

Meeting notes for TG1.Optimization, June 23, 2013

Meeting time: 1:00p - 3:00p.

Meeting location: Denver Sheraton, Plaza Court 5

Meeting opened at 1:15.

3 voting members are present: Vikrant Aute, Omar Abdelaziz, and David Yashar. Peter Armstrong, S.A. Sherif, Chris Laughman, Zheng O'Neill also attended.

Motion by Vikrant Aute made to approve the distributed minutes from the Dallas ASHRAE meeting. Seconded by David Yashar. Approved 3/0/0 (CNV).

Information from the group chair:

1. Proposals for both seminars and forums for the January 2014 ASHRAE conference in New York City (NYC2013) are due on August 12, and paper abstracts for the June 2014 ASHRAE conference in Seattle (Seattle2014) are due on September 23. Tracks for the Seattle conference include:
 - Research summit,
 - Indoor environment,
 - Ground source heat pumps,
 - HVAC systems and equipment,
 - HVAC fundamentals and applications,
 - Standards,
 - Guidelines and codes, and
 - Refrigeration.
2. Only 4/24 forum proposals were accepted for this conference.
3. CEC announced a call for reviewers and session chairs for NYC2013. If you are interested in signing up for either of these positions, email Tiffany Cox (tcox@ashrae.org).
4. The TC meeting in the morning provided notification that we need to use a TC activity sheet for these meetings.
5. The new membership roster for this TG to take effect on July 1 is posted and has been reviewed by the TG. Meeting minutes, membership, information, and so forth may be accessed online by clicking through a link at the bottom of the ASHRAE page for "My Details", the link to "My Committees" on the following page, and then the link to this specific committee.
6. The deadline for nominating people to the Hightower Award is 1 September, 2013. If there is someone that we'd like to nominate, we just need to let the section head know soon.
7. We should add our employment information to the membership details on our ASHRAE site.
8. We have the option of having a webinar at these TG meetings if we request such a service so that our members who cannot attend can still participate in the meeting. We'll look into requesting and using this service for the next meeting.
9. A number of conferences are coming up for which Omar has received a list from section head. He will provide a more detailed list to the committee members when the minutes for this meeting are distributed.
10. The CEC is looking for the names of reviewers of papers for the NYC2013 conference. Omar will collect a list of these names and will send them to Leon Shapiro.

Program chair report:

1. Steve Treado attended this TG meeting in Dallas, but there has not been a lot of information distributed since that meeting.
2. It appears that there will be an opportunity submit a request to have a conference paper session for papers that have already been accepted for presentation at a future ASHRAE conference. Omar needs to contact Tiffany Cox to confirm that this is indeed the case.
3. Research that is presented in seminars can be written up and submitted at a later date to the HVAC&R Research Journal.
4. There is interest within the committee in co-sponsoring a seminar with TC7.5 about the dynamic optimization. One potential title for this session could be "Application of Dynamic Optimization to Smart Building Systems." Peter Armstrong is interested in publishing a paper in such a session, particularly as related to the optimization of building controls to incorporate demand response (DR) signals. Vikrant Aute also has a material for setpoint optimization for an adsorption chiller. Chris Laughman will chair the session. We will seek co-sponsorship with 7.5. Titles for the speakers and an abstract for the overall session in NYC2014 will be needed by Aug 12.
5. The people submitting the above seminar talks will also plan to submit abstracts for related papers to ASHRAE so that these three papers can also be collected into a conference paper session for Seattle2014. Zheng O'Neill will chair this conference paper session.
6. Peter Armstrong is also interested in presenting some research at a seminar in NYC2014. The proposed title for this seminar would be "Online optimized scheduling for demand response under real-time pricing". He is in charge of making this seminar happen (e.g. finding two other individual that would like to present in such a seminar) and has offered to chair it.
7. Vikrant is interested in organizing a seminar on component and system design optimization for Seattle2014. The proposed title of this seminar is "Advanced optimization of HVAC+R Components and Systems" for Seattle. Vikrant Aute will chair this seminar and will endeavor to find some other papers.
8. In summary, we expect to have 2 seminars at NYC2014, as well as 1 seminar and 1 conference paper session in Seattle. David Yashar proposed a motion to accept this plan proposes, Vikrant seconded this motion. Approved 3/0/0 (CNV).

Info from the section head:

1. Papers that are submitted for publication in the ASHRAE conferences need to be well written. The program committee has been working through a backlog of publications, but this has largely been cleared out; well-written papers stand a good chance of being accepted for publication.
2. Vic Penar (the outgoing section head) will have an update on the deadlines for the handbook chapter; he will give the information to Omar.

Handbook chair:

1. Examples are needed for the handbook chapter. Two proposed examples include
 - Duct optimization based upon Kim & Spitler, 2002, 108-1, pp 96-107
 - Cooling tower and condenser pipe optimization based upon an ASHRAE Journal paper by Steve Taylor.

It would also be possible to reference the supervisory control example that is currently in the handbook. The chapter could also provide a number of different examples for a given problem, such as duct sizing, and then talk about some more complex problems. There was an HVAC+R research journal issue recently which focused on the use of optimization in the HVAC&R area. It was also pointed out that it is important to highlight how *not* to use optimization techniques. The chapter could have a reference/example from to free software from NIST.

Website chair:

It would be good to publish the roster on the website.

Membership chair:

We discussed the new roster as of July 1. We might want to request from the section head that TG1.Optimization become a regular TC. David Yashar made a motion to request to become a regular TC made by David Yashar; seconded by Vikrant Aute. Approved 3/0/0 (CNV). The proposed title of this TC would be Optimization Methods and Applications.

Motion to adjourn at 2:36 by David Yashar, Vikrant Aute seconded. Approved 3/0/0 (CNV).