

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 June 28, 2016

TC/TG/TRG TITLE System Chemistry

DATE OF MEETING June 27, 2016 LOCATION St. Louis, MO

MEMBERS PRESENT	STATUS	MEMBERS ABSENT	STATUS	EX-OFFICIO MEMBERS AND ADDITIONAL ATTENDANCE
Rosine Rohatgi	Chair/VM	Greg Smith	VM	Mark Spatz
Warren Clough	VChair/CM	Brad Boggess	VM	Jay Kohler
Chris Reeves	VM	Alice Riemer	MNQ	John Withouse
Rob Yost	SSC/VM			Ted Li
Stephen Kujak	VM			Neil Turner
Thomas Leck	MTG/VM			Samuel Yana Motta
Chris Seeton	VM			Chris Campo
Sonny Sundaresan	VM			Dave Winningham
Danny Halel	VM			Patrick Coughlan
Ed Hessell	VM			Doug Gildehaus
Dave Vincent	Web/CM			Hewitt Gaudin
Mark Baker	RSC/CM			Sage Tomlinson
Joe Karnaz	SEC/CM			William Kopko
Scott Gustafson	ALI/CM			YiLun Wei
Marc Scancarello	CM			Junichi Ishikawa
Knut Petry	CM			
Julie Majurin	CM			
Alan Cohen	CM			
Elyse Sorenson	CM			
Sarah Kim	CM			
Ivan Rydkin	CM			
Stephen Spletzer	CM			
Don Shuster	CM			
Scott Wujek	CM			
Glenn Steinkoenig	CM			
Roberto Urrego	CM			
Eric Newberg	CM			
Joe Nigro	CM			
Sheli Porter	CM			

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 Rosine Rohatgi, called the meeting to order at 2:15 pm on Monday, June 27, 2016. The meeting was held in America's Center Room 227 in St. Louis, MO. After the introduction of members and guests, a quorum was confirmed with 9 members present (including chair); 2 members and 1 non-quorum member were absent.

ASHRAE Code of Ethics – A mention of the Code was made to remind all members and visitors of the Code and that it should be adhered to whenever at an ASHRAE meeting.

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

MOTION PASSED 9-0-0 CV

MOTION #2 A motion was made by Rob Yost and seconded by Danny Harel to approve the Minutes from the meeting in Orlando in January of 2016.

MOTION PASSED 9-0-0 CV

Report on TC 3.0 Chair Breakfast Meeting

TC Chair Meeting Notes

NEW ITEMS:

- Two new multidisciplinary Task Groups: MTG.IAST (Impact of ASHRAE Standards and Technology on Energy Savings/Performance); MTG.OBB (Occupant Behavior in Buildings)
- TC Website Template is updated
- TC E-mail Aliases created for TC management team including secretary, Standards sub-chair, Program sub-chair, Handbook sub-chair and webmaster
- CEC Ongoing Issues with Program Presentation Submissions. At the close of Confex for St. Louis on June 21, 11 sessions had not been uploaded. Starting in Las Vegas, presenters with presentations not uploaded by the published due date, will incur a "strike" in ASHRAE three-strike policy. Once three strikes have accrued, the speaker will not be allowed to speak for a period of time that could be up to one calendar year or more.

ST LOUIS MEETING:

- TC Program Subcommittee Chair Training on Tuesday 6/28 at 11:15 AM in Room 220 (2nd Level of the America's Convention Center)
 1. Incomplete program submission is the biggest reason for rejection now. All information is needed up front for CEC selection process.
 2. A packaged session on a similar topic is the best way to greatly improve your chances for acceptance.
- Remote Participation Meeting allows some TC members to participate in the TC meeting from a remote location electronically. A total 38 RPM will be hosted in St. Louis.
- Retiring TC/TG/TRG/MTG Chair Certificates of Appreciation

PROGRAM STATISTICS:

