimball Ferguson – Special Pubs C Brian Wandling – Program Benjamin Crowley – CTTC
Manager Of Standards	Claire Ramspeck
Manager Of Research & Technical Services	Mike Vaughn
Admin Asst – Technical Services	Tara Thomas

Note: "These draft minutes have not been approved and are not the official, approved record until approved by this committee."

## 1) Call to Order

Joe Karnaz, Chair, called the meeting to order at 2:15 pm on Monday, January 23, 2006. The meeting was held in Chicago at the Palmer House in the Monroe room. After the introduction of members and guests, a quorum was confirmed with 10 members present (including chair) with 2 members absent. A motion was made and seconded to approve the minutes from June's Denver meeting.

The motion passed 10-0-0(Chair Voting)

## Report on TC 3.0 Chair Breakfast Meeting

- Programs – Theme for Quebec City “Coming in from the Cold Climate Systems”
  - This session was the first time that an on-line download process was used for speakers to submit their presentation prior to the meeting for review. About 50% of the presenters sent in their presentations, hope for 90% by Quebec City. They hope that this will alleviate some confusion in the speakers lounge before the session.
  - Session moderators are encourage attendees to fill out the session review forms which are now being automatically tabulated and returned to the session chair.
  - New configuration of sessions for Quebec City: Sessions will be 1 ½ hours with 3 speakers and 1 hour with 2 speakers or for forums.
  - Symposium and Technical Papers will now be called Transaction Papers.
  - Program Packages for Quebec City are due by February 10<sup>th</sup>.
- Handbook – A handbook workshop is scheduled for each winter meeting and handbook subcommittee chairs are encouraged to attend.
  - Handbook subcommittees are asked to have a meeting set-up for each conference.
  - Handbooks chapters with special graphics are asked to submit for publication in the CD+.
  - TC should consider include placing in their chapters things related to:
    - Information from ASHRAE Transaction
    - Homeland Security
    - Practical examples of design applications
    - Content on Sustainability
- Chapter Technology Transfer committee is used as a conduit between technical committees and local chapters. They can help in finding people for review of publications and are also looking for names to nominate for the Distinguished Lecturer Program.
- Research – Plans for each TC are expected to fall in-line with the Strategic Research Plan 2005-2006 that has been outlined by ASHRAE. Work statements and RTAR's that don't meet these requirements will not be considered.
  - A number of RTAR's have been returned due to be filled out incorrectly.
- Webmaster – ASHRAE is asking that all TC have their websites on the ASHRAE server.
- Membership – A new database for bios will be set-up by September for internal use and by April 2007 for external use. Members are encouraged to visit the ASHRAE membership site and update their bios periodically.
- Other Section 3 Business - TC's are asked to nominate individuals for the George Hightower Award.
  - Suggestion to combine TC 3 groups; this discussion has been dropped.

## 2) ASHRAE Liaison Comments

See individual subcommittee reports.

## Sub-Committee Reports

### 3) Program – Raymond Thomas

At the Chicago meeting the following Programs were sponsored or cosponsored.

- Symposium CH-06-14 – System Chemistry and Contaminants Research
  - Session will be Wednesday morning with four speakers presenting work on completed research projects.
    - Andy Gbur – RP1239
    - Rich Cavestri – RP1240
    - Rosine Rohatgi – RP1158
    - Bob Kaufmann – RP1211
- Forum – Refrigerant Impurities: Do They Matter?
  - Session will be Wednesday morning and moderated by Rob Yost

#### Future Meetings:

- Quebec City
  - A motion was made and seconded to sponsor a seminar entitled “System Chemistry with Alternative Refrigerants” chaired by Ken Lilje. Motion carried 10-0-0 Chair Voting. Three people, Rich Cavestri, Alice Riemer and Joe Karnaz stepped forward and volunteered to give a talk on the subject.

#### Past or Future Ideas:

- The following two programs that had been discussed in the past and are found in the minutes and/or agenda were tabled for further discussion in Quebec City.
  - System Chemistry in Transport Refrigeration
  - The History of System Chemistry

### 4) Handbook – Bob Doerr

The handbook committee (Bob Doerr, Raymond Thomas, Chris Seeton and Ken Lilje). The System Chemistry chapter rewrite is complete and was submitted. Request to move the environmental properties of refrigerants section out of our chapter was requested of ASHRAE Handbook committee.

