

**RESEARCH ADMINISTRATION COMMITTEE
2024 Spring Meeting Minutes**

Spring Teleconferences

April 3rd & May 2nd, 2024

DRAFT

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

TABLE OF CONTENTS
2024 SPRING MEETING
RESEARCH ADMINISTRATION COMMITTEE
APRIL 3RD & MAY 2ND, 2024

PRINCIPAL MOTIONS 3

ACTION ITEMS 3

A. CALL TO ORDER 4

B. ASHRAE VALUE STATEMENT 4

C. ADDITIONS AND/OR CHANGES TO AGENDA 5

D. APPROVAL OF MINUTES 5

E- CHAIR'S REPORT 5

F- BOD EX-OFFICIO & COORD. OFFICER 5

G- ACTION ITEM TRACKING & PRELIMINARY REVIEW OF ACTIONS... 5

H- TRPS TO BID OR REBID SPRW 2024..... 5

I- GRANT IN AID AWARD APPLICATIONS 5

J- RTAR REVIEW 6

K- WORK STATEMENT REVIEW 7

L- PTAR REVIEW 8

M. CARRYOVER TRP REQUESTS 9

N. CONSULTANTS REPORTS..... 9

O. UNFINISHED BUSINESS OR OUT OF SEQUENCE BUSINESS 9

P. NEW BUSINESS..... 10

ADJOURN 10

RECURRING ACTION ITEMS..... 11

**PRINCIPAL MOTIONS
RESEARCH ADMINISTRATION COMMITTEE
APRIL 3RD & MAY 2ND, 2024**

NO.	PAGE	MOTION
1	5	RAC approve Winter 2024 minutes with revisions.
2	5	the following 20 students each be awarded an ASHRAE Graduate Student Grant-in-Aid grant for the 2024-2025 academic year.
3	6	RAC <u>conditionally accept</u> 1968-RTAR.
4	7	RAC <u>conditionally accept</u> 1970-RTAR.
5	7	RAC <u>conditionally accept</u> 1971-RTAR.
6	7	RAC <u>accept</u> 1972-RTAR.
7	7	RAC <u>conditionally accept</u> 1886-WS.
8	8	RAC <u>accept</u> 1909-WS.
9	8	RAS <u>return</u> 1956-WS.
10	8	RAC return 1959-WS.
11	8	RAC <u>accept</u> 0001-PTAR
12	9	RAC award 1889-TRP to Mazzetti Inc.
13	9	RAC award 1926-TRP to WSP Canada Inc.

**ACTION ITEMS
RESEARCH ADMINISTRATION COMMITTEE
APRIL 3RD & MAY 2ND, 2024**

NO.	PERSON	ACTION	STATUS
1	Staff	Verify eligibility for all GIA nominees and notify winners	
2	Staff	Confirm and clarify GIA language to modify eligibility requirements on application and website to include a statement to verify they've never received the GIA previously	
3	Staff	Explore legal/fiscal requirements for this co-funding commitment	

MINUTES

RESEARCH ADMINISTRATION COMMITTEE APRIL 3RD & MAY 2ND, 2024

MEMBERS PRESENT:

William Murphy, *Chair*
Natascha Milesi Ferretti, *Vice Chair*
Jin Wen, *Chair RPS*
Stefan Elbel, *Chair RAS*
Srinivas Katipamula, *RL Section 1.0*
Chris Gray, *RL Section 2.0*
Zheng O'Neill, *RL Section 3.0*
Dennis Landsberg, *RL Section 4.0*
Douglas Scott, *RL Section 5.0*
Matthew Mullen, *RL Section 6.0 (April 3rd)*
James Bogart, *RL Section 7.0*
Carl Huber, *RL Section 8.0*
Roland Charneau, *RL Section 9.0*
WenBin Ng, *RL Section 10.0*

GUESTS:

Susanna Hanson, *Incoming Ex-O (April 3rd)*

ASHRAE STAFF:

Steve Hammerling, *MORTS (May 2nd)*
Donna Daniel, *AMR*

MEMBERS ABSENT:

Hywel Davies, *Consultant*
Ashish Rakheja, *CO*
Xudong Wang, *Consultant*

A. CALL TO ORDER & INTRODUCTIONS

Meeting was called to order by Chair Bill Murphy at just after 11 AM EDT.

