



Issue 6  
January 2013

# IBPSA-USA Newsletter

# BUILDING SIMULATION 2013

CHAMBERY, FRANCE AUGUST 25-28



*The next Building Simulation conference of IBPSA-World will take place late August in France.*

## Upcoming Events

IBPSA-USA semi-annual meeting, Dallas, TX, January 26, 2013  
ASHRAE Winter meeting, Dallas TX, January 26-30, 2013  
DOE Modeling Roadmap Workshop, Dallas, TX, January 30-31, 2013  
IBPSA-USA semi-annual meeting, Denver, CO, June 22, 2013  
Building Simulation 2013, Chambéry France, Aug. 25-30, 2013

## About this Newsletter

The IBPSA-USA Newsletter will be published every 3 months to inform its membership about current and emerging events in building simulation. To submit articles, send email to [newsletter@ibpsa.us](mailto:newsletter@ibpsa.us)

## IBPSA-USA Semi-Annual Meeting

IBPSA-USA invites you to join us in Dallas for our Winter 2013 meeting.

Dinner RSVP requested (see below).

4:00 - 9:00 PM, Saturday, January 26, 2013 at the Campisi's Restaurant  
1520 Elm Street, Ste 111  
Dallas, TX 75201  
214.752.0141

### Agenda:

- 4pm IBPSA-USA's strategic plan and regional chapter idea exchange
- 5pm Social hour cash bar
- 6pm Business meeting
- 6:30 Elections
- 7pm Dinner with after-dinner talks

Registration for dinner at <http://ibpsa2013wintermeeting.eventbrite.com/>

No registration is required for the business meeting.

The business meeting will include election of the next slate of Board of Directors.

The past few meetings have been very informative concerning events in the simulation community, and provide a great opportunity to meet fellow building simulators.

Please contact David Eldridge ([dse@grummanbutkus.com](mailto:dse@grummanbutkus.com)) if you have any questions about the meeting or IBPSA-USA.

## IBPSA-USA Membership Dues

To help support our expanding set of programs and services, IBPSA-USA, a 501(c)(3) not-for-profit organization is beginning a membership dues program:

Effective in 2013, members will pay an annual membership dues of \$90.00, or \$20 for student members.

A fully activated membership paid by January 16, 2013 will qualify you to vote, either in person or by proxy, in the Board of Directors Election which will be held on January 26th at the IBPSA-USA

Annual Meeting in Dallas, the location of ASHRAE's Winter Conference.

The IBPSA-USA membership system can be accessed at <http://ibpsausa.wildapricot.org/> or through the IBPSA-USA website at [www.ibpsa.us](http://www.ibpsa.us).

Questions regarding membership dues may be directed to [membership@ibpsa.us](mailto:membership@ibpsa.us).

### *Expanding IBPSA-USA Programs & Services*

Recently the domain of building energy modeling has been growing substantially. IBPSA-USA has been leading in providing new services to help provide much-needed support, including:

- BEMBook wiki ([bembook.ibpsa.us](http://bembook.ibpsa.us))
- One day seminar on energy modeling (HVAC emphasis), delivered a dozen times so far and available free online
- One day seminar on lighting & daylighting modeling, with RFP under final internal review
- Developing policies to set direction
- Developing support services for many new local IBPSA-USA chapters
- Hosting bi-annual simulation conferences, the most recent being SimBuild 2012, the 5th National Conference of IBPSA-USA
- Quarterly newsletter

We have focused on providing support for early-career modelers, and we promote and develop open source products as needed to address gaps in the industry.

To support this growing list of activities, we are adding modest staff resources.

We will continue to actively cultivate other sources of support for our expanding programs, and we are hopeful that most of the current members will support the objectives of the organization with their membership dues.

### **Student Scholarship to attend the Building Simulation 2013 Conference in Chambéry, France**

IBPSA-USA will offer up to 7 student scholarships for US-\$ 1500 each to attend the IBPSA Building Simulation Conference in Chambéry, France in August 2013. Share your research and meet potential employers and peers!

To participate, contribute at least three pages to the BEMBook wiki (<http://bembook.ibpsa.us>). Contributions to the BEMBook wiki done in collaboration with your University faculty advisor are encouraged.

A formal announcement will be made in late January at [www.ibpsa.us](http://www.ibpsa.us)

### **San Francisco Chapter Helps Organize Energy Modeler Study**

The San Francisco chapter of IBPSA-USA worked with a UC Berkeley Ph.D. student and researchers at the Lawrence Berkeley National Laboratory to hold an event that explored the effect of the modeler on variation in building energy simulation results. The event was hosted by the Pacific Energy Center in San Francisco on November 1; calls

for participants had been sent out to the local ASHRAE and IBPSA-USA chapters and to the Pacific Energy Center (PEC) mailing lists.

