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DRAFT

TC/TG/MTG/TRG MINUTES COVER SHEET

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

TC/TG/MTG/TRG No. 3.2 DATE April 6, 2020

TC/TG/MTG/TRG TITLE System Chemistry

DATE OF MEETING February 3, 2020 LOCATION Orlando, FL

MEMBERS PRESENT	YEAR APPTD ENDS	MEMBERS PRESENT	YEAR APPTD ENDS	EX-OFFICIO MEMBERS AND ADDITIONAL ATTENDANCE
Ed Hessell - Chair	2020	John Senediak	2020	Brad Boggess - Programs
Joe Karnaz – Vice Chair	2020			
Rob Yost - Standards	2021			
Steven Baker - Secretary	2021			
Dave Vincent - Webmaster	2021	MEMBERS ABSENT		EX-OFFICIO MEMBERS ABSENT
Julie Majurin	2023	Danny Halel	2021	Greg Smith - Handbook
Elyse Sorenson	2022	Knut Petry	2023	
Ngoc Dung (Rosine) Rohatgi	2022			
Jian Sun-Blanks	2022			
Casey Scruggs	2023			
Sarah Kim	2021			

DISTRIBUTION: All Members of TC/TG/MTG/TRG plus the following:

TAC Section Head: Barbara Minor	SH3@ashrae.net
All Committee Liaisons As Shown On TC/TG/MTG/TRG Rosters (Research, Standards, ALI, etc.)	Steve Kujak – Research Don Fenton - Standards
Mike Vaughn, Manager of Research & Technical Services	MORTS@ashrae.net

Note: These draft minutes have not been approved and not the official, approved record until approved by the TC.

Minutes – TC 3.2 System Chemistry

Call to Order - Ed Hessell

Chair Ed Hessell, called the meeting to order at 2:25 pm on Monday February 3rd in Orlando at the Hilton Orlando, LL, Orange E room. Members and guests introduced themselves. Guests were welcomed and invited to participate with a special welcome to YEA members. A sign-up sheet was circulated. The Chair reviewed the ASHRAE Code of Ethics with members and visitors in attendance.

Chair Ed Hassell and TC 3.2 recognized the passing of an esteemed ASHRAE member and colleague, Sonny Sundaresan, on September 25, 2019. Sonny was an active ASHRAE member participating in many TCs and former employee of Emerson Copeland where was a materials scientist involved in industry's conversion from CFC to HFC refrigerants.

A quorum was established with 12 of 13 members present.

Approval of 2020 Winter Meeting Agenda and 2019 Kansas City Meeting Minutes - Ed Hessell/Joe Karnaz

MOTION #1 A motion was made by Rob Yost and seconded by Julie Majurin to approve the Agenda for this meeting as written.

MOTION PASSED 11-0-0-CV

MOTION #2 A motion was made by Casey Scruggs and seconded by Julie Majurin to approve the Minutes from the meeting in Kansas City as written.

MOTION PASSED 10-0-1-CV. John Senediak abstained as he was not present at the Kansas City meeting.

Report on TC 3.0 Chair Breakfast Meeting - Ed Hessell

- 2021 Hightower Award nominations due September 1, 2021. Award for individual exhibiting outstanding technical leadership during the last 4 years. TC nominates individual(s) followed by a vote. Consideration is based point-based where individuals received points for participation in ASHRAE as a TC chair, Handbook chair, etc..
- CEC has a standing request for suggestions for program tracks for future conferences. Seeking volunteers to chair program sessions and review papers. Contact Tony Giametti if interested.
- Orlando Tech Meeting statistics: Conference papers received=165, 137 approved, 73 presented; 27 tech papers submitted, 25 presented; 123 seminar papers received, 75 presented.
- Local chapter technical knowledge transfer committee. Distinguished lecturers listed on ASHRAE website; if interested in being a lecturer, ASHRAE pays travel expense to visit and talk at local chapter.
- Residential Building committee in its 5th year and expanding activity in this space.
- ASHRAE efforts to put "R" back into ASHRAE underway. Refrigeration committees being revamped as Cold Chain with 7 sub-committees. Rajan Rajendran of Emerson is the committee chair. Committee is looking for active volunteers.

Liaison Reports:

Barbara Minor (TAC Section 3 Chair)

- Reorganization of TCs studied by ad-hoc committee under TAC. Changes instituted where section chairs meet as a single group and room sharing for joint committee meetings.
- Merger of TC 3.2 and 3.3 proposed. Must be reviewed by each TC and if accepted, be approved by each TC by Wednesday morning February 5th.

Steve Kujak (RAC liaison)

- RP 1886, “Kinetic and Mechanistic Studies of the Breakdown of HFO Refrigerants” – RTAR approved. Work Statement needed.
- Project Monitoring Subcommittee (PMS) training offered twice a year for those interested.
- PES training available on ASHRAE YouTube site.
- Funding available for projects, prioritization of projects has not yet taken place.

Sub-Committee Reports

Programs - Brad Boggess

Austin 2020

- No programs scheduled.

Chicago 2021

- To be determined but discussed following ideas
 - Results of AHRI Material Compatibility Study (funded by DOE) literature search by Spauschus reviewing prior work with HFO refrigerants to identify knowledge gaps this study could address.
 - Purdue Conference – Brad to follow-up with authors to gauge interest for presenting at ASHRAE Winter conference.
 - Austin conference - Brad and Steve Kujak to review papers for presenting again at ASHRAE Winter conference.

