

## **ASHRAE TC 8.03 Absorption and Heat Operated Machines**

### **Meeting Minutes**

**Monday, June 23, 2018**

**Summer Meeting – Houston, TX**

1. *TC8.3 Chair Kyle Gluesenkamp called the meeting to order at 3.35pm and asked for members and visitors to sign the attendance sheet and give their introductions. Remote Meeting Participation (RPM) was not utilized. One participant Chris (SMTI) was on a teleconference call. Since no voting members participating RPN was not required.*
2. *Quorum: Six voting members were present. TC8.3 has 9 voting members. Therefore, a quorum (6/9) was established for the meeting. The voting members present were: Doug Davis, Kyle Gluesenkamp, William Ryan, Rajesh Dixit, Kumar Sivagnanam and Timothy Wagner. Uwe Rockenfeller, Juergen Scharfe (VMNQ), and Gershon Gershman were absent. Kyle read the code of ethics. Kyle paid tribute to the longstanding intellectual and cultural pillar due to his contributions, recognizing Don Erickson who passed away on 27<sup>th</sup> May 2018 at age 78, after a valiant struggle with pancreatic cancer. (Audio recording ending 6:10).*
3. *Kyle Gluesenkamp stated that it was his last meeting as chair and thus rolling off as a voting member, with Patrick Geoghagan becoming the chair and voting member. Rajesh rolling off after the Houston meeting. Reinhard will be rolling on. Don Erickson is no longer a voting member. Kyle suggested we continue with only 8 voting members without any additions, since we can have quorum 5/8 as Juergen Scharfe (VMNQ) being a consistent attendee, it will be 6/9 when he is present. No others expressed an interest at being a voting member. (Audio recording ending 13:30).*
4. *Kumar Sivagnanam announced that the meeting was being recorded and then read the statement of purpose for TC 8.03. (Audio recording ending 14:25).*
5. *Kumar Sivagnanam moved that the minutes from the winter meeting in Chicago, IL, be accepted as submitted. Tim Wagner seconded the motion. The motion was accepted (New format: Yes, No, Abstain, Absent, CV/CNV: 6, 0, 0, 3, CV). (Audio recording ending 15:25).*
6. *Dustin Meredith was recognized and assured that quorum was established. He thanked Kyle for his contributions as chairperson of the committee and presented him with a certificate. (Audio recording ending 16:21).*
7. *John Karakash stated that he is working on the cold & hot climate design guides which are in review mode for the chapter expected to take 6 months. He stated that the meetings happen on Sunday and interested persons are welcome to attend. (Audio recording ending 17:13)*

8. *Subcommittee reports were presented:*

- a. *Website: Ken updated the members about the website and keeping up with updates. Results from the research and standards 182 status will be done when he receives the information from Jay Kohler. Kyle thanked him for the great job he has been doing (Audio recording ending 19:45)*
- 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. It has been decided to start with ASHRAE std 30 as a basis and work from there on. (Audio recording ending 0:22:20). The other ASHRAE std 40-14 "Methods of Testing for Rating Heat Operated Unitary Air Conditioning Heat Pumps Equipment". Ahmad has been contributing to it as chair. Chris (??) & Kyle Gluesenkamp volunteered to be part of the team revising std 40. Tim Wagner made the motion, which Bill Ryan seconded to revise the ASHRAE std 40-2002 as required by ANSI to re-affirm, revision or withdrawal all standards periodically. Motion was accepted (5, 0, 0, 3, CNV). (Audio recording ending 32:40).*
- c. *Program: Bill Ryan reported that TC8.3 was sponsoring a seminar 41 on Tuesday "The Future of Thermal Cooling to Support Resilient CHP Systems" with 3 presenters. See the 2018 ASHRAE Houston guide on page 66 for details.*

*Rajesh Dixit mentioned that European countries are using Biomass boilers and Scandanavian countries are using the low temperature heat source from flue gas since they need to cool it down. "Renewable Fueled Natural Refrigerant Systems" was also suggested as a title. Several possible presenters were suggested.*

*A program for ASHRAE winter conference in Atlanta. "Building Integrated Renewably Fueled Natural Refrigerant Systems" was the chosen as the track for Atlanta. The motion made by Bill Ryan and seconded by Rajesh Dixit was accepted (5, 0, 0, 3, CNV). (Audio recording ending 50:05).*