B. ASHRAE VALUE STATEMENT

In ASHRAE meetings, we will act with honesty, fairness, courtesy, competence, inclusiveness and respect for others, which exemplify our core values of excellence, commitment, integrity, collaboration, volunteerism and diversity, and shall avoid all real or perceived conflicts of interest. Our culture is one of inclusiveness, acknowledging the inherent value and dignity of each individual. We celebrate diverse and inclusive communities, understanding that doing so fuels better, more creative and more thoughtful ideas, solutions and strategies for the Society and the communities our Society serves. We respect and welcome all.

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

Core Values - <https://www.ashrae.org/about/ashrae-s-core-values>

Diversity Statement - <https://www.ashrae.org/about/diversity-equity-and-inclusion-dei>

C. ADDITIONS AND/OR CHANGES TO THE AGENDA

- a) none

D. APPROVAL OF WINTER 2024 MINUTES

It was moved (SK) and seconded (NMF) that,

- (1) RAC approve Winter 2024 minutes with revisions.

Motion #1 PASSED RAC: 12-0-0-1 (13) CNV

E. CHAIR'S REPORT – MURPHY

Murphy would give his report at Part B of RAC Meeting.

a) Disposition of Motions from Last Meeting or Letter Ballots

1. The five projects bid in the Fall 2023 (1797-TRP, 1864-TRP, 1928-TRP, 1929-TRP and 1934-TRP) with project funding motions were approved by RAC in Chicago, Illinois

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 Indiana
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 – Hanson & Rakheja

Susanna Hanson introduced herself noting she would be the new BOD Ex-O to RAC, replacing Dru Crawley in this role. No formal report was given at this time.

G. ACTION ITEM TRACKING AND PRELIMINARY REVIEW OF W24 ACTIONS

Wen and Elbel were asked to track action items.

H. TRPs to Bid or Rebid in Spring 2024

- a) Research Project Expenditures Forecast Spreadsheet for projects pending for bid – Attachment #1.
Carryover to May meeting.

I. Grant-in-Aid Award Applications – RPS Chair Wen Lead

A total of 67 applications were considered for the 2024-2025 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 (SK) and seconded (DS) that,

- (2) the following 20 students each be awarded an ASHRAE Graduate Student Grant-in-Aid grant for the 2024-2025 academic year.

1. Nehul Agarwal, University of Toronto

2. Nadah Faris Al Theeb, Purdue University
3. Saqib Ayuob, Oklahoma State University
4. Abd Alrhman Bani Issa, Purdue University – **LMC#2**
5. Subhrajit Chakraborty, University California
6. Youngsik Choi, Texas A&M University
7. Ejenakevwe Kevwe Andrew, UNIVERSITY OF OKLAHOMA
8. Julia Ho, Pennsylvania State University
9. Chunxu Huang, Purdue University
10. Michael Huylo, University of Texas at Austin
11. Jinyoung Ko, University of Toronto - **LMC#1**
12. Sichen Lu, Purdue University
13. Alexander Mendell, University of Toronto
14. Maria Milan, Toronto Metropolitan University
15. Karlyle Munz, Colorado School of Mines
16. Levi Reyes Premer, Purdue University
17. Daniel Joseph Rush, University of Texas at Austin
18. Yu Sun, Texas A&M University
19. Xuezheng Wang, Syracuse University
20. Feng Wu, Purdue University

Jinyoung Ko of University of Toronto and Abd Alrhman Bani Issa of Purdue University hold the added distinction of being named the 2024-2025 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 #2 PASSED RAC: 11-0-1*-1 (15) CNV

*ZO

Daniel would verify eligibility for all nominees and notify winners (**Action Item #1**)

Daniel would confirm and clarify GIA language to modify eligibility requirements on application and website to include a statement to verify they've never received the GIA previously (**Action Item #2**).

J. Review of RTARs – (4 new & revised RTARs) RPS Chair Wen Lead

- a) **1968-RTAR**, Optimize outside-air supply for passengers in a light-rail/subway car environment – TC 9.3, Transportation

It was moved (SK) and seconded (CG) that,

- (3) RAC conditionally accept 1968-RTAR.

