

**ASHRAE TC 9.10 Laboratory Systems
Houston
Tuesday June 26 , 2018
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 26, 2018
TC/TG/TRG TITLE	Laboratory Systems		
DATE OF MEETING	June 26, 2018	LOCATION	Houston

Members Present	Term Expires	Members Absent	Term Expires	Ex-officio members and additional attendance
Jim Coogan	2018	Charles Coward	2018	Roland Charneux
Mark Hydeman	2018	Adam Bare	2018	Mary Foutz
Gaylon Richardson	2018	Guy Perreault	2019	K. Khankari
Robert Weidner	2018	Pete Gardner	2019	B. Fullerton
John Castelvevchi				
David Raush	2019			
Carol Donovan	2019			D. Hammond
Wade Conlan	2020			G. Augustini
Traci Hanegan	2020			C. Henck
Jason A Atkinson	2021			Jacob Edmonson
Patrick Carpenter	2021			C Reinderds-Caron
Kenneth W Kuntz	2021			L Hartman
Tom Smith	2021			B. Burley
Henry Hayes	2018			J.S. Mac'urray
Nathan Ho	2019			P.R. Lemester
Brad Cochran				D. Hammond
				E. Ballachey

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All Committee Liaisons As Shown On TC/TG/TRG Rosters:	
Standards liaison Manager of Research & Technical Services	
Research liaison	

Call to order 3:30

Traci Hanegan called the meeting to order.

Introductions

All present introduced themselves and were invited to sign the attendance sheet.

Roll Call

Quorum is met, 13 members are present.

Membership Update (Trace Hannigan)

Traci reviewed Member Updates. Brad is rolling into Chair and Guy is moving into the Vice Chair. Carol is rolling into secretary for the next two year. Bob Weidner will take over Carol's leadership position and become Vice Chair in 2 years and then move up to Chair. Carol is rolling off Programs sub-committee. Christine Reinders-Caron is rolling on as programs sub-committee chair. Traci reviewed who is rolling off as voting members after this meeting. Jim Coogan's term is being extended by one year. As Chair, Brad is rolling on as a voting member. Three other new voting members include: Eric Ballachey, Jacob Edmondson and Brent Fullerton.

New Provisional corresponding members – through website.

Section Head Report (Traci Hanegan)

- TC members have been using ASHRAE letterheads for reviews for other organizations. Other organizations reported back to ASHRAE. Individuals can not speak for ASHRAE
- ASHRAE Celebrates 125th anniversary – historical committee is looking for stories and technical papers
- ASHRAE making clarifications on issuing white papers / technical bulletin. TAC finds a peer review before technical bulletin is issued
- TAC is updating manual for procedures for technical committees

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- It has been requested that Sub-committee chair training meetings be offered more than once during the conference. Kelley Cramm stated that most all of the training material is available on ASHRAE website

Approval of previous minutes (Chicago)

- Minutes from the Chicago meeting were emailed previously.
- Minutes from the meeting were reviewed. Bob Weidner commented on Research notes that TC 5.5 decided not to Co-Sponsor RP1781.
- Minutes approved 13 for, 0 against

Research Subcommittee (Bob Weidner)

- RP-1573 ASHRAE 110 Tracer Gas Replacement. Draft report due end of August 2018. Final report expected in September. PMS is satisfied with the study and findings. Tom Smith presented findings and conclusions in presentation to date.
- RTAR-1780 has been approved by RAC and moving forward. Will go out to bid in the fall depending on funds. Bob Weidner reviewed members.
- RTAR-1835 Characterizing the Performance of Induced Flow Stacks
 - Brad asks for reviewer, participants on the PES as well as potential bidders

Other RTARs under discussion:

- Survey of existing contaminants for existing labs – on hold for now.
- Work Statement written for Effective Air change rates
- RTAR – Duct velocity / transport velocities in chemical fume hood distribution ductwork

Program Subcommittee (Carol Donovan)

- See report in the attachments (see attached minutes)
- Gaylon Richardson suggests that TC 9.10 co-sponsor a seminar out of TC 5.3 on ventilation effectiveness and possibly Chilled beams and Fancoil units

Brad Cochran Mini-Presentation on WS-1835 Characterizing the Performance of Induced Flow Fans

(4:24 pm)

ASHRAE TC 9.10 Laboratory Systems
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Project Monitoring Sub-Committee (PMS) Bob Weidner – No additional comments

Handbook Subcommittee (Lou Hartman)

- 4 year cycle
- Evolving topics – 110 testing, New SEFA standard, ANSI Z9.5 revision, lab classification
- 2020 update of the online Handbook to pick up these topics
- Vote to approve – no updates. 16 updates

