



Shaping Tomorrow's
Built Environment Today

2023 SPRING MEETING MINUTES

RESEARCH ADMINISTRATION COMMITTEE

Spring Teleconferences

APRIL 5th & 6th, 2023

Note: These draft minutes have not been approved and are not the official record until approved by the Research Administration Committee.

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RESEARCH ADMINISTRATION COMMITTEE
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**PRINCIPAL MOTIONS
RESEARCH ADMINISTRATION COMMITTEE
APRIL 5th & 6th, 2023**

NO.	PAGE	MOTION
1	1	the draft minutes of the RAC 2023 winter meeting be approved as drafted.
2	3	the following seven projects be released for bid in the spring: 1566-TRP-R, 1716-TRP-R, 1790-TRP-R, 1869-TRP, 1873-TRP, 1910-TRP and 1919-TRP.
3	3	that the following 20 students each be awarded an ASHRAE Graduate Student Grant-in-Aid grant for the 2023-2024 academic year.
4		<u>1931-RTAR</u> , <i>Determination of the Metabolic Rates and CO₂ and Aerosol Generation of Occupants in Offices, Medical Settings, and Commercial Kitchens</i> – TC (2.1 Physiology & Human Environment), be <u>accepted</u>
5		<u>1950-RTAR</u> , <i>Effect of Residential Exhaust Terminations on Jet Mechanics and Resulting Required Intake Separation</i> – TC (4.3 Ventilation and Infiltration), be <u>accepted w/comments</u> .
6		<u>1951-RTAR</u> , <i>Development of Material Moisture Tolerance Criteria and Evaluation Methodology for ASHRAE Standard 160 to Control Structural Property Degradation of Common Sheathing Materials</i> - TC (4.4 Building Materials and Building Envelope Performance), be <u>returned</u> .
7		<u>1953-RTAR</u> , <i>Evaluation of Ground Source Heat Pumps (GSHP) with Thermal Energy Storage (TES) for Residential and Commercial Buildings</i> - TC (6.8 Geothermal Heat Pump and Energy Recovery Applications), be <u>accepted w/comments</u>
8		<u>1954-RTAR</u> , <i>Flammability Testing and Calibration of 200L to 12L Flammability Limits for Borderline Cases</i> - TC (3.1 Refrigerants and Secondary Coolants), be <u>accepted w/comments</u>
9		<u>1955-RTAR</u> , <i>Healthcare Anteroom Ventilation</i> – TC (9.6 Health Care Facilities), be <u>accepted w/comments</u> .
10		<u>1956-RTAR</u> , <i>Compact CFD Modeling Guidance for Flow Resistances</i> - TC (4.10 Indoor Environmental Modeling), be <u>accepted w/comments</u> .
11		<u>1851-WS</u> , <i>Dielectric Properties of Lower GWP Refrigerants</i> – TC 3.1 (Refrigerants and Secondary Coolants), be <u>returned</u> .
12		<u>1926-WS</u> , <i>Update of U-factors, Solar Heat Gain Coefficients and Visible Transmittances of Standard Fenestration Units made from Representative Fenestration Frame and Glazing Systems in the Fenestration Chapter of Handbook of Fundamentals</i> - TC (4.5 – Fenestration), be <u>conditionally accepted</u> .
13		<u>1929-WS</u> , <i>Evaluation of Building Life Cycle Analysis Tools Incorporating embodied Carbon</i> - TC (2.8 Building Environmental Impacts and Sustainability), be <u>conditionally accepted</u> .



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MINUTES

RESEARCH ADMINISTRATION COMMITTEE APRIL 5th & 6th, 2023

MEMBERS PRESENT:

Omar Abdelaziz, *Chair*
William Murphy, *Vice Chair*
Natascha Milesi Ferretti, *Chair RAS*
Jin Wen, *Chair RPS (April 6th only)*
Ahmed Kashef, *RL Section 1.0*
William Hutzal, *RL Section 2.0*
Chee Sheng Ow, *RL Section 3.0 (April 6th only)*
Dennis Landsberg, *RL Section 4.0*
Douglas Scott, *RL Section 5.0*
Stefan Elbel, *RL Section 6.0*
James Bogart, *Section 7.0*
Carl Huber, *RL Section 8.0*
Roland Charneau, *RL Section 9.0*
Lorenzo Cremaschi, *RL Section 10.0*
Xudong Wang, *Consultant*

GUESTS:

None

ASHRAE STAFF:

Michael Vaughn, *MORTS*
Donna Daniel, *COORD*

MEMBERS ABSENT:

A. CALL TO ORDER & INTRODUCTIONS

B. ASHRAE CODE OF ETHICS

<https://www.ashrae.org/about-ashrae/ashrae-code-of-ethics>

C. ADDITIONS AND/OR CHANGES TO THE AGENDA

D. APPROVAL OF WINTER '23 MINUTES

It was moved and seconded that,

- (1) the draft minutes of the RAC 2022 winter meeting be approved as drafted.