Motion #3 PASSED RAC: 12-0-0-1 (13) CNV

RTAR's that are conditionally accepted will be accepted when TC addresses RAC comments to satisfaction of the Research Liaison (RL).

- b) **1970-RTAR**, Study of Current Ground Heat Exchanger Grout Technologies - TC 6.8, Geothermal Heat Pump and Energy Recovery Applications

It was moved (SK) and seconded (RC) that,

(4) RAC conditionally accept 1970-RTAR.

Motion #4 PASSED RAC: 13-0-0-1 (14) CNV

- c) **1971-RTAR** Assessment of operation and efficiency of next generation ultra-efficient absorption cooling systems Phase I: absorbents characterizations, cycle configuration, and thermodynamics efficiency - TC 8.3, Absorption and Heat Operated Machines

It was moved (SK) and seconded (CG) that,

(5) RAC conditionally accept 1971-RTAR.

Motion #5 PASSED RAC: 13-0-0-1 (14) CNV

- d) **1972-RTAR**, Data Center Direct-to-Chip Liquid Cooling Resiliency - Failure Modes and IT Throttling Impacts - TC .9.9, Mission Critical Facilities, Data Centers, Technology Spaces and Electronic Equipment

It was moved (SK) and seconded (DS) that,

(6) RAC accept 1972-RTAR.

Motion #6 PASSED RAC: 13-0-0-1 (14) CNV

- e) Summary of Reviews

Work statements would be discussed at the next meeting. Staff was asked to poll RAC for Part B meeting. Meeting recessed after 1:10 PM EDT.

RECESSED

RECONVENED MAY 2nd, 2024

- K. Work Statement Review (4 new & revised WSs) – RAS Chair Elbel Lead

- a) **1886-WS**, *Kinetic and Mechanistic Study of the Breakdown and Interactions of HFO Refrigerants* – TC 3.2 (Refrigerant System Chemistry and Contaminant Control)

It was moved (JB) and seconded (ZO) that,

(7) RAC conditionally accept 1886-WS.

Motion #7 PASSED RAC: 10-0-0-1 (11) CNV

WS's that are conditionally accepted will be accepted when TC addresses RAC comments to satisfaction of the Research Liaison (RL).

- b) **1909-WS**, *In-Tube Condensing Flue Gas Heat Transfer and Pressure Drop with Enhancements for Residential Furnaces* - TC 1.3 (Heat Transfer and Fluid Flow), Co-Sponsors: TC 6.3, (Residential and Ligh Commercial Forced Air Heating and Cooling Systems)

It was moved (DL) and seconded (ZO) that,

(8) RAC accept 1909-WS.

Motion #8 PASSED RAC: 10-0-0-1 (11) CNV

- c) **1956-WS**, Compact CFD Modeling Guidance for Thin Flow Resistances - TC 4.10, (Indoor Environmental Modeling)

It was moved (DL) and seconded (ZO) that,

(9) RAS return 1956-WS.

Motion #9 PASSED RAS: 4-0-1 (5) CNV

RAC comments would be sent to TC for consideration for future resubmission.

- d) **1959-WS**, Update People Load Data for Cooling Load Calculations - TC 4.1 (Load Calculations Data and Procedures)

It was moved (JB) and seconded (ZO) that,

(10) RAC return 1959-WS.

Motion #10 PASSED RAS: 4-0-1 (5) CNV

RAC comments would be sent to TC for consideration for future resubmission.

- e) Summary of Reviews

L. PTAR (1 new & 1 rejected PTAR)

- a. **0001-PTAR**, Update of ASHRAE Publication: Application of Manufacturers' Sound Data, © 1998

It was moved (JB) and seconded (DL) that,

(11) RAC accept 0001-PTAR

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

Budget was increased to \$60k.

- b. **0006 -PTAR**, Procedures for Commercial Building Energy Audits (3rd Edition

Status: Rejected by Publications – No action required by RAC

M. Carry-over TRPs Requests:

TCs letter balloted recommended bidders for the following projects and are ready for RAC consideration.

1889-TRP, Graywater use in healthcare facilities- determining risk and appropriate design responses, sponsored by TC 9.6, Health Care Facilities

(12) It was moved (ZO) and seconded (DL) that,

RAC award 1889-TRP to Mazzetti Inc.

