

TC 1.13 minutes

July 9, 2020

Current roster of voting members and officers:

Name	Voting Status	Committee Position
Christopher Laughman	Voting	Chair/webmaster
Kyle Gluesenkamp	Voting	Vice Chair
Omar Abdelaziz	Non-voting	Research Subcommittee Chair
Vikrant Aute	Voting	Handbook Subcommittee Chair
Zheng O'Neill	Voting	Program Subcommittee Chair
Stephen Treado	Voting	Member Non Quorum
Khaled Saleh	Voting	Member
David Yashar	Voting	Member

Attendance today, as of 1:10 Eastern time:

Participants (7)

- KG Kyle Gluesenkamp (Me)  
- CL Chris Laughman   
- CT Cole Tucker  
- EY Emily Yin  
- KS Khaled Saleh  
- VA Vikrant Aute  
- ZL Zhenning Li 

A quorum was established.

Voting members (4 present out of [6 VM + 1 MNQ]):

1. Chris Laughman (**present**)
2. Kyle Gluesenkamp (**present**)
3. Vikrant Aute (**present**)
4. Zheng O'Neill (not present)
5. Stephen Treado (MNQ not present)
6. Khaled Saleh (**present**)
7. David Yashar (not present)

Non-voting:

1. Cole Tucker – Energy engineer at Cornell University
2. Emily Yin – Trane, equipment and building simulation

3. Zhenning Li – postdoc, ORNL

1:17 Khaled moved to accept the Orlando minutes, and Vikrant seconded. Motion passed 4-0-0, CV.

1:18 Program discussion

Program: Chicago



2021 Winter Conference - Chicago

Deadlines:

- Monday, June 15, 2020:** Website Opens for Seminar, Workshop, Forum, Debate, and Panel Proposals
- Wednesday, July 8, 2020:** Final Conference Papers Due - Submitted for Review (Includes Bio, Learning Objectives and Methods of Assessment); Request for Conference Paper Sessions Due
- Monday, July 27, 2020:** Conference Paper Accept/Revise/Reject Notifications
- Monday, August 3, 2020:** Website Closes for Seminar, Workshop, Forum, Debate, and Panel Proposals
- Monday, August 10, 2020:** Revised Conference Papers/Final Technical Papers Due
- Monday, August 24, 2020:** Conference and Technical Paper Final Accept/Reject Notifications
- Monday, October 5, 2020:** Seminar, Workshop, Forum, Debate, and Panel Accept/Reject Notifications



Program: Phoenix deadlines:

- Aug 12, 2020: Conference Paper abstracts
- Aug 12, 2020: Technical Paper full manuscript
- Feb 8, 2021: extended abstracts for Summer research summit

Kyle notes that it may be time for another general seminar to educate general ASHRAE population about the benefits of optimization.

Khaled proposes we could do a seminar highlighting the contents of the handbook chapter for Summer 2021.

Khaled proposes for January a CFD optimization for IAQ – potentially speakers Omar Abdelaziz, Khaled, another professor in Egypt (Prof. Khaleel (sp?)), Chris knows someone at MERL, Vikrant could identify someone from UMD. Vikrant notes that this could include (1) optimization in CFD and (2) air flow optimization with CFD in enclosed spaces (for example in mission critical applications). The ASHRAE pandemic response panel has been discussing this extensively. This would represent a pool of speakers. List is available through ASHRAE announcement about the pandemic response panel.

Adjoints are becoming more common in commercial CFD packages and allow calculating gradients of interest in a large simulation.

Use of adjoints to allow formal optimization of CFD

Possible joint seminar with TC 4.x on air distribution.

Chris could chair a seminar on adjoint optimization

Khaled proposes title: "Optimization for computationally expensive simulations"

Emily asks if we could do a seminar on general methodology – equipment, building, and the integrated treatment of the two.

Conclusions of Program discussion:

For Winter 2021:

- Seminar: "Optimization for computationally expensive simulations" (**Chris lead**)
 - o Vikrant can contribute something on comparison of traditional metamodel approaches to adjoint approaches.
- Seminar: Optimization relating to contaminant dispersion in indoor environments (**Vikrant lead** reaching out to pandemic response panel)
- Seminar: "Equipment, building, and integrated optimization" (**Emily lead**)
- Seminar: "Optimized control of systems for thermal comfort was discussed last time; but that was not accepted" (see description in February minutes) (**Omar Abdelaziz lead**)

For Summer 2021:

- Seminar: discussion of book chapter

2:03 – Handbook (Vikrant)

Khaled suggests to hold regular teleconference meetings to facilitate progress

Vikrant will set up recurring meeting for next few months.

2:10 – Membership

4 VMs are set to roll off in June 2021

So at January meeting we'll need to identify 4 new members

Need to identify new Secretary

Zhenning and Emily are interested to become corresponding members.

2:17 Vikrant moved to adjourn, Kyle seconded. Motion passed 4-0-0 CV.

