



Shaping Tomorrow's
Built Environment Today

2020 SPRING MEETING MINUTES

RESEARCH ADMINISTRATION COMMITTEE

Spring Teleconferences

MARCH 16, MAY 4, &

MAY 27, 2020

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RESEARCH ADMINISTRATION COMMITTEE
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**PRINCIPAL MOTIONS
RESEARCH ADMINISTRATION COMMITTEE
MARCH 16, MAY 4, & MAY 27, 2020**

NO.	PAGE	MOTION
1	1	Draft minutes of the RAC winter 2020 meeting be approved as written.
2	3	the following five projects be released for bid in the spring; 1703-TRP, 1831-TRP, 1835-TRP, 1850-TRP and 1879-TRP.
3	3	20 students each be awarded an ASHRAE Graduate Student Grant-in-Aid grant for the 2020-2021 academic year.
4	3	<u>1895-RTAR</u> , <i>Effect of penetration through particle pre-filters on the performance of gas filters</i> – TC 2.3 (Gaseous Air Contaminants and Gas Contaminant Removal Equipment), be <u>accepted with comments</u> .
5	4	<u>1897-RTAR</u> , <i>HFO Refrigerant Compatibility with Aged Lubricants and Contaminants</i> – TC 3.2 (Refrigerant System Chemistry), be <u>accepted with comments</u> .
6	4	<u>1898-RTAR</u> , <i>Enhancing Whole-Building Calibrated Simulation Using Indoor Environmental Data</i> – TC 4.7 (Energy Calculations), be <u>accepted with comments</u> .
7	4	<u>1901-RTAR</u> , <i>Determination of Latent Loads Controlled Environment Agriculture Crops</i> – TC 2.2 (Plant and Animal Environment), Co-sponsor: TC 8.10 (Mechanical Dehumidification Equipment and Heat Pipes), be <u>accepted with comments</u> .
8	4	<u>1861-WS</u> , <i>Thermal Comfort in U.S. and Canadian residences: Indoor conditions, occupant behavior and energy consumption</i> – TC 2.1 (Physiology and Human Environment), co-sponsored by, TC 7.6 (Building Energy Performance), is <u>returned</u> .
9	4	<u>1744-WS</u> , <i>Guidelines for Accurate CFD Modeling of Natural Ventilation</i> – TC 4.10 (Indoor Environmental Modeling), is <u>returned</u> .
10	4	<u>1843-WS</u> , <i>Validation of Low-Order Acoustic Models of Combustion Driven Oscillations on Fire Tube Water Heaters</i> – TC 6.10 (Mechanical Dehumidification Equipment and Heat Pipes), co-sponsored by, TC 9.8 (Fuels and Combustion) is <u>conditionally accepted</u> .
11	5	<u>1874-WS</u> , <i>Addition of Roof Top Temperature Information to the Climatic Design Conditions chapter of the ASHRAE Handbook</i> - TC 4.2 (Climatic Information), co-Sponsored by, TC 4.7 Energy Calculations, TC 4.10 Indoor Environmental Modeling, is <u>conditionally accepted</u> .
12	5	<u>1900-WS</u> , <i>Using simulated weather data with sparse measured data to produce hourly weather files and calculate design conditions</i> – TC 4.2 (Climatic Information), is <u>conditionally accepted</u> .
13	5	Due the COVID-19 pandemic, unsolicited research proposals are temporarily suspended effective, August 1, 2020.



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MINUTES

RESEARCH ADMINISTRATION COMMITTEE MARCH 16, MAY 4, & MAY 27, 2020

MEMBERS PRESENT:

David Yashar, *Chair*
Christopher Wilkins, *Vice-chair*
Michael Pouchak, *Chair RAS*
Curtis Eichelberger, *Chair RPS*
Ahmed Kashaf, *RL Section 1.0 (05/04, 05/27 only)*
William Hutzal, *RL Section 2.0*
Stephen Kujak, *RL Section 3.0 (05/27 only)*
David Claridge, *RL Section 4.0*
Dennis Loveday, *RL Section 5.0 (05/04, 05/27 only)*
Omar Abdelaziz, *RL Section 6.0 (05/04, 05/27 only)*
William Murphy, *RL Section 7.0*
Christopher Seeton, *RL Section 8.0*
Paolo Tronville, *RL Section 9.0*
Lorenzo Cremaschi, *RL Section 10.0*

MEMBER ABSENT:

ASHRAE STAFF:

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

A. CALL TO ORDER & INTRODUCTIONS

B. ASHRAE CODE OF ETHICS

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

C. APPROVAL OF WINTER '20 MINUTES

It was moved and seconded that,

- (1) the draft minutes of the RAC 2020 winter meeting be approved as drafted.

