**AMERICAN SOCIETY OF HEATING, REFRIGERATING AND AIR-CONDITIONING ENGINEERS, INC.**

**1791 Tullie Circle, N.E./Atlanta, GA 30329**

**404-636-8400**

**TC/TG/MTG/TRG MINUTES COVER SHEET**

**(Minutes of all Meetings are to be distributed to all persons listed below within 60 days following the meeting.)**

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| --- | --- | --- | --- | --- | --- | --- |
| TC/TG/MTG/TRG No. | | TC 2.9 | | DATE: | February 4, 2020 | |
|  | | | | | | |
| TC/TG/MTG/TRG TITLE: | | | Ultraviolet Air and Surface Treatment | | | |
| DATE OF MEETING: | Monday, February 3, 2020 | | | LOCATION: | | Orlando, FL |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| MEMBERS PRESENT | YEAR APPTD | MEMBERS ABSENT | YEAR APPTD | EX-OFFICIO MEMBERS AND ADDITIONAL ATTENDANCE |
| David Skelton | 7-1-2018 | Chang-Seo Lee | 7-1-2016 |  |
| Steve Martin | 7-1-2016 | Richard Vincent | 7-1-2017 |  |
| Jaak Geboers | 7-1-2016 | Aaron Engle | 7-1-2018 |  |
| Henry Greist | 7-1-2016 |  |  |  |
| Brian Hafendorfer | 7-1-2018 |  |  |  |
| Kathleen Owen | 7-1-2018 |  |  |  |
|  |  |  |  |  |

**DISTRIBUTION**

|  |  |
| --- | --- |
| ***All Members of TC/TG/MTG/TRG plus the following:*** | |
| TAC Section Head: |  |
| TAC Chair: |  |
| All Committee Liaisons As Shown On TC/TG/MTG/TRG Rosters: |  |
| Manager Of Standards  Manager Of Research & Technical Services |  |

**ASHRAE Technical Committee 2.9 (TC 2.9)**

**Ultraviolet Air and Surface Treatment**

**Main Committee Meeting Minutes**

**MEETING AGENDA**

**Orlando, FL**

**Lake Sheen A**

**Monday, February 3, 2020 at 10:00-NOON**

**These DRAFT minutes have not been approved and are not the official record until approved by the Technical Committee at the 2020 Austin, TX Winter Meeting**

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

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**Meeting came to order at 10:00 am**

**Dave introduced our liaison:**

Liaison stated the following:

Meeting minutes were not updated for the last several meetings

**Voting members Present:**

David Skelton Aaron Engle Richard Vincent

Jaak Geboers Chang-Seo Lee Kathleen Owen

Steve Martin Brian Hafendorfer Henry Greist

**9 of 10 present (quorum is met)**

Introductions made.

David Skelton discussed the merging of other TC’s…Section has several air quality groups that may be able to merge. ASHRAE pushing online mtgs. Activity is the key to avoiding merger.

Meeting minutes from the Kansas City meeting were approved 9 for/ 0 against.

Brian Rogers of UL let the TC know that the new standard 60324-2-40 has been updated and the “Sunset” date for UL1995 is 1/1/24. Any lamps listed to current standards can keep the listing, Part 1 of annex T regarding the testing of materials in included.

**Website report** – Bob Coleman will mover Basecamp II content to Basecamp III platform.

**Subcommittee Reports**

Research- Richard Vincent – Chair

**RTAR update:** Upper air high-ceiling, UVC K-values - Lit search underway

SPC-185; Methods of test to Inactivate Microorganisms, Steve Martin is working on the RTAR for 185

**GPC-37-Upper Room UVC:** Richard Vincent, Chair – This is a guideline committee not really under research but the guideline is “mature” and will be tightened up in Austin and ready soon after.

**Standards – Jaak Goebers Chair**

Standards are moving into maintenance mode

**Programs- Sam Guzman Chair / Aaron New Chair**

One suggestion for Austin regarding the Corona virus, SARS, MERS, and the history and future of UVC against this type of threat.

Honorable mention to Scott Sherwood for his extraordinary help and efforts for the TC Program efforts!

**Handbook Subcommittee, Steve Martin, Chair**

2019 updates are done Chapter 60 is now 62

2020 Galley proofs are approved

Next update is 2023

Dean Saputa has agreed to be the new Chair

**Membership Subcommittee, Benoit Despatis**

Benoit has changed his profession and is no longer involved with ASHRAE

Matt Middlebrooks offered to help but not Chair the committee.

Steve Martin was bullied into the position by the TC membership and he agreed.

3 new voting members will roll on in Austin – Dean Tompkins, Dean Saputa, and Scott Sherwood.

**US TAG for ISO/TC 142 Update, Dean Saputa**

ISO has approved and released a standard for lamp measurement

**Old Business**

Discussion: Expand TC2.9 definition to include germicidal inactivation @ 405? TC2.9 Scope: ….. *Systems that utilize ultraviolet radiation and visible light to destroy or deactivate…*

***Agreed to table this as no members of TC 2.9 are currently involved with 405nm energy***

Discussion: Create and publish an official TC2.9 position on ozone generation? Dead issue?

**ASHRAE TC’s do not publish position papers. Suggestion was made to maybe do a Journal article**

**New Business**

Discussion: The National Institute of Standards and Technology (NIST) , working with the International Ultraviolet Association, (IUVA) has formed a working group on UVC Disinfection Technologies for Healthcare. NIST can create and implement testing,

Standards and requirements that are backed by the US government, not suggestions or standards with no enforcement. Several TC2.9 members recently attended a conference at the NIST headquarters in Maryland to get information on this group effort.

Mr. Troy Cowan is the IUVA Healthcare / UV Working Group Coordinator. In an email to me, Mr. Cowan wrote; ***“We hope to be doing more with ASHRAE, i.e, leading up to joint collaborative MOU to help us develop our line of standards (we’re***

***realizing more than one is needed).Ashish Mathur and Sam Guzman are already active on this workgroup”. Discussion??***

Richard Vincent is reaching out to IEC members to co-ordinate efforts. We are looking to schedule an on-site meeting at NIST with the TC members to address cooperation between IUVA /IEC / ASHRAE

Meeting adjourned at 11:56 pm