- 124 conference paper abstracts approved out of 130 submitted
- 71 conference papers presented out of 84 conference papers received
- 22 conference paper sessions
- 28 technical papers presented out of 60 technical papers received
- 9 technical paper sessions
- 64 seminars presented out of 116 seminars submitted
- 8 workshops presented out of 10 workshops submitted
- 4 forum presented out of 12 forum submitted

UPCOMING DEADLINES

LAS VEGAS:

- Seminar and Forum proposals for Las Vegas due by Monday, August 8, 2016.
- All presentations due on line January 2, 2017. Please upload early for commercialism review. Uploads must be complete, including the AIA Disclaimer and Learning Objectives.
- In St. Louis approximately 30 sessions were not uploaded by the final due date. 11 presenters were not uploaded as of June 24th (9 of these programs were sponsored by TCs)

RECENT ANNOUNCEMENTS:

- Provide Section Head after each Society meeting with a list of qualified volunteers for potential Technical Session Chairs and reviewers of session papers for use by CEC
- TC Opportunities:
 1. TC member who want to submit a program should consult the Track Chair for assistance in preparing a good abstract, learning objectives and Q&A to help assure complete submission
 2. TCs and Sections are welcome to suggest new presentation formats. Best way to present material to benefit attendee is a goal.
 3. TCs and Sections are encouraged to work with a track chair to put together a series of sessions that can be used as a mini-track.
 4. Putting together an entire track of programs in cooperation with other TCs is also encouraged; keeping in mind that track subjects are typically determined 14-15 months prior to a conference.
 5. CEC welcomes suggestions for tracks. Provide information in the Comment Section on the activity form.

Liaison Reports:

Handbook Liaison, Don Fenton who is also the Handbook Volume Chair for Refrigeration was filling in for our past handbook liaison who recently resigned, commented that TC 3.2 appears to be on track for the 2018 Handbook edition and suggested target next summer if not sooner for TC vote on acceptance of the chapter to avoid what he called “the panic year”.

TAC Section 3 Head, Jay Kohler, thanked the committee for their good service and commented on our ability to maintain quorum during our meetings.

Research Liaison, Mark Spatz, as usual stayed for our TC meeting and provided input during the research section. This will be Mark’s last meeting as Section 3 Research Liaison and the committee recognized and thanked him for the help he has always provided this committee. Steve Kujak will be the incoming research liaison for section 3.

Sub-Committee Reports

Program – Brad Boggess (Ed Hessell Substituting)

There was 1 program Sponsored here at the St. Louis meeting.

Technical Paper Session 2: *Challenge and Opportunities with Refrigerants*. The speakers associated with TC 3.2 were Steve Kujak, Ingersoll Rand who presented on RP-1665 work and Rosine Rohatgi, Spauschus Associates who presented on RP-1641.

If you missed this program and have registered for the conference you can view it on the virtual conference.

Future program ideas:

Las Vegas:

Ingersoll Rand has submitted two Conference Papers for Las Vegas as unsolicited presentations. TC 3.2 will contact CEC to see if these papers can be integrated into a TC 3.2 sponsored session with possible co-sponsorship from TC 3.4.

MOTION #3 A motion was made by Danny Halel and seconded by Chris Reeves to sponsor a technical paper session in Las Vegas titled “System Material and Chemical Compatibility with Low GWP Refrigerants” Chaired by Ed Hessell.

MOTION PASSED 9-0-0 CV

Chicago:

An idea was presented to consider coordinating with other TC 3 groups along with MTG LGWP to put together a mini-track for Chicago. TC 3 program chairs will try to coordinate this effort.

Other Ideas:

Put together a program, most likely a seminar, with one presentation each from TC 3.2, TC 3.3 and TC 3.4 specific focus. This will provide a very diverse program.

Discuss with LGWP about their seminar for St. Louis that wasn't accepted to see if we can collaborate with them on incorporating with TC 3.2. Tom Leck will get the information to Ed Hessell and Brad Boggess.

