

# TC 2.9 ULTRAVIOLET AIR AND SURFACE TREATMENT

## MEETING AGENDA

### 2025 Summer Meeting, Phoenix

Date: Monday, June 23, 2025

Time: 10:00 to 12:00 PM CST

Location: Sheraton Phoenix Downtown, Valley of the Sun C (Level 2)

Link: [Join the meeting now](#)

Meeting ID: 282 255 131 743

Passcode: tk7Cr6RQ

TC 2.9 Scope – TC2.9 is concerned with all aspects of equipment and systems that utilize ultraviolet radiation to destroy or deactivate chemical and/or biological air and surface contaminants in HVAC systems and indoor spaces, including, but not limited to, effectiveness, safety, maintenance, and economics.

Website: <https://tpc.ashrae.org/?cmtKey=e94e5979-e432-4716-a91f-ff438f192a2f>

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#### **Welcome, Call to Order**

1 minute

#### **ASHRAE Code of Ethics**

1 minute

*“ In this and all other ASHRAE meetings, we will act with honesty, fairness, courtesy, competence, integrity and respect for others, and we shall avoid all real or perceived conflicts of interests. (See full Code of Ethics: <https://www.ashrae.org/about-ashrae/ashrae-code-of-ethics>.) ”*

#### **ASHRAE Diversity Commitment**

*“ASHRAE is committed to providing a welcoming environment. Our culture is one of inclusiveness, acknowledging the inherent value and dignity of each individual. We proactively pursue and celebrate diverse and inclusive communities understanding that doing so fuels better, more creative, and more thoughtful ideas, solutions, and strategies for the Society and for the communities our Society serves. We respect and welcome all people regardless of age, gender, ethnicity, physical appearance, thought styles, religion, nationality, socio-economic status, belief systems, sexual orientation, or education,”*

#### **Introductions (Name and Affiliation) Sign-in Sheet**

5 minute

*Use Webex Chat and type your Name, Affiliation, E-mail, Member Status (Voting, Corresponding, Guest,) and YEA if you are a Young Engineer in ASHRAE, ≤35 years old*

*Update your ASHRAE bio information at the [ASHRAE](#) website*

**Roll Call of Voting Members; Quorum Check**

1 minute

<b>Name</b>	<b>Affiliation</b>	<b>TC Position</b>	<b>Voting Status</b>	<b>Appointed</b>	<b>End Year</b>
Sam Guzman	American Ultraviolet	Chair	<b>VM</b>	7/1/2024	6/30/2026
Aaron Engel	Fresh-Aire UV	Vice Chair	<b>VM</b>	7/1/2024	6/30/2028
Derek Sears	Lumalier Ultraviolet	Secretary	<b>VM</b>	7/1/2024	6/30/2028
Larry Fletcher	RGF Environmental	Standards SC Chair	<b>VM</b>	7/1/2022	6/30/2025
Scott Sherwood	Eco Care Corporation	Program SC Chair	<b>VM</b>	7/1/2021	6/30/2025
Robert Coleman	Trane Technologies	Webmaster	<b>VM</b>	7/1/2022	6/30/2026
Carl Bloomfield	Intertek Testing Services	Member	<b>VM</b>	7/1/2023	6/30/2027
Richard Lee Vincent	Mount Sinai	Research SC Chair	<b>VM</b>	7/1/2023	6/30/2027
Kevin Kwong	LMS Technologies	Member	<b>VM</b>	7/1/2022	6/30/2026
Steve Welty	Green Clean Air	Member	<b>VM</b>	7/1/2021	6/30/2025
Stephen Martin	CDC/NIOSH	Membership SC Chair	NVM	N/A	N/A
Richard Vincent	Mount Sinai Hospital	Research SC Chair	NVM	N/A	N/A
Ashley Shipley	Lumalier Ultraviolet	Handbook SC Chair	NVM	N/A	N/A

**Review Agenda**

1 minute

**Approve Draft Minutes from 2025 Winter Meeting, Orlando**

3 minutes

**ASHRAE Staff and Liaison Reports**

5 minutes

Craig Messmer, TAC Chair

Diana Fisler, Section Head

Chris Gray, Research Liaison

William Walter, Standard Liaison

Steven Hammerling, Staff Liaison

Rex Scare, Handbook Liaison

**Review Action Items from TC Chair breakfast**

5 minutes

- Updated prior to main meeting

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**SUBCOMMITTEE REPORTS**
**Research Subcommittee**, Richard Vincent, SC Chair

