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	JANUA	RY 26, 2015	
TC/TG/TRG TITLE	System Chemistry				
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DATE OF MEETING	January 26, 2015	LOC	ATION	Chicago II	

MEMBERS PRESENT	STATUS	MEMBERS ABSENT	STATUS	EX-OFFICIO MEMBERS AND ADDITIONAL ATTENDANCE	
Joe Karnaz	Chair/VM	Kirsten Ahrenstorf	CM	Mark Spatz	
Danny Halel	Sec/VM	Liz Dixon	RSC/CM	Mark Baker	
Julie Majurin	VM	Corey Anderson	CM	Joe Lomgo	
Warren Clough	VM	Karim Amrane	CM	Asbjern Vonsild	
Dave Vincent	Web/VM	Chris Bertelo	CM	William Kopko	
Rob Yost	SSC/VM	Charlie Butler	CM	Jay Kohler	
Brad Boggess	VM	Ken Lilje	PSC/VM	Sheli Porter	
Scott Gustafson	ALI/CM	Dale Carr	CM	Mikelann Scerbo	
Rosine Rohatgi	HBC/VChr	Stephen Spletzer	CM	Sarah Kim	
Alice Reimer	NQM	Michael Foster`	CM	Pratik Deokoas	
Jorge Cabrera	CM	Clinton Finstad	CM	Kyle Weidmayer	
Amanda Hickman	CM	Andrew Gbur	CM	John Whithouse	
Jay Field	CM	Ersin Gercek	CM	Chris Urban	
Greg Smith	CM	Katrin Juch	CM	Kapil Singhal	
Ed Hessell	CM	Barry Milward	CM	Ted Li	
Raymond Thomas	CM	Tony Min	CM	Eugene Chen	
Stephen Kujak	CM	Eric Newberg	CM	John Senedahl	
Thomas Leck	CM	Fred Polley	CM	Michael Callan	
Frank Nagy	CM	Joe Nigro	CM	Leonard Challenger	
Robert Woods	CM	Curtis Slayton	CM	Pat Gilbane	
Alan Cohen	СМ	William Walter	CM	Roberto Urrego	
Marc Scancarello	СМ			Amy Paul	
Chris Seeton	СМ			Knut Petry	
Glen Steinkoenig	СМ			Ivan Rydkin	
Sonny Sundaresan	CM			Scott Wujek	
Elyse Sorenson	CM				
Yanwei Cen	CM				
Christopher Reeves	CM				
Juan Flores	СМ				

DISTRIBUTION

All Members of TC/TG/TRG plus the following:					
TAC Section Head: Jay Kohler					
All Committee Liaisons As Shown On TC/TG/TRG Rosters: Research Liaison – Mark Spatz	Manager Of Standards – Stephanie Reiniche Manager Of Research & Technical Services – Mike Vaughn				
Note: These draft minutes have not been approved and are not the official, approved record until approved by this committee.					

Call to Order

Chair Joe Karnaz, called the meeting to order at 2:15 pm on Monday, June 26, 2015. The meeting was held in the Honore Room of the Hilton Hotel Palmer House in Chicago, IL. After the introduction of members and guests, a quorum was confirmed with 11 members present (including chair) 1 International Members with 1 members absent.

The Agenda was approved as written.

MOTION #1 A motion was made by Steve Kujak and seconded by Rosine Rohatgi to approve the Agenda for this meeting as written.

MOTION PASSED 10-0-0 CV

MOTION #2 A motion was made by Rob Yost and seconded by Warren Clough to approve the Minutes from the meeting in Seattle in June of 2014.

MOTION PASSED 9-0-1 CV Reason for abstention – not at meeting.

Report on TC 3.0 Chair Breakfast Meeting

- Jay Kohler is the new Section 3 Chair.
- Programs for Atlanta are due February 9th, 2015.
- Due to our recent issues with getting programs approved is was recommended that the Section. 3 groups suggest particular tracks to CEC for St Louis.
- AdHoc committee between TAC and CEC has been formed to address particular issues.
- CEC Chicago Statistics 56 Conference Papers; 64 Seminars; 8 Workshops; 5 Forums; 44 Tech Papers: Conference and Tech Papers had highest percentage of acceptance.
- Website Update The TC can make suggestion for other information to post to the website.
- Employment Discipline should be updated on your Bio.
- Upcoming Specialty Conferences particular to Section 3 committees.
 - o ICR 2015 Yokohama Japan

Liaison Reports - TC Liaison Jay Kohler advised that he is the new Section 3 TAC liaison and here to help. He advised that this TC was very strong throughout the years and that keeping up with all the requirements was very much appreciated. Thank you and keep up the Good Work.

