



Issue 5
October 2012

IBPSA-USA Newsletter

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

IBPSA-USA Elects New Slate of Officers

Every two years after the SimBuild conference, the President of IBPSA-USA rolls off and the Board elects a new slate of Officers. For the next two years, the officers below have been elected by the Board of Directors. Michael Wetter rolls off as President, Shanta Tucker, former Vice President is now



Banquet of the SimBuild 2012 conference at the Monona Terrace Community and Convention Center, Madison, WI

Upcoming Events

IBPSA-USA semi-annual meeting, Dallas, TX, January 26, 2013
ASHRAE Winter meeting, Dallas TX, January 26-30, 2013

President, and Joe Deringer is the new Vice President. Timothy McDowell remains Secretary and Chip Barnaby remains Treasurer.

Below are the biographical information for the new Officers.

Shanta Tucker
Associate Director, Atelier Ten
New York, NY



As an associate director at Atelier Ten, Shanta has twelve years of experience with the engineering and design of HVAC systems, as well as modeling and analysis

techniques for optimizing energy efficiency of high-performance building envelopes, mechanical systems, and electrical systems. She has worked on a variety of university, commercial, and institutional buildings that are known for their efficient energy performance. In addition, she has taught environmental systems courses for the undergraduate program at Pratt Institute's Architecture School, a graduate environmental studio at the Yale School of Architecture, an environmental technology course at Parsons School of Design, and currently guest teaches at Columbia's Graduate School of Architecture.

Shanta is a LEED-Accredited Professional, an ASHRAE certified Building Energy Modeling Professional (BEMP), a member of the ASHRAE Certification Committee, and president of IBPSA-USA. She has studied at

the Center for Energy Studies at the Ecole des Mines in Paris, holds a BS in Architectural Engineering from the University of Colorado, and is a registered Professional Engineer in the State of California.

Joe Deringer
Executive Director
Institute for the Sustainable
Performance of Buildings
(SuPerB)
Berkeley, CA



For over 30 years Joe Deringer has managed energy projects for USDOE, HUD, USEPA, USDOD, NSF, CPUC, USAID, UNDP, and the World Bank. He is an experienced simulator who has analyzed the energy use of buildings worldwide. He is currently managing an EnergyPlus study of high performance office buildings in 15 North American locations. He has managed parametric modeling supporting energy codes in the US, Egypt, Vietnam, India, and Jamaica. He has served on ASHRAE's 90.1 energy standard committee for 15 years and chaired its envelope subcommittee for 10 years. He has managed international teams that assisted to develop building energy codes in 8 countries. He

has presented many seminars attended by more than 6000 people. He has conducted post-occupancy evaluations of several US Federal courthouses & has managed two large M&V projects.

For over 15 years he has developed eLearning resources with recent projects using emerging WebGL 3D technologies: see www.su-per-b.org, www.learnhvac.org, www.ecoadvisor.org, elad.lbl.gov, <http://www.learnhpb.com>, and www.nerlearning.org. He is a member of AIA, ASHRAE, IESNA, USGBC, IBPSA-USA (VP, Board Member, & Education Committee Chair). He holds an MS/OR, CWRU, B. Arch., CMU, & BA/History (Honors), U-Pittsburgh.

Charles S. "Chip" Barnaby
Vice-President of Research
Wrightsoft Corporation
Lexington, MA



Chip Barnaby got his start in the building energy field while he was in architecture school during the first oil crisis. He is now a software developer focusing on implementation of loads, energy simulation, and operating cost aspects of Wrightsoft products. He also leads Wrightsoft research efforts, working on EnergyPlus

enhancements and ASHRAE-funded projects.

He has a long involvement in IBPSA going back to its founding in the 1980s. He is past Treasurer and current Vice-President of IBPSA-World. Within IBPSA-USA, he has served as President and is currently Treasurer.

Chip sits on the ASHRAE Standards Committee and several technical committees. He is past chair of the TC 4.2 (Climatic Information) and TC 4.7 (Energy Calculations). Currently, he is chair of SPC-205 (Standard Representation of Performance Simulation Data for HVAC&R and Other Facility Equipment). He is a Building Energy Modeling Professional (BEMP).

Chip holds an MArch from the University of California, Berkeley and a B.A. in Engineering and Applied Physics from Harvard.