### 5) Standards – Rob Yost

- SPC 141P – “Method of Testing Fluorocarbon Refrigerants for Contaminants”
  - This standard is on hold. ISO TC86SC8 is considering taking this on as a Working Group.
- SPC 175P – “Metal Pressure Vessel Method to Test Materials Used with Refrigeration Systems”
  - Joe Karnaz – Chair. Committee members are Alan Cohen, Rosine Rohatgi and Chris Seeton. The committee meets at 4:15 pm following the TC meeting and is working on a draft of the procedure.
- SPC 97 – “Sealed Glass Tube Method to Test the Chemical Stability of Materials for Use Within Refrigeration Systems”
  - This standard was voted to be reaffirmed – A motion was made and seconded to reaffirm SPC 97. The motion carried 10-0-0 chair voting. The proper paperwork was filled out and submitted to the standards liaison who was present at the meeting.

## 6) Research – Liz Dixon (Scott Gustafson substituting)

- Research Subcommittee met on Sunday afternoon to discuss current research projects and RTAR's and future research needs.
- WS 1249 – Determine the Mechanism for Copper Plating and Methods for its Elimination from HVAC Systems. The contract was awarded to the University of Dayton. Bob Kaufman spoke briefly on the project saying they are just getting started due to some wording of the ASHRAE contract and will be able to give an update in Quebec City. The PMS for this research project is Ken Lilje, Jay Field and Bob Doerr.
- RTAR 1410 – Effects of System Materials Towards the Breakdown of POE Lubricants and HFC Refrigerants Part 2 – This RTAR was returned from RAC citing some changes needed and reasons such as lack of references, the need to meet ASHRAE Strategic Research Plan and minor wording changes. The RTAR will be revised with the proper changes and resubmitted for approval during the RAC meeting in May.
- RTAR 1409 – Stability of Candidate Lubricants for CO<sub>2</sub> Refrigeration Systems – This RTAR was returned from RAC citing similar changes as outlined above. The RTAR will be revised with the proper changes and resubmitted for approval during the RAC meeting in May.
- Scott Gustafson attended the Research Chair meeting on Monday morning and outlined some of the highlights of the meeting. One thing discussed was the bidding process and guidelines for the Project Evaluation Subcommittee (PES).
- Don Fenton, TC 3.2 Research Liaison was present at the meeting and provided the following comments:
  1. Returned RTAR's don't necessarily mean things are bad just that they need to be in a format that the ASHRAE reviewers can read and understand.
  2. Meeting the strategic research plan weighs 45% when determining which RTAR's get accepted.
  3. He offered the service of reviewing our RTAR's prior to submittal so he could have an understanding and be able to support it when it goes before RAC.

## 7) Webmaster – Dave Vincent

- Dave Vincent has requested the forms from ASHRAE to place our website on the ASHRAE server. Once received he will submit the necessary paperwork.

## 8) Membership – Dave Vincent

- The rollover roster needs to be submitted within the next few days. A call was put out to anyone interesting in becoming a member or corresponding member to see the membership or committee chair after the meeting. The rollover roster officers beginning July 2006 will be.

<u>Office</u>	<u>Person</u>
Chair	Ken Lilje
Vice-chair	Tom Leck
Secretary	Danny Halel
Program	Raymond Thomas
Standards	Rob Yost
Handbook	Sonny Sundaresan
Research	Liz Dixon
Webmaster	Dave Vincent
ALI Coordinator	Scott Gustafson

## 9) Old Business

- As outlined in the chairs meeting highlights the discussion of combining TC 3.2 and 3.3 has been dropped.

## **10) New Business**

- George Hightower Award – The forms can be found on-line at the ASHRAE website. We are asking that you self-evaluate yourself and return the forms to the TC Chair for consideration.

## **11) Adjournment**

- A motion was made and seconded. Meeting was adjourned at 4:00 pm.