

**ASHRAE TC 9.10 Laboratory Systems  
Virtual (Annual 2020)  
Thursday, June 18, 2020  
Meeting Minutes**

**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**

TC/TG/TRG NO	9.10	DATE	June 18, 2020
TC/TG/TRG TITLE	Laboratory Systems		
DATE OF MEETING	June 18, 2020	LOCATION	Virtual

Voting Members Present	Term Expires	Members Absent	Term Expires	Ex-officio members and additional attendance
Brad Cochran (Chair)	2020	Mary Foutz	2023	Guy Perreault
Christine Reinders-Caron	2023	Lloyd Le	2023	Duncan Green
Kenneth Kuntz	2021	Martin Stangl	2023	Robert Weidner
Jason Atkisson	2021	Patrick Carpenter	2021	Jessica Mangler
Eric Ballachey	2022	Jacob Edmondson	2022	Jim Coogan
Adam Bare	2020			Dan Frasier
Wade Conlan	2020			Jared Ritter
Nathan Ho	2020			Rachel Romero
Traci Hanegan	2020			John Varley
Tom Smith	2021			Robert Valbracht
Brent Fullerton	2022			Kishor Khandari
				Lou Hartman
				John Castelvechi
				Roland Charneux
				Rami Alkhalil
				Brendon Burley
				Salil Sansare



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**DISTRIBUTION**

<i>All Members of TC/TG/TRG plus the following:</i>	
TAC Section Head: Vance Payne	
TAC Chair: Jay Kohler	
All Committee Liaisons As Shown On TC/TG/TRG Rosters:	
Standards liaison: Michael Gallagher	
Manager of Research & Technical Services Mike Vaughn	
Research liaison: Paolo Tronville	

**Call to order 6:00 PM / Introductions**

Brad gave introduction to TC9.10 and reviewed high level objectives. Reviewed Code of Ethics. Introduction to TC9.10 website and Basecamp. Jim Coogan is web master. Roles and responsibilities are on the website.

Skipped individual introductions because of virtual meeting, participants could see participants list.

Reviewed Current Leadership and Follow-on leadership taking over in 2021.

Currently there are 16 voting members – preference is to have mix of manufacturers, owners, consultants, and contractors.

**Quorum is met 11 members present.**

**Membership Update (Brad Cochran/ Guy Perreault)**

Current Leadership

Chair – Brad Cochran

Vice-Chair – Guy Perreault

Secretary – Carol Donovan

Taking Over in August 2020

Chair – Guy Perreault

Vice-Chair – Robert Weidner

Secretary – John Castelvechi

Rolling off August 1, 2020

- Nathan Ho

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- Adam Bare
- Traci Hannigan
- Wade Conlan

Rolling on August 1, 2020

- Guy Perreault
- John Varley
- Glenn Friedman
- Kishor Khankari

### **Approval of Orlando meeting minutes (Brad Cochran)**

- Minutes from the Orlando meeting were emailed previously.
- Comments on Orlando Minutes:
  - Jacob Edmondson's name was misspelled.
- Move to approve with edits: Traci Hanegan moved, Wade Conlan seconded.
  - Approved 10-0-0, CNV.

### **Section Head Report (Vance Payne)**

- ASHRAE looking to shrink the technical program and absorb some of the smaller TCs
- ASHRAE encourages having online meetings before the conference to reduce the number of rooms to be organized. People are not attending the sessions.
- TC9.10 looks good – large and productive
- Collecting statistics from the TCs i.e. activity, publications, productivity. TAC will be cutting the TCs that are not being productive and will be merged with other TCs.
- ASHRAE website has list of email alias in pdf format.
- TC 9.4 and 9.8 merged.
- For interim virtual TC meetings, email [TCmeetings@ASHRAE.net](mailto:TCmeetings@ASHRAE.net) for web conference.

### **I<sup>2</sup>SL User Manual Presentation (Adana Johns and Christopher Kleingartner)**

- Adana Johns and Christopher Kleingartner gave a presentation on a new user's manual being developed for laboratories by I<sup>2</sup>SL.
- Project was Launched in October 2019.
- Their goal is to develop a living document that defines the purpose, function, infrastructure, operations, intended uses for the facility along with changes as they happen
- Currently they have the Executive Group formed.