Upcoming meetings

- Atlanta June 2015
- Orlando Jan 2016
- St. Louis June 2016

Sub-Committee Reports

Program – Brad Boggess

There were 0 programs sponsored here at the Chicago meeting.

February 9th Atlanta Seminar, Forum and Workshop submittal is due.

March 23rd Orlando conference paper abstracts are due.

MOTION #3 A MOTION was made by Chris Seeton and 2nd by Rob Yost that TC 3.2 sponsor a Seminar with the Title: *Synthetic Lubricants: Making the Commercialization of Low GWP Refrigerants a Reality* – Chair – TBD in Orlando. Brad will complete the proper paperwork and line up speakers.

MOTION PASSED 10-0-0 CV

MOTION #4 A MOTION was made by Brad Bogess and 2nd by Rosine Rohatgi for sponsoring a Conference Paper entitled *Improving Product Reliability for Orlando Chair Steve*

MOTION PASSED 11-0-0 CV

More discussion was centered on finding subjects for more programs, including compatibility, and chemistry.

Handbook - Gregory Smith

The Handbook committee is working on the 2018 Refrigeration Chapter 6 *Refrigerant System Chemistry*. Adding a section on HFO refrigerants and possibly Hydrocarbons.

Committee Members include – Chair – Greg Smith, Rosine Rohatgi, Brad Boggess, Ed Hessell, Warren Clough and Sonny Sundaresan.

Looking for reviewers – Elise Sorensen volunteered.

Standards - **Rob Yost**

- SPC 175 "Metal Pressure Vessel Method to Test Materials Used with Refrigeration Systems"
 - Joe Karnaz Chair. Committee members are Alan Cohen, Ed Hessel, Brad Boggess, Rosine Rohatgi and Chris Seeton, working on mandatory language, added terminology and public review format, product is near complete; meeting at 4:15 pm on Monday. The committee is very close to a final draft.
- SPC 97-2007 <u>Sealed Glass Tube Method to Test for Chemical Stability of Materials for Use Within Refrigerant</u> Systems
 - Chris Seeton, Chair. Roster with balance is complete will be sending out TPS for public review looking for additional participants. This group meets at 9:20 on Tuesday morning.

The Chair has looked at JIS and DIN standards and are considering their work for incorporation in an ASHRAE standard.

Research - Mark Baker

- RP-1665 "Reactivity of R-40" The report is available today at the ASHRAE Bookstore. Excellent work by the researcher.
- An RTAR is being worked on Water Level Effects on Low GWP Refrigerants Brad Boggess is working on the document in conjunction with TC 3.3.

Additional ideas include:

• Follow up after the completion of RP-1410 Julie Majurin completed a Work Statement – *Effect of System Chemicals Towards the Breakdown of Lubricants and Lower GWP Refrigerants* the committee reviewed the WS and commented with keeping this as WS and Julie asked for additional ideas.

MOTION #5 A MOTION was made by Chris Seeton and 2nd by Steve Kujak to submit the above WS to RAC. Mark Spatz will review and recommend any changes to Julie Majurin. Volunteers Chair-Julie Majurin – Members Chris Seeton, Ivan Rydkin, Alice Reimer, and Greg Smith.

MOTION PASSED 11-0-0 CV

Steve Kujak and Mark Baker will be working on a RTAR titled: *Mechanistic Studies of HFO Decomposition – Reactions taking place in the HVAC/R system.*

Extra research ideas included continuing work with R-40, (this can be addressed when the existing R-40 work is fully complete).

Webmaster - Dave Vincent

Dave Vincent reported that the website is up to date.

If anyone has FAQ's please send to Dave Vincent for posting on the website.

<u>Membership – Ken Lilje</u>

The roster was reviewed and the Chair advised that he has the next slate of officers and will be filling out the new roster. If anyone in the room wanted to join this Committee please see the Chair or Membership Chair. The Chair asked for additional members if anyone was interested.

Voting Members – 11 International Members - 1 Corresponding Members – 44

MTG Lower GWP Refrigerants (Tom Leck)

The group takes an umbrella approach visiting what work is being done throughout ASHRAE on Low GWP Refrigerants. The group will be meeting on Wednesday in the Clark Room at 10 am. They are also tracking AHRI work in this area. The work includes looking at over 50 refrigerants that meet the criteria.

Old Business

No old business was brought before the committee.

New Business

Jay Field brought up that in the near past there have been issues with residential and commercial Air-Conditioning systems in the field and he is suggesting that we look into these issues with more clarity and try to figure out what we need to do to prevent this from happening again.

Jay is retiring and we congratulate him in his retirement. A round of applause was given from the committee thanking him for his work.

Adjournment

The meeting was adjourned at 4:06pm by Chair Joe Karnaz thru a Motion made by Steve Kujak and 2nd by Sonny Sundaresan.

Respectfully submitted,

Danny Halel – Secretary