MOTION #1 PASSED: 11-0-0-1 (12) CNV

E. CHAIR'S REPORT

- a) Disposition of Motions from Last Meeting or Letter Ballots
 1. The four projects bid in Fall 2022(1843, 1857, 1884, and 1890) with project funding motions were approved by RAC/TechC in Atlanta, Georgia.

- b) New & On-going Action Items Assigned by Tech. Council
 - 1. Completed RAC Budget Forecast form for TechC –
- c) New Information Items: TBD
 - 1. Plans for ASHRAE Annual Meeting in Tampa
 - 2. PMS or PES Training Webinars – Need to set date for Webinars in spring and fall
- d) MBO Status Report – Review with action items

F. BOD EX-OFFICIO & COORD. OFFICER

none

G. ACTION ITEMS

**Research Administration Committee (RAC)
Winter 2023**

Action #	Responsibility	Summary of Action	Status
1	Cremaschi	Write-up a plan to expand the research budget.	On-going
2	Murphy	Write-up a procedure on the “Conflict of Interest, for New Investigator, Homer Adams Award, and Innovative Research Grants to be added to the reference manual.	On-going
3	Staff	Send out a doodle poll for pre-spring meeting.	Complete
4	Staff	Change Research Breakfast time to 7:00 AM instead of 6:30 AM for the Tampa meeting	Complete
5	Staff	Change the RAC Saturday meeting time to 8:00 AM through 3:00 PM.	Complete
6	Bogart, Landsberg, Cremschi	Recommendations to address the list server and bidders list. Who receives the announcements?	On-going

H. TRPs to BID or REBID in spring 2023

It is moved and seconded that,

- (2) that the following seven projects be released for bid in the spring: 1566-TRP, 1716-TRP, 1790-TRP, 1869-TRP, 1873-TRP, 1910-TRP AND 1919-TRP.

MOTION #2 PASSED RAC: 11-0-0-1 (12) CNV

RECESSED

RECONVENED April 16TH 2023

I. ASHRAE GRADUATE STUDENT GRANT-IN-AID AWARD

A total of 43 applications were considered for the 2023-2024 ASHRAE Graduate Student Grant in-Aid program. Each grant recipient receives up to \$10,000 with the option to earn

an additional \$1,500 honorarium if they present a paper on their GIA research at an ASHRAE Society meeting.

It was moved and seconded that,

- (3) that the following 20 students each be awarded an ASHRAE Graduate Student Grant-in-Aid grant for the 2023-2024 academic year.

1. Ahn Jounghwan - Texas A&M University
2. Justin Berquist - University of Toronto- **#1 LMC**
3. Erin Blackley - Colorado State University
4. Yidan Cui - Purdue University
5. Hashani De Silva - University of Cincinnati
6. Amirhossein Eisapour - Toronto Metropolitan University
7. William Hobson - Carleton University
8. Jinglin Jiang - Purdue University
9. Guowen Li - Texas A&M University
10. Jiacheng Ma - Purdue University
11. Andre Markus – Carleton University
12. Seongjun Park – Pennsylvania State University
13. Satya Sundar Patra - Purdue University
14. Elias Pergantis - Purdue University
15. Mostafa Saad - Concordia University
16. Saba Shahvari - Ohio State University- **#2 LMC**
17. Brett Stinson - Portland State University
18. Casey Troxler - Embry-Riddle Aeronautical University
19. Shenbo Zhang - University of Toronto
20. Xi Zhao - Texas A&M University

Justin Berquist of University of Toronto and Saba Shahvari of Ohio State University hold the added distinction of being named the 2023-2024 Life Member Club grant recipients as the top one and two rated applicants, respectively. These two grants are supported by a financial contribution from the club.

MOTION #3 PASSED: 11-0-0-1 (12) CNV

I. **RTAR Review** (7 new or revised RTARs)

It was moved and seconded that,

- (4) **1931-RTAR** *Determination of the Metabolic Rates and CO₂ and Aerosol Generation of Occupants in Offices, Medical Settings, and Commercial Kitchens* – TC (2.1 Physiology & Human Environment), be accepted.

MOTION #4 PASSED: 11-0-0-1 (12) CNV

It was moved and seconded that,

- (5) **1950-RTAR**, *Effect of Residential Exhaust Terminations on Jet Mechanics and Resulting Required Intake Separation* – TC (4.3 Ventilation and Infiltration), be accepted w/comments.

MOTION #5 PASSED: 11-0-0-1 (12) CNV

It was moved and seconded that,

- (6) **1951-RTAR**, *Development of Material Moisture Tolerance Criteria and Evaluation Methodology for ASHRAE Standard 160 to Control Structural Property Degradation of Common Sheathing Materials* - TC (4.4 Building Materials and Building Envelope Performance), be returned.

MOTION #6 PASSED RPS: 4-0-0-1 (5) CNV

It was moved and seconded that,

- (7) **1953-RTAR**, *Evaluation of Ground Source Heat Pumps (GSHP) with Thermal Energy Storage (TES) for Residential and Commercial Buildings* - TC (6.8 Geothermal Heat Pump and Energy Recovery Applications), be accepted w/comments.

