

TC5.5 Ad Hoc Research Subcommittee Meeting

April 20, 2020, 11:00 AM-Noon central time

MINUTES

Minutes considered at the May 11, 2020 TC Meeting. The decision was that the whole TC group does not need to approve the minutes of the SC meeting.

Chair of TC 5.5 stated that he called this meeting without the usual public announcement and notice due to urgency required by the current pandemic situation, and that a follow-up meeting with proper notice will be held later to provide TC5.5 oversight.

Invited: Matthew Friedlander Chair TC5.5, Adam Fecteau Vice-Chair TC5.5, and John Dieckmann Chair TC5.5 Research SC, Larry Smith Section 5 Head, and Carey Simonson, TC 5.5 member.

1. Agreed that Matthew would Chair and John would take notes.
2. Attending: Friedlander, Fecteau, Simonson, Dieckmann
3. Accepted Agenda as proposed.
- 4.a. Potential research needs were discussed. Topics included:

Hypothesis that virus and/or aerosol transfer rate in ERVs is well-characterized by tracer gas tests;

Hypothesis that virus and/or aerosol transfer can occur in energy wheels by mechanical attachment to and detachment from;

Hypothesis that in conventional buildings with HVAC systems in designed for a significant volume of recirculated return air, that virus recapture in ERVs even if it occurs is of negligible effect?

Whether any of these questions are addressed in peer-reviewed literature? Call for volunteers to help with literature search, once the full TC has seen the TC5.5 position paper.

A 2011 ASHRAE paper on method to sample bacteria in air streams may be of interest: Yang Zhao et al, 2011, ASHRAE Conference Proceeding, *A Method for Evaluating Sampling Efficiency of Bio-samplers for Airborne Bacteria and Virus*

- 4.b. Although interest has been expressed in expanding scope of 1780-RP (contaminant transfer) from gases to viruses, since TC5.5 is not a sponsor of that RP, we cannot make such a proposal as a committee.

4.c. Possible approaches to coordinate with other TCs in Covid-19-specific research were discussed. These approaches were identified as initiated by COVID-19 task force, initiated by RAC, or at TC's initiative as in the usual RTAR process.

4 d. Next formal research subcommittee meeting: it was determined to hold this meeting (i) after the TC5.5 Covid-19 guidance paper is reviewed and approved by the full TC and (ii) after the call for subcommittee volunteers has been sent to all TC members and responded to.

5. Assignments

a. John to draft a call for literature search volunteers to be sent out once the full TC has seen the TC5.5 position paper.

b. Matthew to ask ASHRAE task force if they have any multi-TC research suggestions relevant to energy recovery in this context.

Minutes prepared by Matthew Friedlander from notes taken by John Dieckmann