Handbook – Gregory Smith (Ed Hessell Substituted)

The handbook process is on track. ASHRAE has implemented a share point site to help in the editing of the Handbook. This site is available to the handbook committee members as well as the TC membership. The handbook committee could still use more help and asked if anyone was interested to contact Greg Smith.

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

Standards –Rob Yost

- GPC 38P – “Metal Pressure Vessel Method to Test Materials Used with Refrigeration Systems”
 - Joe Karnaz – Chair. Committee members are Alan Cohen, Ed Hessell, Brad Boggess, Rosine Rohatgi and Chris Seeton. The work plan for this GPC is to have a draft ready to submit for public review by Las Vegas. The committee is finishing up some editing and placing the document in the standard public review format.
- SPC 97-2007 – Sealed Glass Tube Method to Test for Chemical Stability of Materials for Use Within Refrigerant Systems
 - Chris Seeton – Chair. Committee will meet on Tuesday morning in the convention center Room 127 and is working on some rewriting of the standard. No completion date is set yet.

Open Discussion: A previously discussed new standard topic was revisited on polymeric material testing. After some discussion, Sonny Sundaresan felt that this was still a good idea and volunteered to draft a TPS and send to Rob Yost for further consideration.

Research – Mark Baker

- WS 1774 “Effects of System Chemicals Towards the Breakdown of Lubricants and Lower GWP Refrigerants” Authored by Julie Majurin. Bids for this project have been received and the committee will go into executive sessions at the conclusion of the meeting to vote on a bidder.
- RTAR 1790 “Distribution of Water Between Vapor and Liquid Phases of Low GWP Refrigerants”. Authored by Brad Boggess – this RTAR proposed investigating 5-6 refrigerants. It was decided to rewrite as a work statement with more clearly defined objectives. No new details were provided on this work statement status and will be tabled for discussion in Las Vegas.
- A paper was presented by Steve Kujak at this conference based on the work done in RP-1665 “Reactivity of R-40”. All the requirements have been met for this project and will be removed from further meeting discussion.
- New Ideas
 - For the Sunday research subcommittee meeting an idea was proposed to investigate the need for a research project based on the reaction of new refrigerants such as R-1123, R-1130, R-1336mzz(Z) and others. A committee composed of Elyse Sorenson (Lead), Chris Seeton, Julie Majurin and Jian Sun-Blanks will draft an RTAR.

Webmaster – Dave Vincent

The new website format has been implemented and comments from Dave Vincent was it works well. Once the roster for the upcoming society year is received it will be uploaded to the website. The chair will send this new roster.

Membership – Rosine Rohatgi

The new society year takes effect after this meeting and the following will be the voting members and management team.

Voting Members: Rosine Rohatgi; Ed Hessel; Steve Kujak; Sonny Sundaresan; Brad Boggess; Chris Seeton; Tom Leck; Greg Smith; Chris Reeves; Joe Karnaz, Warren Clough, John Senediak.

Management Team:

Chair – Rosine Rohatgi

Vice Chair – Warren Clough

Secretary – Joe Karnaz

Programs – Brad Boggess

Standards – Rob Yost

Research – Mark Baker

Webmaster – Dave Vincent

ALI – Scott Gustafson

MTG Low GWP – Tom Leck

MTG Lower GWP Refrigerants (Tom Leck)

The MTG is meant to serve as a resource to the TC’s and is available to support various activities concerned with low GWP refrigerants. The committee will meet on Wednesday at 10am in the Marriott conference center Landmark 5. Tom Leck updated the TC on current MTG LGWP activities specifically related to the funding of

research on flammable refrigerants which MTG LGWP will be take the lead as the representing body for ASHRAE.

Old Business

No old business was brought before the committee.

New Business

No new business was brought before the committee.

Adjournment

The meeting was adjourned at 3:50 pm by Chair Rosine Rohatgi through a Motion made by Danny Halel and seconded by Chris Reeves. The committee moved into Executive Session.

Respectfully submitted,

Joe Karnaz – Secretary