*Kyle Gluesenkamp volunteered to be the chair for the seminar at Atlanta and submit the accepted motion to the relevant ASHRAE authorities.*

*No suggestions were made for the "Optimization Techniques" track in Kansas City. suggested "HVAC Applications for Green Houses".*

*Kyle mentioned that ASHRAE's CEC is looking for suggestions for track names. Rajesh Dixit mentioned "Innovative Real World Applications" using examples such as in cruise ships. Eric Smith (or somebody else?) suggested, "Conserving Our Resources", "Building Integrated Interface". Kyle agreed to submit some of these topics to CEC. CEC is also looking for reviewers of conference papers. (Audio recording ending 70:35).*

- d. *Research: Tim Wagner reported (since Uwe Rockenfeller Sub-committee chair was not present) that:*

*Work statement RTAR (# 1796) titled 'Design Guide for Absorption for Chiller & Heat Pumps' is being worked on by Tim Wagner.*

*Work statement RTAR (# ???? ) 'Development of Co-Generation / Tri-Generation Tools for Building Designers' David S & Patrick Geoghagan are working on this.*

*The goal was to have both developed by summer and approved by email ballot.*

*Rajesh Dixit & Juergen Scharfe will work on developing an RTAR combining "Absorption Heat Pumps and District Heating Cogen"*

*Corrosion as a topic dropped for lack of interest.*

*Kyle Gluesenkamp had stated that the committee can approve brief technical documents ('white papers') for publication. Rajesh Dixit had suggested "Sub-Freezing Operation" & "Heat Pump", which Rajesh Dixit, Chris (??) & Mike Garrabrant(?) would be working on these topics.*

*(Audio recording ending 74:49).*

- e. *Handbook: Kyle Gluesenkamp reported (in place of Juergen Scharfe -Sub-committee chair) that the "Refrigeration" chapter publication has completed and is in hard copy format and possibly been mailed out. Kyle thanked Juergen (in absentia), Bill Ryan and Doug Davis for their work. The chapter on "Fundamentals" had not been sent to the committee. Kyle agreed to get in touch with Juergen and get further details of the status.*

*Kyle Gluesenkamp stated that 2 publications to be evaluated for retire, re-affirm or revise. (Kyle to send Kumar the titles - "Dessicant and Adsorption Cooling #88199" and "Application Guide for Adsorption Cooling and Recovered Heat #90378"). Kyle agreed to contact Juergen for further clarifications as the opinion was the final version is to be submitted by the end of July. TC 8.12 (Dessicant Dehumidification Equipment & Components) will be contacted by Kyle to defer #88199 to them for action, since it pertains to adsorption not absorption.*

*Kyle Gluesenkamp stated that the Historical Committee is expecting to receive written materials by Dec 7<sup>th</sup>, 2018, which can be articles, papers, seminar or best presentations. Kyle noted that the subjects need not be technical but more so of historical significance and general interest, maybe even "cool facts". Doug Davis stated that he has been working on this and submitted to the relevant committee. Kumar Sivagnanam suggested that NH3-H2O refrigeration could be*

- of historical interest. He asked for contributors from the industry. (Audio recording ending 84:10).*
- f. *Membership: Doug Davis reported that the committee shows 75 members. Rajesh agreed to suggest wording that amends the title and statement of purpose of the TC 8.3 since it was discussed that alterations might attract a wider audience and increase membership. Kyle to discuss with the section head for the process of making a change. (Audio recording ending 110:47).*
9. *Kyle Gluesenkamp presented the Chairperson's Overview and Report.*
- a. *Employer support letters are available.*
  - b. *TC Liaisons: None.*
  - c. *Awards: None known. It was suggested that Uwe Rockenfeller be nominated for an award. (Audio recording ending 110:40).*
  - d. *Old Business: None.*
  - e. *New business: Kyle stated that we do have the option to invite people from the industry for a seminar within the TC meeting.*
  - f. *Next Meeting: Monday Jan 2019 in Atlanta, GA.*
10. *Tim Wagner moved that the meeting be adjourned. Doug Davis seconded the motion and it was passed (6, 0, 0, 3 CV). (Audio recording ending 114:21)*

*Duration of recordings: (116:44)*

#### ***MINUTES ATTENDANCE LIST***

*(see accompanying PDF)*

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