The goal of this event was to try to isolate individual modeler decisions from other sources of variation in building energy simulation results. To accomplish this, 12 experienced eQUEST modelers were given the same building to model in a 3 hour period. Lighting and mechanical plans were given to participants along with the floor plans and other basic information about the building. At the end of the modeling exercise the modelers ran their simulations and results were collected for comparison. Modelers also kept notes on their decision-making process throughout the study, and demographic information was gathered on educational background and building energy simulation experience.

While the results were being compiled for comparison, participants heard talks by Santosh Philip and Erik Kolderup on the topic of quality control in building energy simulation. Following the talks, preliminary results were presented to the participants and there was general discussion about a number of potential sources of variation in results. Some of the hypothesized major sources of variation included weather file and scheduling differences; variations in the representation of the building floor plan appeared to have had very little impact on overall results.

Data from this study will be analyzed for a number of different sources of variation and examined to see whether there is any correlation between modeler experience and consistency of simulation results. Results of this

study will be detailed in the Ph.D. thesis of Pam Berkeley and potentially in other publications.

Numerous thanks to all the participants and to all those who helped out with the event – Bill Burke, Robert Marcial, Sam Jensen Augustine, and the rest of the staff at the PEC; Shruti Kasarekar and fellow IBPSA-USA SF officers; Erik Kolderup of Kolderup Consulting, and Santosh Philip of Loisos + Ubbelohde; and Phil Haves and Tianzhen Hong from LBNL. Additional thanks to Taylor and Francis for donating a copy of Building Performance Simulation for Design and Operation to the event and providing participants with journal subscriptions.

### **Open Workshop about Public Sector Roadmap in Building Energy Modeling, hosted by US DOE National Laboratories**

Jan 30-31, 2013, Dallas Sheraton Hotel

In the Spring of 2011, Rocky Mountain Institute hosted a two day summit that dealt with innovation in building energy modeling (BEM). Identifying BEM as a key enabling technology for building energy efficiency, the summit aimed to create 2-5 year roadmaps for significant aspects of BEM including software platforms, methods and processes, supporting resources, market drivers, and education.

This workshop will attempt to define BEM priorities and strategies for a public sector road map of activities for the next 3-5 years.

Topics for discussion include:

- Which currently important and emerging use cases of BEM need public support?
- Which areas of BEM need additional basic research, measurement, or validation?
- What are realistic and strategic goals for EnergyPlus functionality, speed, use, and user-support?
- What are realistic and strategic goals for supporting software tools like OpenStudio?
- How does the public sector push standards and interoperability?
- How can the public sector collect, vet, and organize data to help BEM practitioners?
- How can the public sector help scale BEM education and training?
- What are the most productive ways for public entities to collaborate with the private sector?

This open workshop will be held immediately following the ASHRAE Winter Meeting and all who would like to provide input or contribute to the discussion are encouraged to participate.

The first half-day session will be from 1pm to 6pm on Wednesday, Jan. 30, 2013. The second half-day session will be from 8am to 12noon on Thursday, Jan. 31, 2013.

So that we can get an estimated head count for planning purposes, please inform Caroline Hutchinson [chutchinson@lbl.gov](mailto:chutchinson@lbl.gov) if you expect to attend.

## BEMBook Workshops

IBPSA-USA presents several workshops about Building Energy Modeling. These workshops cover modeling fundamentals, ASHRAE 90.1 performance rating, modeling best practices, modeling to inform design and measurement & verifications. Slides can be downloaded from [http://www.bembook.ibpsa.us/index.php?title=Workshop\\_Downloads](http://www.bembook.ibpsa.us/index.php?title=Workshop_Downloads)

The next workshop will be held on January 29 at the Dallas Convention Center, TX. For registration, visit: <http://www.ashrae.org/education--certification/2013-dallas-winter-conference-courses>

For future workshops, visit [http://www.bembook.ibpsa.us/index.php?title=Workshop\\_Plan\\_and\\_Status](http://www.bembook.ibpsa.us/index.php?title=Workshop_Plan_and_Status)



## IBPSA-USA Regional Chapters

IBPSA-USA has provisionally approved eight regional chapters throughout the United States. The regional chapters provide an opportunity for local people to meet and discuss issues that arise in building simulation.

Approved Provisional Chapters include Boston, Houston, New York City, Raleigh-Durham, San Francisco, Los Angeles, Seattle and Washington DC.

Chapters in the following cities are in the process of applying for membership approval: Chicago, Philadelphia, Portland, and Twin Cities.

For chapter information, visit <http://www.ibpsa.us/chapters.shtml>

If you are a group interested in forming a local chapter in your area within the United States, please contact Shanta Tucker at [shanta.tucker@atelierten.com](mailto:shanta.tucker@atelierten.com).