



MINUTES - ASHRAE MEETING - Chicago
TC 2.3 - Gaseous Air Contaminants/Removal Equipment
TC Meeting

Tuesday (1/23/18), 1:00 pm - 3:30 pm
Palmer House Hilton – Spire

Meeting membership attendee list is as follows:

Last Name	Name	Member Status	Position	Present
Total Voting Members = 15 out of 16 in attendance at Voting				
Agopian	Mr. Nick Agopian	VM	Member	X
Bayer	Dr. Charlene W. Bayer, PhD	CM	Member	P
Choi	Dr. Kyung-Ju Choi, PhD	NV	Program Chair	P
Freeman	Mr. Peter Freeman	VM-NQ	Member	
Hingorani	Dr. Sanjeev Hingorani, PhD	VM	Vice Chair	P
Levasseur	Ms. Paula Levasseur	VM	Chair /Webmaster	P
Listvan	Dr. Marilyn Listvan	VM	Program co-chair	P
Mathur	Mr. Ashish Mathur	VM	Member	P
Muller	Mr. Christopher Muller	VM	Member	P
Owen	Ms. Kathleen Owen	VM	Research Chair	P
Sherwood	Scott Sherwood	VM-NQ	Member	P
Zaatari	Dr. Marwa Zaatari, PhD	VM	Secretary	P
Middlebrooks	Mr. Matt Middlebrooks	NV	Membership Chair	P
Tronville	Dr. Paolo M. Tronville, PhD	NV	Standards Chair	P
Haas	Mr. Daniel Haas	VM	Member	P
Krafthefer	Mr. Brian Krafthefer	VM	Member	P
Kwong	Mr. Kevin Kwong	VM	Member	P
Lee	Dr. Chang Seo Lee	VM-NQ	Member	P

1. Meeting was called to order by Chair @ 1:00pm

a. ASHRAE Code of Ethics

- i. The ASHRAE Code of Ethics is to be adhered to by those doing ASHRAE business whether or not they are an ASHRAE member. The Code of Ethics can be reviewed at the below link.
- ii. <https://www.ashrae.org/about-ashrae/ashrae-code-of-ethics>

b. Introduction of guests and members.

c. *Determination of Quorum.*

i. *Voting Members for this meeting: Charlene Bayer, Paula Levasseur, Sanjeev Hingorani, Kathleen Owen, Peter Freeman(NQM), Scott Sherwood, Chris Muller, Marwa Zaatari, Nick Agopian, Daniel Haas, Marilyn Listvan, Ashish Mathur, Brian Krafthefer, Paolo Tronville, Kevin Kwong, Chang Seo Lee (NQM)*

a. *14 Voting Members 2 NQM*

b. *> ½ Voting Members Present (8) (Yes 15/16)*

d. *Chair's Report*

Chair discussed new tools. The chair will put the links on the website.

- 90.1 portal free to use until March 15
 - Standard 90.1-2016
 - 90.1 user's manual
 - Redline version of Standard 90.1-2016 compared with version 2013
 - Copy/print/annotation/interpretations/errata
- New ASHRAE technology portal
 - ASHRAE journal articles
 - ASHRAE research reports
 - Transactions and conference papers
 - ASHRAE conference seminars
- ASHRAE authoring portal
 - Multiple authors review revise, and edit a document together in word
 - ASHRAE – approved
- ASHRAE terminology
 - Free online glossary of more than 3700 terms related to the built environment
 - Help your publication development efforts
 - Give your input to TC1.6 by checking the accuracy and omissions
 -

Chair will request the same meeting room as the room where TC2.4 will be held to make it easy for members to attend both meetings.

e. *Reporting from ASHRAE liaisons.*

No reports.

2. Review and Approval of previous meeting minutes from Long Beach.

Motion	Charlene Bayer
Second	Kathleen Owen
Yes	13
Abstain	Chang Seo Lee
CNV	Paula Levasseur

3. Review of Action Items from Last Meeting

#	Action Item	Owner	Meeting Initiated	Update at Last Meeting	Status
1	Workshop on performance rating system summary to be sent out.	Ashish Mathur	Atlanta	Update: Ashish Mathur decided not to pursue it. Will remove it from the list.	Closed
2	Collection of TC member bibliography papers for website posting	Marilyn Listvan	Atlanta	3 years LinkedIn page ASHRAE TC2.3 outreach. Still collecting bibliography for TC2.3 website. Please send to Marilyn. Work in progress. Update: Marilyn: did not get any info since last meeting.	Ongoing
3	Development of a course on gas phase filtration to be part of ASHRAE supported classes and sent to chapters. Send the TC 2.4 presentation as an example	Paula Levasseur /Brian Krafthefer	Atlanta	Brian to send presentation TC2.4 as an example. Update: Barney and Chris want to put a course on air cleaning (half or full day course) Paula and Brian will work on the presentation.	Open
4	Start an email discussion between TC 2.3, TC 2.4 TC 2.9 & SSPC 145 Regarding starting an MTG to see how to use/test devices	Paula Levasseur Ashish Mathur	Las Vegas	Include 62.1 & EHC along with TC2.9 Update: Will replace Paula name by Ashish's name. Need to do a forum to get ideas from other committees (multi-technology systems).	Open
5	Setup BaseCamp site for TC2.3 Research	Charlene Bayer	Las Vegas	Continue using it Update: Basecamp already setup	Open
6	Start Twitter account	Marwa Zaatari	Long Beach	Update: Marwa set it up.	Open
7	Abstract for ASHRAE 125th anniversary: 2019-2020	Brian Gemma Barney?			Open

4. Subcommittee Reports

a. Handbook - Subcommittee Chair -- Brian Krafthefer

Brian will send the chapter updates third week of Feb. The deadline is March.

b. Membership - Subcommittee Chair -- Matt Middlebrooks



Currently, there are 16 voting members. After June 2018 meeting, Marilyn, Kathleen, Ashish will roll off. Paula will continue as a Chair. Three new people will roll on the committee, Tony Abate, Jeff Roseberry, Gemma Kerr.

