

## ASHRAE TC 8.03 Absorption and Heat Operated Machines

Meeting Minutes

Monday, June 26, 2017

Summer Meeting – Long Beach, CA

1. *TC8.3 Chair Kyle Gluesenkamp called the meeting to order at 3.32 pm, and asked for members and visitors to sign the attendance sheet and give their introductions. Remote Meeting Participation (RPM) was utilized for allowing participation as well.*
2. *Quorum: Six voting members and one member non-quorum (VMNQ) were present. TC8.3 has 7 voting members. Therefore, a quorum was established for the meeting. The voting members present were: Doug Davis, Kyle Gluesenkamp, Uwe Rockenfeller, Reinhard Radermacher, Jay Kohler, Juergen Scharfe (VMNQ) and Don Erickson (via RPM). Rajesh Dixit was absent. (Audio recording ending xx:xx).*
3. *Kumar Sivagnanam announced that the meeting was being recorded and then read the statement of purpose for TC 8.03. (Audio recording ending xx:xx).*
4. *Uwe Rockenfeller moved that the minutes from the winter meeting in Las Vegas be accepted as submitted. Doug Davis seconded the motion. The motion was accepted (6, 0, 0 CV). (Audio recording ending 14:50)*
5. *Subcommittee reports were presented:*
  - a. *Program: Kyle stated that Ersin's last meeting as Program Chair was this meeting. He also reported that the ASHRAE was promoting the historical committee celebrating its 125<sup>th</sup> anniversary in 2020 and a publication opportunity in the journal about the history of absorption for the interest of the general membership. Doug agreed to lead the effort assisted by Jurgen, Uwe & Bill agreed to draft an article. Dustin stated that it would be a couple of years from now. (Audio recording ending 14:50).*

*Bill Ryan volunteered to be the program chair.*

*Seminar (Winter): Motion for the Chicago seminar the title "Heat Exchanger Challenges & Opportunities in Absorption", in the 'Heat Exchange Equipment' track was moved by Reinhard, seconded by Uwe. The motion was accepted (6, 0, 0 CV). (Audio recording ending 44:00)*

*Seminar (Summer): Motion for the Houston seminar under Tri-generation titled "CCHP: Combined Cooling Heating & Power" was moved by Doug, seconded by Reinhard. The motion was accepted (6, 0, 0 CV). (Audio recording ending 48:34).*

- b. *Standards: Jay Kohler AHSRAE SPC 182 revision meeting was held and the method to test is going to be referenced by AHRI 560 which was moving slower than expected, but plan to get back on it. No action is required by this committee. (Audio recording ending 50:06). The other ASHRAE std 40-14 "Methods of Testing for Rating heat operated unitary air conditioning heat pump equivalent" revisions are done and ASNI rules require revision, re-affirmation or withdrawal. Motion to re-affirm moved by , seconded by . Since the deadline to take action is a 5 year cycle the committee decided to review the standard before voting on the issue. Jay recommended to put it on the agenda for Chicago and that committee members review it and be prepared to vote on it at Chicago. Jay agreed to send the reminder to Kyle, who agreed to send it out. (Audio recording ending 54:45).*
- c. *Research: Uwe Rockenfeller (Sub-committee chair) reported that there are 4 items:*

*Work statement RTAR (# 1796) titled 'Design Guide for Absorption for Chiller & Heat Pumps' statement has been finalized, including all comments and feedback were given to Uwe, Paul, Tim & Doug. The main committee is expected to to vote on it. Some omissions were discovered, just house keeping. ASHRAE likes to see a recommended bidders list. A sub committee with 3 minimum people needs to be formed. The old design guide was published in 1992 so it is needs to be updated. ICF Consulting, Avalon Consulting & University of Illinois, Chicago were the 3 names suggested. A PMS (Project Monitoring Sub Committee) consisting of Juergen, Kyle & Doug was floated. Don expressed that it should include a statement that it excludes ammonia water absorption systems. The PMS shall reconcile any discrepancies between the ASHRAE handbook and this report. The motion made by Uwe, seconded by Don. The motion was accepted (6, 0, 0 CV). (Audio recording ending 1:09:13).*