MOTION #7 PASSED: 7-0-1-1 (8) CNV

It was moved and seconded that,

- (8) **1954-RTAR**, *Flammability Testing and Calibration of 200L to 12L Flammability Limits for Borderline Cases* - TC (3.1 Refrigerants and Secondary Coolants), be accepted w/comments.

MOTION #8 PASSED: 7-0-1-1 (8) CNV

It was moved and seconded that,

- (9) **1955-RTAR**, *Healthcare Anteroom Ventilation* – TC (9.6 Health Care Facilities), be accepted w/comments.

MOTION #9 PASSED: 8-0-0-1 (9) CNV

It was moved and seconded that,

- (10) **1956-RTAR**, *Compact CFD Modeling Guidance for Flow Resistances* - TC (4.10 Indoor Environmental Modeling), be accepted w/comments.

MOTION #10 PASSED: 7-1-0-1 (9) CNV

K. WORK STATEMENT REVIEW (3 new & revised WSs)

It was moved and seconded that,

- (11) **1851-WS**, *Dielectric Properties of Lower GWP Refrigerants* – TC 3.1 (Refrigerants and Secondary Coolants), be returned.

MOTION #11 PASSED RAS: 4-0-0-1 (5) CNV

It was moved and seconded that,

- (12) **1926-WS**, *Update of U-factors, Solar Heat Gain Coefficients and Visible Transmittances of Standard Fenestration Units made from Representative Fenestration Frame and Glazing Systems in the Fenestration Chapter of Handbook of Fundamentals* - TC (4.5 – Fenestration), be conditionally accepted.

MOTION #12 PASSED: 11-0-0-0 (12) CNV

It was moved and seconded that,

- (13) **1929-WS**, *Evaluation of Building Life Cycle Analysis Tools Incorporating embodied Carbon* - TC (2.8 Building Environmental Impacts and Sustainability), be

conditionally accepted.

MOTION #13 PASSED: 11-0-0-0 (12) CNV

L. CARRY-OVER TRPs/URPs, FUNDED EXTENSIONS & GRANT REQUESTS

NONE

M. CONSULTANTS REPORTS

- a) AHRI – Xudong Wang - None
- b) CIBSE – Hywel Davies - None

N. UNFINISHED OR OUT-OF-SEQUENCE BUSINESS

NONE

O. NEW BUSINESS

NONE

ADJOURNED

The meeting of the Research Administration Committee adjourned at 12:10 PM.

DRAFT

**RECURRING ACTION ITEMS
(EACH MEETING)**

<u>Responsibility</u>	<u>Summary of Action</u>
Chair	Report to Technology Council on RAC's MBO Status.
Research Liaisons	Remind all TC chairs and research subcommittee chairs in section that a draft of all Work Statement and RTARs, and all later versions should be sent to their Research Liaison for review before information is passed on to the Manager of Research.
RPS (Primary) RAS (Secondary)	Review RTARs
RAS (Primary) RPS (Secondary)	Review Work Statements
RAS (Primary) RPS (Secondary)	Review TRPs and URPs
RPS (Primary) upon (Secondary)	Review and revise the Society's Research Implementation Plan based accepted RTARs.
Subcommittee Chairs	Report Status of assigned MBOs.
Staff	Distribute copies of Technology Council's Action Items and Motions affecting RAC.
BOD ExO	Report to the RAC Chair BOD's Actions and Motions affecting RAC.
Staff	Forward URPs to RAS Chair to help identify a champion for the URP on RAC based on members background and experience. The RAC URP Champion will either help select a cognizant TC to review the URP or return the URP with a recommendation that it not be reviewed further as a possible ASHRAE research project.

RECURRING ACTION ITEMS
(WINTER MEETING)

<u>Responsibility</u>	<u>Summary of Action</u>
RAS	Plan TC Research Subcommittee chair Training Workshop for Winter Meeting
RPS	Review Grant-In-Aid Applications
RPS	Review New Investigator Award Nominations
RPS	Review Homer Addams Award Nominations
Chair	Present Service to ASHRAE Research Award to this year's recipient
RAC	Decide if spring meeting is needed and set date for spring meeting.
MORTS	Prepare semi-annual report to RAC by December 15.

RECURRING ACTION ITEMS
(SPRING MEETING)

<u>Responsibility</u>	<u>Summary of Action</u>
RPS	Review Grant-In-Aid Applications

RECURRING ACTION ITEMS
(FALL MEETING)

<u>Responsibility</u>	<u>Summary of Action</u>
RLs	Review "Service to ASHRAE Research Award" nominations submitted by TC chairs and select the best nomination for RAC consideration.

RECURRING ACTION ITEMS
(ANNUAL MEETING)

<u>Responsibility</u>	<u>Summary of Action</u>
RPS	Plan training workshop for new RAC members at the Annual meeting
Research Liaisons Award	Request nominations from TCs for Service to ASHRAE Research Award
Chair	Invite new members of RAC to the workshop for new RAC members scheduled for the Annual meeting.
MORTS	Prepare semi-annual report to RAC by May 15.