Timothy McDowell
Vice President
Thermal Energy System
Specialists, LLC, Madison, WI



Tim McDowell is Vice President of Thermal Energy System Specialists, LLC in Madison, WI. He joined TESS in the Fall of 1995 and has worked on a wide variety of building energy projects using the TRNSYS software

package and is a part of the team maintaining and developing the software.

Tim is an ASHRAE certified Building Energy Modeling Professional (BEMP) and is an active member of ASHRAE currently serving as chair of TC 4.7 Energy Calculations and as a member of SSPC 140 Standard MOT for Evaluation of Building Energy Analysis Computer Programs and formerly serving on TC 6.9 Thermal Storage.

He chaired the SimBuild 2012 conference in Madison, WI.

Los Angeles Chapter hosts PechaKucha

On Monday, September 24th, the newly formed Los Angeles Chapter of IBPSA-USA hosted a PechaKucha 20x20 (20 Slides x 20 Seconds Each) event in the Red Zone at Gensler LA. Ten (10) speakers ranging from Architects, Engineers, Utility Representatives, Consultants to Educators presented on the topic “Bringing Sexy Back in Simulation”. With the support of the local chapters of AIA, ASHRAE, IESNA and USGBC, the event generated 80+ attendees to celebrate the newly formed chapter’s formation. With the mission of the chapter to “improve buildings through performance based design”, initiatives will focus on Building Performance, Education and Communication and will be supported through the development of lecture series, conferences and workshops but most importantly the chapter will serve as the platform to share ideas.



*Meeting of Los Angeles Chapter.
Photo credit: Mini Chu, Gensler*

*Regional Organizing Committee:
Mika Yagi, Greg Collins, Jeff Landreth, Karen Kensek, Simon Chu, Mohamed El Sheikh, Morgan Wiener
Special thanks to the event sponsors:*

*IES Virtual Environment, GBG Inc and Whites Associate Lighting
Special thanks to the photographer:
Mini Chu, Gensler*

SimBuild 2012 Conference in Madison, Wisconsin, USA

The SimBuild 2012 conference was held in Madison, WI in early August. The conference attracted approximately 200 attendees from all over the world for three days of technical sessions and two days of workshops.

The conference kicked off at the welcome party overlooking Lake Mendota and was highlighted by talks from Christoph Reinhart from the Massachusetts Institute of Technology and Tom Kubala of the Kubala Washatko Architects and a plenary session on initiatives in California to update the software it provides for performance compliance with building energy efficiency requirements for both residential and nonresidential buildings with Bruce Wilcox, Chip Barnaby and Jason Glazer.

Around 100 technical papers were presented during the conference and six additional sessions on topics of current interest were included in the conference. All of the papers are available on the SimBuild 2012 website. Current and recently graduated students were encouraged to present posters on their research projects.

The conference was made possible by generous support of the sponsors: the University of Wisconsin-Madison department of Engineering Professional Development, the United States Department of Energy, Affiliated Engineers Inc., United Technologies Research Center and the Energy Center of Wisconsin. Their financial

support allowed for over 30 students to be granted scholarships to attend the conference.

At the conference banquet held at the Monona Terrace Community and Convention Center overlooking Lake Monona, various awards were presented by the conference organizing committee and by the IBPSA-USA board of directors.

Awards for the best papers at the conference were presented to “A Framework for Generating Stochastic Meteorological Years for Risk-Conscious Design of Buildings” by Benjamin D. Lee, Yuming Sun, Huafen Hu, Godfried Augenbroe, and Christian J.J. Paredis and “A Demonstration of the Run-Time Coupling between ESPr and TRNSYS” by Francesca Macdonald, Romain Jost, Ian Beausoleil-Morrison, Michaël Kummert, Timothy McDowell, and Alex Ferguson.

Best poster awards were presented to in 1st Place: Humberto Quintana of Ecole Polytechnique de Montreal for “Improving Energy Efficiency for Solar Communities by using Model Predictive Control Strategies” and in 2nd Place: Shan He of Iowa State University for “Integrating Thermo-Fluid Computational Models into Understanding Sustainable Building Design”.

The Board of Directors of IBPSA-USA presented the Outstanding Practitioner Award to Taylor Engineering of Alameda, California and Outstanding Achievement Awards to Greg Ward of Dolby

Laboratories, Inc. in Berkeley, California and to Jeffrey D. Spittler, a professor of mechanical and aerospace engineering at Oklahoma State University

We look forward to seeing everyone at SimBuild 2014!

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=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=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: 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.