### **ASHRAE Epidemic Task Force Presentation (Wade Conlan)**

- Wade Conlan gave an update on the Epidemic Task Force (ETC).
- The Task Force has updated ASHRAE's Position Document on Infectious Aerosols

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- Developed and Environmental Health Emerging Issues Brief titled “Pandemic Covid-19 and Airborne Transmission”
- Both documents are available for free on ASHRAE’s website.

**Research Subcommittee (Bob Weidner)**

- See sub-committee report on attachment.
- RP1573 – SF6 replacement gas – Final report has been submitted and Approved.
- RP 1780 – Test Method to develop a Methodology to Evaluate Cross Contamination of Gaseous Contaminants within Total Energy Wheels – Project was awarded to University of Saskatchewan. Kick-off meeting has happened and project is under way.
- Work statement 1835 Characterizing the Performance of Entrained Flow Stacks– WS is complete, been bid and is currently in review.

**Program Subcommittee (Christine Reinders-Caron)**

- See sub-committee report attachment. June 15th is deadline for program seminars for Chicago. Program template is on basecamp.
- No Programs this meeting, Debate withdrawn.

**Handbook Subcommittee (Lou Hartman)**

- Working on aligning Handbook with Design Guide.

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### **Laboratory Design Guide (Ken Kuntz)**

- See attached minutes.
- Using Basecamp for edits with final edits by lead on Author Portal
- Chapter 3: Design Process: edits are complete – design. On the base camp
- Chapter 5: Laboratory hood design: Final edits have been made.
- Chapter 9: Exhaust Stack Design: Updates from Orlando have been made. Will lockdown in January.
- Chapter 11: Controls: John Castelvechi is going to review Jim Coogan’s comments and revise and is almost complete and will be sent to committee.
- Chapter 12: Airflow Patterns and Testing Procedure: Started edits
- Chapter 14: Laboratory Commissioning: Looking for additional feed back.
- Chapter 16: Microbiological and Biomedical Laboratories: A few edits have been made.
- Chapter 17: CFD Modeling of Laboratory Ventilation: Being reviewed, may rewrite from design engineer’s viewpoint.
- Chapter 19: Exposure Control Devices: New chapter.
- May re-order chapters.

### **Laboratory Classification – (Adam Bare)**

- See attached minutes
- Discussion on need for updating.

### **Journal (Roland Charneaux)**

- Roland – Articles in April and June editions.
- Tom Smith preparing article on replacement tracer gas.

### **ALI Courses**

- Lab Design – not given this time
- Lab Exhaust (Given twice by Brad Cochran
- Lab Controls – Under development, need to get paperwork to ASHRAE.

### **Liaison Reports**

Brad provided updates on liaison reports being provided on basecamp in order to capture important information and links if applicable.

- TC 1.4: Guideline 36 is in continuous maintenance. (High-Performance Sequences of Operation for HVAC Systems) There are plans to add sequences for lab rooms and for exhaust fans.
- TC 4.3: RP-1823: Improved Exhaust-to-Intake Dilution (Concentration) Calculations final report was approved by the PMS and is going on to a vote in the TC. A new research idea was proposed to evaluate effect of screen walls or other large roof objects on previously evaluated plume rise

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enhancement of stack ganging. No immediate action. Will likely re-hash program idea looking at dispersion criteria and contaminant re-entrainment (John Carter/Martin Stangl) for Chicago meeting. There was discussion regarding whether TC4.3 should coordinate with TC4.10 to provide guidance on how to appropriately model air flow around buildings (external environment).

- TC 5.1: While several topics were discussed, the only topic of direct relation to TC 9.10 was concern over changes to the joint sponsored RP-1835 - PMS with removal of AMCA Member Joe Brooks. Clarification on RAC's concern regarding having AMCA as a potential bidder has forthwith occurred. AMCA to clarify if they will formally state that they have no interest in bidding.
- TC 9.6: Healthcare (Traci Hannigan) Committee has not met yet.
- TC 9.11: Research on Demand Control Ventilation for Cleanrooms is underway.
- 62.1: Discussion of including contamination removal effectiveness, no proposals yet.
- 90.1: Requesting energy analysis data for laboratories. Looking at requiring heat recovery chillers.
- SPC 110: Working on how to modify Standard for new tracer gas testing.
- NFPA 45: Current version is 2019. Next edition 2020 is open for public comment.
- ANSI Z9.5: Committee has restarted. Assigned groups to work on specific chapters.

**Old business**

- None Reported

**New business**

- Feedback on Virtual Conference requested.

**Main Meeting adjourned at 7:40 pm.**