*RTAR (# ) 'Development of Co-Generation / Tri-Generation Tools for Building Designers' has been submitted on June 9<sup>th</sup>. Uwe to attach the RTAR to the minutes. Paul to lead the work statement development assisted by Dragos. Feedback is expected before the winter (Chicago) meeting. (Audio recording ending 1:18:20).*

*Mark Owen brought a couple books that are out of circulation for members to look at.*

- d. *Handbook: Juergen (Sub-committee chair) reported that the updates for the handbook chapter 18 will be floated to committee members in a week. The final version is to be submitted by the end of July. A vote will be required by mid July on the final version. (Audio recording ending 1:25:18).*

6. *Kyle Gluesenkamp presented the Chair person's Overview and Report.*
  - a. *Membership: Kyle reported that rolling off after the meeting are Ersin & Reinhard. ASHRAE created Provisional Corresponding Member with a 2 year waiting period they become eligible to become a Corresponding Member. Doug to check with Gershon if he wants to continue as Corresponding Member. Kumar & Tim roll on as voting members as of 7/1/2017. Eric Smith & Bill Ryan volunteered to become voting members. The motion to increase voting members to 9 was made by Reinhard, seconded by Uwe. The motion was accepted (6, 0, 0 CV). (Audio recording ending 1:38:25).*
  - b. *Website: Ken is not present. Kyle reported that Ken has consistently kept the website updated. (Audio recording ending 1:38:53).*
  - c. *TC Liaisons: ASHRAE is offering to do a liaison TC 90.1 (Efficiency Standards) which Doug Davis volunteered for. 2:15 – 4:15 was the suggested time slot, which overlaps the committee's meeting time, so it was decided that Doug can attend a beginning portion of that special liaison meeting and report back to this committee. (Audio recording ending 1:42:50).*
  - d. *Awards: Bill Ryan & Ken Shultz were recognized as 'Distinguished Service Award' recipients. (Audio recording ending 1:43:45).*
  - e. *Old Business: Chicago meeting*
  - f. *New business: ASHRAE has implemented a penalty system for not submitting PPT slides in time. The penalty is a probationary period.*
  - g. *Kyle recognized Eric Smith. (International Institute of Ammonia Refrigeration). Eric stated: that a change proposal has been submitted to ASHRAE 15 to refer to IAR 24 "Design for NH3 Refrigeration Systems" which will include "Design for Absorption Systems". The addendum to IAAR 2 has been sent for public review. IAR would like to include listed systems. Appliances are listed by CSA and are exempted as pressure vessels since they are less than 6" in diameter. Mike Garrabrand would like to make exceptions based on the quantity of charge & the diameter of the pressure vessel (6"). CGA has as an exception for systems less than 6.6 lbs (2.0 Kg) of charge. Per Eric Smith reports that ASME intends to regulate pressure vessels under 6" as well. Eric read the scope: "Stationary closed circuit refrigeration systems using anhydrous ammonia as a refrigerant shall comply with the standard. The standard shall not apply to 1) Ammonia absorption refrigeration systems that are listed and manufactured in accordance with other ANSI standards." The committee decided to not alter the status quo. Eric agreed to discuss this committee's opinions within IAR. Eric reported that ASHARE 15 rejected Mike Garrabrand's suggestions. (Audio recording ending 2:12:30).*

7. *Reinhard moved that the meeting be adjourned. Uwe seconded the motion and it was passed (6, 0, 0 CV). (Audio recording ending 2:13:14)*

*Duration of recordings: (2:13:14)*

**MINUTES RECIPIENTS AND ATTENDANCE LIST**

*(see accompanying PDF)*

***Distribution: All current emails in the roster.***

*Additional Distribution: By legible emails in the Jan 30, 2017 sign in sheet:*  
[michael@rockyresearch.com](mailto:michael@rockyresearch.com), [bhedman.entropyresearch@gmail.com](mailto:bhedman.entropyresearch@gmail.com),  
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*Illegible emails in the Jan 30, 2017 sign-in sheet: peterschossig@???*