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

D. CHAIR'S REPORT

B. CHAIR'S REPORT - YASHAR (10 minutes)

a) Disposition of Motions from Last Meeting or Letter Ballots

1. Five of the eight projects bid (1683, 1780, 1824, 1830, and 1852) with project funding motions were approved by RAC/TechC in Orlando.
2. TRPs -1799, 1817, and 1830 now have funding recommendations for RAC and TechC consideration. Funding approval will be handled for these projects via letter ballot votes of both RAC and TechC.

b) New & On-going Action Items Assigned by Tech. Council

1. Completed RAC Budget Forecast form for TechC – See Attachment # 1

c) New Information Items:

1. Plans for ASHRAE Research Technology Transfer Process (Yashar)
2. PMS or PES Training Webinar – Need to set date for Webinars

d) MBO Status Report – Review with action items

E. BOD EX-OFFICIO & COORD. OFFICER

none

F. ACTION ITEMS

**Research Administration Committee (RAC)
Winter 2020
February 1st & 5th, 2020**

Action #	Responsibility	Summary of Action	Status
1	MORTS	Review information from 2006 on how RAC conflicts were handled under Wayne Reedy's Chair term. Add to the agenda any conflicts for RTAR's, WS's, TRP's, NIA's, GIA's, etc..	Complete
2	Wilkins	Modify conflict document and discuss and be ready to vote on Wednesday. Meeting vote on concept only not text for research manual.	On-going
3	Wilkins	Update table to the WS and RTAR review form and distribute on Wednesday before second review meeting.	On-going
4	Hutzel	Research liaison to work with the PMS on ASHRAE research project 1883-RP milestone.	Complete
5	MORTS?	Check the Homer Addams rule to see if Yanfei Yi would be eligible for one more year for this award.	Complete
6	Hutzel, Kashef, Claridge, Wilkins	Form a subcommittee to look at New Investigator award selection criteria. Look at documentation and procedures to determine ways we can make the award more impactful.	On-going
7	MORTS	Notify TC 1.4 that they have two options regarding TRP-1865. 1) award the project to Texas A&M based upon scores submitted to RAC Tuesday night or expand bidders list, revise WS, and get back in line to rebid project.	Complete
8	RAS Chair Pouchak	Recruit and appoint URP Liaisons, and through them, Review Subcs. for new URPs 1893 and 1894	Complete

G. TRPs to BID or REBID in spring 2020

It is moved and seconded that,

- (2) that the following five projects be released for bid in the spring; 1703-TRP, 1831-TRP, 1835-TRP, 1850-TRP and 1879-TRP.

MOTION #2 PASSED: 8-0-0-1 (9) CNV

RECESSED

RECONVENED May 4, 2020

H. ASHRAE GRADUATE STUDENT GRANT-IN-AID AWARD

A total of 67 applications were considered for the 2020-2021 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.

- (3) It was moved and seconded that,

that the following 20 students each be awarded an ASHRAE Graduate Student Grant-in-Aid grant for the 2020-2021 academic year.

1. John Berquist –University of Toronto
2. Matthew Brandt – Colorado School of Mines
3. Leon Brendel – Purdue University
4. Mohammad Dabbagh – University of Colorado
5. Mitra Debrudra – Michigan State University
6. Hongxiang Fu – Texas A&M University
7. Jinglin Jiang – Purdue University
8. Micheal Kim – Purdue University
9. Xiaoli Liu – Purdue University
10. Cara Lozinsky – University of Toronto
11. Melissa Messenger – Embry-Riddle Aeronautical University
12. Pedram Nojedehe – Carleton University
13. Joshua Rothe – Auburn University
14. Nicholas Salts – Purdue University
15. Saba Zakei Shahvari – Ohio State University
16. Jialei Shen – Syracuse University
17. Zhu Shi – Purdue University
18. Michael Wade – University of Texas Austin
19. Tongling Xia – Chinese University of Hong Kong
20. Sevet Umut Yuruker – University of Maryland

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

I. RTAR Review (4 new or revised RTARs)

It was moved and seconded that,

- (4) 1895-RTAR, Effect of penetration through particle pre-filters on the performance of gas filters – TC 2.3 (Gaseous Air Contaminants and Gas Contaminant Removal Equipment), be accepted with comments.

