

Minutes of IBPSA-USA Emerging Simulation Technology Research Subcommittee

Time: 1pm - 2pm EST 12/17/2014

Participants:

Nathaniel Jones (MIT) (chair)
David Bosworth (BUILDlab)
Michael Georgescu (UCSB)
Scot Halverson (LANL)
Nicholas Long (NREL)
Jibonananda Sanyal (ORNL)
Michael Wetter (LBNL)
Wangda Zuo (Miami)

Location: GoToMeeting

Notes:

IBPSA-USA Research Committee

IBPSA-USA has established a research committee chaired by Wangda Zuo to promote research activity within the building simulation community. Currently there are three subcommittees: this one focusing on new, non-conventional research, one on conventional building simulation, and one on urban scale simulation. These subcommittees are modeled after the ASHRAE technical committees.

The official announcement of the Research Committee and its subcommittees will occur at the 2015 ASHRAE Winter Conference in Chicago, Jan. 24-28.

Functions of the Subcommittee

The following functions have been proposed for the subcommittee:

- Monitor the state of the art in building simulation
- Organize conference sessions as a way of steering research interests
- Reach out to other communities through high-level presentations about what building simulation can do
- Help university faculty connect with new ideas that could lead to interesting student work and thesis topics
- Help researchers work with funding agencies such as NSF and ASHRAE
- Organize competitions among students or firms
- Host webinars and create a library of lectures, and develop marketing strategies to create awareness of these resources
- Act as a consulting group to help other organizations and industry groups make decisions on new research directions
- Publish roadmaps and white papers to offer advice on emerging simulation techniques
- Curate lightning or TED-style talks for IBPSA conferences
- Put together literatures reviews that broadly represent the state of building simulation, including areas such as CFD that are outside “typical” building simulation

Next Steps

The subcommittee can start to work on some of the simpler tasks now and look to other groups for examples as it develops a business model. Subcommittee members may spearhead tasks that they have a particular interest in. As the subcommittee does not have a budget to administer projects, it must be careful to quality-control any work that it becomes associated with. This will help IBPSA's reputation.

Some immediate opportunities could be at the following conferences:

- International Conference on Advanced Building Skins (3-4 November 2015, Bern, Switzerland) has put out a call for session topic proposals (forwarded to the subcommittee by Jibonananda Sanyal).
- ASHRAE Annual Conference (27 June-1 July 2015, Atlanta) has two tracks where committee members might be able to put on a seminar. These are track 3 on research and track 7 on modeling throughout building life-cycle.
- IBPSA Building Simulation Conference (7-9 December 2015, Hyderabad, India) could be an opportunity, although the subcommittee's contribution needs to be well-defined.

Website

The Research Committee and subcommittees will have pages in the committees section of ibpsa.us. The site uses Drupal for content management, so it should be easy to update. Another possibility is to link to a WordPress site that could be managed directly by the subcommittee, as some local IBPSA chapters have done.

No participants objected to having names and affiliations of subcommittee members listed on the website.

The website content should allow outreach by providing introductions to topics of interest to the subcommittee. It should not be biased toward specific projects that committee members are working on. It should make use of the collective experience of the subcommittee.

Actions:

- Nathaniel will poll the other members on interest for participating in the functions that were brainstormed during the meeting and for availability for the next meeting.
- Participants may voice interest in spearheading activities for the subcommittee.

Next meeting:

To be determined by poll in January.