10 minutes

Update on activities from TC Research Meeting

**ASHRAE Has money and no RTARs currently.**

RP 1854: UVC K-values –

WS 1928: Air Cleaner Efficiency in Combination Chamber Duct System- Kevin PI / Kathleen O

WS 1873: Upper-Air Ultraviolet Germicidal Irradiation (UVGI) for Tall Spaces –

**Standards Subcommittee**, Larry Fletcher, Chair

10 minutes

We have an updated list of UV-C related standards and guidelines posted on the TC website.

**SSPC-185** Methods of test to Inactivate Microorganisms, Katja Auer, ChairASHRAE Standard **185.1** - Method of Testing UVC Lights for Use in Air Handling Units or Air Ducts to Inactivate Airborne Microorganisms – Steve Martin, ChairASHRAE Standard **185.2** - Method of Testing Ultraviolet Lamps for Use in HVAC&R Units or Air Ducts to Inactivate Microorganisms on Irradiated Surface- update to include lamps perpendicular to duct – Sam Guzman, ChairASHRAE Standard **185.3** - Method of Testing Commercial and Industrial In-Room Air-Cleaning Devices and Systems for Microorganism Bioaerosol Removal or Inactivation in a Test Chamber – revote passed to not retract but begin updates to include unresolved review questions. Linda Lee, ChairASHRAE Standard **185.4P** - Method of Testing In-Room Ultraviolet Devices and Systems for Microbial Inactivation on Surfaces in a Test Room- passed public review comments– Katja Auer, ChairASHRAE Standard **185.5P** - Method of Testing HVAC-duct mounted Devices and Systems and In-Room devices for Particle and Microorganism Removal or Inactivation in a Chamber with a Recirculating Duct System - Kathleen Owen, ChairASHRAE **Standard 241**, Control of Infectious Aerosols – Out for public review and must address all comments for ANSI - Steve Martin**Project Committees**

GPC-37-Upper Room UVC; Richard Vincent, Chair

5 minutes

**Program Subcommittee**, Scott Sherwood, Chair

10 minutes

Status of current and future programs

**Handbook Subcommittee**, Ashley Shipley, Chair

5 minutes

Status of Handbook developments

**Membership Subcommittee**, Stephen Martin, Chair

5 minutes

TC roster summary, membership updates and corrections

Voting members rolling on / off

**Reports from TC Liaisons**

10 minutes

SSPC 62.1, *Ventilation for Acceptable Indoor Air Quality*, Brian HafendorferSSPC 62.2, *Ventilation and Acceptable Indoor Air Quality in Residential Buildings*, Henry Greist

SSPC 145 Kevin Kwong

SSPC 145.1 *Test Method for Assessing the Performance of Gas-Phase Air Cleaning Equipment*

SSPC 145.2

SSPC 145.4

SSPC 161, *Air Quality Within Commercial Aircraft*, Aaron Engel – Removed due to inactivity

TC 2.3, *Gaseous Air Contaminants and Gas Contaminant Removal Equipment*, Kevin Kwong

TC 2.4, *Particulate Air Contaminants and Particulate Contaminant Removal Equipment*, Kevin Kwong

**Reports from Other Liaisons**

10 minutes

IUVA - Troy Cowan

**UL Standards** - UL-1995 / UL 60335-2-40/ US 8802/UL 8803, Mike O’Boyle

**US TAG for ISO/TC 142 - Working Group – 2 -Katja Auer** 15714

**IES**, Richard Vincent

**NEMA** Michael O’Boyle

**NALMCO Update** – Erik Ennen

**Old Business:**

5 minutes

**Kathrine Ratliff** – submitted presentation to ICFUST regarding data variability in microbial inactivation testing.

**Recent cuts are / may / have affected collaboration with NIOSH, EPA, and Private sector groups?**

**Update?**

**20-year TC 2.09 anniversary** – on website please provide Aaron relevant historical information.

**New Business / Action Items:**

5 minutes

**Adjourn**