MOTION #4 PASSED: 12-0-0-1 (13) CNV

It was moved and seconded that,

- (5) 1897-RTAR, HFO Refrigerant Compatibility with Aged Lubricants and Contaminants– TC 3.2 (Refrigerant System Chemistry), be accepted with comments.

MOTION #5 PASSED: 12-0-0-1 (13) CNV

It was moved and seconded that,

- (6) 1898-RTAR, Enhancing Whole-Building Calibrated Simulation Using Indoor Environmental Data – TC 4.7 (Energy Calculations), be accepted with comments.

MOTION #6 PASSED: 11-0-1-1 (13) CNV

It was moved and seconded that,

- (7) 1901-RTAR, Determination of Latent Loads Controlled Environment Agriculture Crops – TC 2.2 (Plant and Animal Environment), Co-sponsor: TC 8.10 (Mechanical Dehumidification Equipment and Heat Pipes), be accepted with comments.

MOTION #7 PASSED: 12-0-0-1 (13) CNV

J. WORK STATEMENT REVIEW (6 new & revised Ws)

It was moved and seconded that,

- (8) 1861-WS, Thermal Comfort in U.S. and Canadian residences: Indoor conditions, occupant behavior and energy consumption – TC 2.1 (Physiology and Human Environment) – Co-Sponsor: TC 7.6 (Building Energy Performance), is returned.

MOTION #8 RAS: 4-0-0-1 (5) CNV

RECESSED

RECONVENED May 27, 2020

It was moved and seconded that,

- (9) 1744-WS, Guidelines for Accurate CFD Modeling of Natural Ventilation – TC 4.10 (Indoor Environmental Modeling), is returned.

MOTION #9 RAS: 5-0-0-1 (6) CNV

It was moved and seconded that,

- (10) 1843-WS, Validation of Low-Order Acoustic Models of Combustion Driven Oscillations on Fire Tube Water Heaters – TC 6.10 (Mechanical Dehumidification Equipment and Heat Pipes) Co-Sponsored by, TC 9.8 (Fuels and Combustion) is conditionally accepted.

MOTION #10 PASSED: 13-0-0-1 (14) CNV

It was moved and seconded that,

- (11) 1874-WS, *Addition of Roof Top Temperature Information to the Climatic Design Conditions chapter of the ASHRAE Handbook - TC 4.2 (Climatic Information)*, co-Sponsored by, TC 4.7 Energy Calculations, TC 4.10 Indoor Environmental Modeling, is conditionally accepted.

MOTION #11 PASSED: 13-0-0-1 (14) CNV

It was moved and seconded that,

- (12) 1900-WS, *Using simulated weather data with sparse measured data to produce hourly weather files and calculate design conditions – TC 4.2 (Climatic Information)*, is conditionally accepted.

MOTION #12 PASSED: 13-0-0-1 (14) CNV

- (13) It was moved and seconded that,

Due the COVID-19 pandemic, unsolicited research proposals are temporarily suspended starting August 1, 2020.

MOTION #13 PASSED: 12-1¹-0-1 (14) CNV

Action #1 < STAFF >: Post to the ASHRAE website a message that due to the COVID-19 pandemic the URP program has been suspended, effective August 1, 2020.

Action #2 < MORTS >: Send out a doodle poll to schedule the review of unsolicited research proposals 1905-URP and 1906-URP.

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

None

L. CONSULTANTS REPORTS

None

M. UNFINISHED OR OUT-OF-SEQUENCE BUSINESS

TBD.

N. NEW BUSINESS

TBD

ADJOURNED

The meeting of the Research Administration Committee adjourned at 12:51 PM.

¹ Christopher Seeton feels the unsolicited research proposals procedure is beneficial to ASHRAE.

**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.