To join the TC2.3 go to the ASHRAE Website [Link to Join TC](#).

c. Planning - Subcommittee Chair – Sanjeev Hingorani

- Working on presentation of TC2.3 (to promote to other TCs, etc.). The deadline is by the Houston meeting.
- Looked at research planning. Brian is working on a summary slide.
- Twitter account. Members need to follow and send tweets. The goal is to promote for local chapters.

d. Professional Development Coordinator -- Barney Burroughs
No report.

e. Program - Subcommittee Chair -- KJ Choi

one seminar was submitted for Houston.

One co-sponsoring forum: test methods to evaluate air cleaning technologies.

Motion: Choi

Yes: 14

CNV: 1

f. Professional Development Coordinator – Barney Burroughs

g. Publications - Subcommittee Chair -- Marilyn Listvan

ASHRAE 125th anniversary: 2019-2020. Call for abstracts on milestone achievements in HVAC that happened between 1920-2000. Abstract: Due March 2018. Papers: Due September 2018.

Marwa sent the link to the members.

Brian is interested. Marilyn will contact Barney.

h. Research - Subcommittee Chair -- Kathleen Owen

TC 2.3 had 2 projects that we had already been told would go out for bid in Spring. It now looks like they won't go out until fall. However, the decision won't be made until Wednesday. RTAR and WS submission: RAC added March 15 deadline.

RAC meeting

2 RTARs considered, both accepted with comments

2 Work Statements considered – both returned

Voted to release all outstanding TRPs for bid

Update on 1780 – WS vote:

1780-WS, Test Method to Evaluate Cross-contamination of Gaseous Contaminant within Total Energy Recovery Devices; Responsible Committee: TC 9.10 (Laboratory Systems); Co-Sponsors: TC 2.3. Chris Muller, Nick and Gemma. WS revised per comments; new draft sent for new votes 1/7/18.



The work statement was rewritten, but TC9.10 did not have the 2.3 people help with the revision. A vote went out to TC 2.3 members via email ballot. Marwa updated Kathleen with vote results.

Yes Votes 8
No Votes 0
Abstain Votes 2
Absent 0
CNV

TC 5.5 will also vote on co-sponsoring this WS at their meeting. TC 5.5 has concerns with the scope and writing. Matthew Friedlander of 5.5 joined us to ask us to be sure that the 3 TCs work together to make the WS better.

Assuming that 9.10 does not go ahead and resubmit as is, Kathleen will reach out to both committees about this WS.

Matt reviewed the Unsolicited Research Project that would be conducted in the Netherlands (Schiphol Airport) and provided a summary in the meeting:

Airport is looking for evaluating different technologies. Unsolicited proposal. No bids. They have concept to compare 1 brand of an ionizer technology to a standard carbon filter. Airport willing to put 125K and asking ASHRAE to put the same amount. Testing: TVOC (specific individual compounds) odors, ozone, CO2, PM10/2.5, biological, human perception.

Matt: will respond and suggest to the applicant to reach out to Mike Vaughn.

i. Standards - Subcommittee Chair -- Paolo Tronville

Had online meeting for the first time. meeting notice was on the website. Mike V sent a web meeting but on short notice.

j. Website - Subcommittee Chair -- Paula Levasseur

k. SPC145 – Committee Chair – Matt Middlebrook

Standard 145.1: media test, no report, no comments.

Standard 145.2: Scope change to take the restriction out for testing electronic air cleaner using standard 145 was approved by ASHRAE.

There is interest in a different test method: example hybrid method: duct test +room test, portable air cleaner, multi-pass test. Chris: need more input from manufacturer.

5. Report from TC liaisons

Charlene updated about the two position documents that relates to TC2.3:

- 1) Filtration and air cleaning: was approved to form a committee to revise the existing document. Need to make sure TC2.3 is on it.
- 2) IAQ guideline

During the EHC meeting, there was lots of discussion on IAQP, design compounds.



TC 4.10: chemical reactions in indoor environments. Second-order reactions. _Need validation data to validate the models. Kathleen and Gemma and Brian and Sao volunteered to review papers.

TC 2.9: need replacement for Matt. Ashish will be the liaison for 2.9.

RTAR: effect of UV on performance of filters (PM, or Gas+PM).

RTAR: L.R UV

6. New Business

Rahul promoted AFS FiltCon 2018 conference.

MTG: Ed Light asked to form an MTG focused on health impacts of VOCs.

Motion: Marilyn

Second: Brian

Discussion: discussion about the purpose, definition of MTG (providing society with expertise, function 1 year)

Yes: 0

No: 12

Abstain: Paolo

Scott not present anymore

CNV: Chair

7. Agenda suggestions for the Summer Meeting in Houston

8. Adjournment at 2:55