Standards (Gaylon Richardson)

- STD 110 is reforming. Research Project 1573
- 62.1 – No reporting
- 90.1, Kelley Cramm met with Track chair. Jason Atkinson applied several times to be the liason. He is on the roster.
- ANSI Z9.5 – Hood minimum of 150 ACH – had a fire / explosion in a fume hood at this ACH. Tom recommended the minimum should be increased to 325 ACH. Gordon Sharp stated that 150 is not a hard minimum and should be based on risk assessment. Users want a number and ignore the risk and use the minimum. Minimum gets chosen without applying appropriate measures.
- TC 9.2 Design guide developed for hazardous spaces. Has not been issued and still under internal review. Representative from TC 9.10 needs to weigh in on the design guide if it includes laboratories
- NFPA 45 final review 2018 and ready to be published

Laboratory Energy Efficiency (Eric Ballachey)

- Refocus the ideas on the next Design Guide revision.
- I2SL has an ROI tool for laboratories
- Shelve the energy efficiency sub-committee and focus on updates in design guide
- I2SL and BEQ creating a lab data set

ASHRAE 110 Sub-committee (Wade Conlan)

- Discussion on reforming standard 110 subcommittee based on research project. 9.10 needs to submit a form to Standards and Chair of 9.10 to submit – Wade as chair and Mark as Vice Chair and 4 individuals committed. Committee of 12 total.
- Slot for meeting based on previous standard meeting time. Longer time to meet quarem
- Motion to move forward. 16 approved, 0 against.

ASHRAE TC 9.10 Laboratory Systems
Houston
Tuesday June 26 , 2018
Meeting Minutes

Journal (Roland Charneux)

- No articles in the last 6 months.
- Classification of labs – posted on ASHRAE website

Laboratory Design Course (John Varley)

- Waiting for an invite for Atlanta
- John is looking for someone to support another class to cover more topics (Brad)
- An advanced course has been requested by members.
- John is looking for members to teach the course

Liaison Reports

TC 1.4 Control Theory and Applications – (Jim Coogan)

- Guideline 36 is available in the bookstore. High Performance Sequences of Operation for HVAC Systems
- Standard for method of test for air terminals is being revised (STD 195)

TC 2.2 Plant and Animal Environment (Henry Hays)

- Focus is on agricultural and plant growth and HVAC guidance for growth facilities. Nothing major for TC 9.10. Possible research projects for animal laboratories for the MTG.

TC 4.3 Ventilation Requirements and Infiltration (Brad Cochran)

- Research project went out to bid

TC 5.1 Fan Design and Application (Ken Kuntz)

- Creating a test standard
- EC motor
- Entrained flow stacks
- Fan energy index for 90.1

ASHRAE TC 9.10 Laboratory Systems
Houston
Tuesday June 26 , 2018
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TC 5.3 Room Air Distribution (Gaylon Richardson)

- Standard 129 – how to test for air change effectiveness – being revisited

TC 5.8 Industrial Ventilation

- TC no longer exists

TC 7.6 Building Energy Performance (Patrick Carpenter)

- Building EQ – Standard 105 being revised
- New guide – best practices guide – specific to laboratories

TC 7.7 Test and Balance (Gaylon Richardson)

- Justin Garner presentation – present different ways to present the data – Journal or papers or webinar

TC 7.9 Building Commissioning – (John Castelvechi)

TC 9.2 Industrial Air Conditioning

- Nothing to report

TC 9.6 Healthcare Facilities (George Augustini)

- No updates

TC 9.11 Clean Spaces (Roland for Kishor Khankari)

- Research project – ventilation control in Cleanrooms
- New work statement on energy consumption

62.1 – Indoor Environmental Quality (Nathan Ho).

- Zone ventilation effectiveness – ventilation effectiveness for labs / get together with Chandra and co-sponsor for research and seminars
- Prescriptive exhaust criteria in educational setting – addenda for public review to change the language for EHS

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90.1 See report in the Standards S-C section.

I2SL (Gordon Sharp)

- Lab accelerator program / smart labs – MOU with DOE
- UCI is putting together workshops for reducing energy in labs, hosted by DOE at UCI, 1 per year
- Benchmarking program – looking for sources of funding – LBNL and DOE, grant proposal to NIST
- Annual conference Oct. 14-17 in Raleigh NC (Elk Season)

Old business

- No old business

New business

- *Wade recognized Roland Charneux for his distinguished award!*

Main Meeting adjourn at 5:30

DRAFT