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

1926-TRP, 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 the Handbook of Fundamentals, - sponsored by TC 4.05, Fenestration

It was moved (ZO) and seconded (DL) that ,

(13)RAC award 1926-TRP to WSP Canada Inc.

Motion #13 PASSED RAC: 11-0-0-1 (12) CNV

N. Consultants' Reports (10 minutes)

- a) AHRI – Xudong Wang
Wang and Davies not in attendance

O. UNFINISHED OR OUT-OF-SEQUENCE BUSINESS
RAC returned to Chair's report agenda from Part A.

a) New Information Items:

1. Plans for ASHRAE Annual Meeting in Indiana
2. PMS or PES Training Webinars – Need to set date for Webinars in spring and fall

RAC's ExCom would discuss and follow up at their meeting in early June.
PMS/PES training could be focus of Research Chair Breakfast in Indianapolis.

b) MBO Status Report – Review with action items

MBO #4 – Expand TC involvement in identifying, communicating with, and obtaining interested bidders

Idea to include a grid on Work Statement cover sheet to include a minimum of 3 contactors with contact information, a check box asking, 'Have you contacted to discuss abstract?'. Also, rebid projects should include 5 contractors. A sub team of RAC would discuss further. WS cover sheet should still be limited to one page and changes would have to be implemented in the RAC Research Manual.

MBO #5 - Expand TC involvement in identifying, communicating with, and obtaining project co-funding support at the work statement review stage

RAC is looking to formalize co-funding commitment process for RAC projects. TC's can be requested to include formal letters with commitments from co-funders to be included with Work Statements. ASHRAE legal or finance staff may need to get involved. A timeline for how long funding can be held for project proposals or ongoing research may be necessary. Staff would explore legal/fiscal requirements for this co-funding commitment (**Action Item #3**).

RAC will resume formal reporting from Xudong Wang in Indianapolis.

c) Other

1. *Online RAC management tool*

RAC discussed the status of the online RTAR project. Daniel summarized progress noting the team would meet with vendor next week. RAC members indicated a desire to help perform testing and give feedback. This tool would not be rolled out until after Annual Meeting but RAC may wish to consider letting TCs know that this tool is almost here, perhaps a preview of what it will look like.

2. *Tech Council MOP streamline*

Conlan had reported that the Tech Council Manual of Procedures is being significantly streamlined. Much of current information will be pushed down to standing committee level for RAC to implement and control. This includes procedures related to the Research Advisory Panel (RAP). Conlan had suggested RAP be a RAC subcommittee to be fully constituted with continuous membership and not disbanded. The last Tech Council MOP listed RAP with no detail on its operation.

P. NEW BUSINESS

a) TBD

ADJOURN

RAC adjourned at approximately 11:00 AM EDT.

**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) (Secondary)	Review and revise the Society's Research Implementation Plan based upon 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.

**RECURRING ACTION ITEMS
(ANNUAL MEETING)**

<u>Responsibility</u>	<u>Summary of Action</u>
Chair	Invite new RAC members to meeting and any training sessions at meeting.
Incoming Chair	Finalize MBOs and roster assignments. Set date for fall meeting.
RAS	Review Invited Innovative Research Grant (IRG) Full Proposals

**RECURRING ACTION ITEMS
(FALL MEETING)**

<u>Responsibility</u>	<u>Summary of Action</u>
RAS	Plan Training Segment for Research Breakfast at Winter Meeting
RLs	Review "Service to ASHRAE Research Award" nominations submitted TC chairs and select best nomination for RAC consideration.
MORTS	Prepare semi-annual report to RAC by December 15.

RECURRING ACTION ITEMS
(WINTER MEETING)

<u>Responsibility</u>	<u>Summary of Action</u>
RPS	Review New Investigator Award Nominations
RPS	Review Homer Addams Award Nominations
RPS	Review Innovative Research Grant (IRG) – Pre-Proposals

RECURRING ACTION ITEMS
(SPRING MEETING)

<u>Responsibility</u>	<u>Summary of Action</u>
RPS	Review Grant-In-Aid Applications
MORTS	Invite new incoming RAC members to the Annual meeting.
MORTS	Prepare semi-annual report to RAC by May 15.
RPS	Plan Training Segment for Research Breakfast at Annual Meeting