Ed Hessell gave special thanks to Casey Scruggs, Bill Mallory, Ivan Rydkin, Elyse Sorensen, Jessica Jude for presenting at Orlando conference.

Handbook – Ed Hessell for Greg Smith

- Chapter reviewed by Chris Campo, suggestions submitted for review by Handbook committee.
- Next revision due July 2021 for print Spring 2022.

Standards - Rob Yost

- GPC 38P – Metal Pressure Vessel Method to Test Materials Used with Refrigeration Systems
 - No action. Next revision due 2021.
- SPC 97-2007 – Sealed Glass Tube Method to Test for Chemical Stability of Materials for Use Within Refrigerant Systems
 - Chris Seeton – Chair. Final vote at Orlando meeting planned.

- New ideas
 - John Senediak suggested updating material compatibility in Guideline 6 reporting approved materials based MLCR published reports. Suggested this be a Handbook activity.

Research - Casey Scruggs

From TC Research Chair breakfast mtg

- 49 active projects, 10 completed.
- Homer Adams ASHRAE Research Service Award nominees sought. Individuals awarded points for Research chairmanship, writing work statements, etc.. for recent participation (<4 years).
- Innovative Research grant, outside TC structure, available in amount of \$125,000. 4 projects submitted for consideration.
- ASHRAE strategic plan initiated, Advisory panel in place. Email sent to 45,000 ASHRAE members for input on strategy, emerging areas of research. Check your Junk/Spam email folder, only 700 responses received thus far and Advisory panel is seeking a 10% response.

RTAR Updates

- 1886 – “Kinetic and Mechanistic Studies of the Breakdown of HFO Refrigerants”, Elyse Sorenson. Work statement needed.
- Proposed RTAR – “HFO Refrigerant Compatibility with Aged Lubricants and Contaminants” Joe Karnaz, Casey Scruggs. Proposal to be submitted to RAC.
- TRP 1740 - “HF capacity of desiccants” co-sponsored by 3.2 is withdrawn. Unable to find qualified contractors to perform project work.
 - Ed Hassell led discussion about reaching out to American Chemical Society, universities as potential contractors.
- No new research project proposals.

Webmaster – Dave Vincent

- Website is current and up to date.

Membership – Ed Hessel

Roster Changes Effective June 30, 2020

- Voting Members Rolling Off
 - Ed Hessel
 - Joe Karnaz
 - John Senediak

Voting Members

Ed Hessel	John Senediak
Joe Karnaz	Elyse Sorenson
Rob Yost	Jian Sun-Blanks
Steven Baker	Rosine Rohatgi
Dave Vincent	Julie Majurin
Danny Halel	Casey Scruggs
Sarah Kim	Knut Petry

MTG

- **Lower GWP Refrigerants – Marc Scancarello**
 - Orlando MTG meeting scheduled for Wednesday at 10am-12pm.
 - 2 programs sponsored, session 1, seminar 54 at Orlando conference.
 - Basecamp link for Codes and Standards.
 - RP 1794, “Odorants for Flammable Refrigerants”. RAC approved, co-sponsored with TC3.1. Funding needed.
 - RP1806, “Flammable refrigerants post ignition simulation” ORNL study.
 - RP1807, “Guidelines for Handling Flammable Refrigerants”. White paper published February 2019.
 - RP1808, “Mechanical joints – servicing flammable refrigerants”. Report published October 2019.
 - RP1855, “Determination of Combustion Products”

- **Guide for Refrigeration and Air-Conditioning (RAC) Plant Assessments**
 - Ed Hessel introduced the representative from 3.2 for this MTG, Jessica Jude.
 - Meeting later this week at Orlando.

Old Business – Ed Hessel

No old business was brought before the committee.

New Business – Ed Hessel

- Update on Proposed Merger of TC 3.2 and TC 3.3 (Ed Hessel/Joe Karnaz)
Title and Scope for Merged TC of 3.2 and 3.3 presented and reviewed. Both TC must vote to approve the new TC’s Title and Scope.
MOTION #3 - Motion to approve new Title and Scope for Merged TC 3.2 and TC 3.3 by Rob Yost and second by Dave Vincent. **MOTION PASSED 12-0-0 CV.**

Proposed Management Team and Officers for merged TC 3.2 and 3.3

Note: Organization to be finalized upon final approval by TAC on Wednesday, February 5, 2020.

- Chair: Joe Karnaz
- Vice-Chair: Elyse Sorensen
- Secretary: Steven Baker
- Handbook: Greg Smith
- Programs: Brad Boggess
- Standards: Rob Yost
- Research: Tony Barthel
- Webmaster: Dave Vincent
- ALI: TBD
- MTG Low GWP: Marc Scancarello
- MTG RAC Plant Sustainability Guide: Jessica Jude

Next Meeting

2020 ASHRAE Summer Meeting Austin, TX, June 27-July 1, 2020.

Adjournment – Ed Hessel

The meeting was closed at 4:15 pm through a motion by Julie Majurin to adjourn.

Respectfully submitted,

Steven Baker – Secretary