



photo: Bruce Haglund

During networking time, SBSEers can hike to the high point, an ancient volcano plug, in Ponderosa State Park and view all of Payette Lake and the world beyond.

SBSE RETREAT CALL FOR PARTICIPATION

The summer retreat will prepare potential participants for the pilot Campus Triathlon, which will focus on a new or remodeled campus building. During the pilot we aim to test and refine logistics, criteria, and evaluation techniques; to expand participation in the subsequent Triathlons; and to disseminate the products and findings of all submissions.

We're seeking three types of retreat attendees: (1) potential Campus Triathlon participants who will initiate an interdisciplinary net zero energy building design (studio) project for their campus; (2) presenters who can share experience and expertise on the retreat themes listed below; and (3) delegates who desire to learn about the retreat topics. Additionally, we'll welcome a cadre of scholarship awardees.

The retreat schedule includes half-day information sessions and half-day workshop sessions on topics that will support preparation of Triathlon entries.

Help shape the 2012 retreat content! Send us your proposals for presentations in any of the five session themes. You may also propose a presentation, workshop, or activity that doesn't fit neatly into one of the sessions ... we have some time reserved for the unexpected.

Topics for Info Sessions and Workshops

1. Interdisciplinary Team Assembly and Management
2. Team Use of Social Media and Web Links
3. Team Interventions at the Space Scale
4. Team Interventions at the Building Scale
5. Team Interventions at the Campus Scale

Plan to join us June 15–18 in Boise and in McCall, ID. For full information stay tuned to the retreat web site <<http://www.sbse.org/retreat2012/>>. 🖐

—Christine Bachman, Walter Grondzik, Bruce Haglund, Bob Koester, and Alison Kwok

SBSE CALENDAR

2012

- Mar 1–4 ACSA Annual Mtg/Boston, MA
- Mar 18–21 Greening IX/Muncie, IN
- Apr 12–15 Windsor Conf/Windsor, UK
- May 14–19 ASES Conf/Denver, CO
- May 17–19 AIA Conv/Washington, DC
- Jun 7–10 ARCC–EAAE Conf/Milan, Italy
- Jun 15–18 SBSE Retreat/McCall, ID
- Jun 23–27 ASHRAE Conf/San Antonio, TX
- Jun 27–30 Sust. Futures/Kampala, Uganda
- Jun 28–30 CIB SASBE Conf/São Paulo, Brasil
- Nov 8–10 PLEA Conf/Lima, Peru

2013

- Apr 15–20 ASES Conf/Baltimore, MD 🖐



photo: Bruce Haglund

Each cabin at the McCall Field Campus sleeps eight in lower bunks ... eight more in uppers. Forty SBSEers can be accommodated in lowers.

LETTERS TO THE EDITOR

How does one search the SBSE archives for a past post? I was looking for a post where I asked for good reference books on daylighting.

—Leonard Sciarra, Gensler

[From the SBSE web site membership page follow the Listserv Archives link <<https://lists.uidaho.edu/pipermail/sbse/>>. Messages are archived by month, then by thread, subject, author, or date. The archives go back to November 2002, so happy searching!—ed.]



As I finished my presentation at the University of Patras, Greece, of the research work on the Roman Coliseum, I received the e-mail on the posting of the Fall *SBSE News* that also reported on the project. What good timing! Truly thanks for SBSE's support.

—Moji Navvab, Michigan

[No, no, no! Thank you for sharing your ideas through the News! We all benefit from your generosity. It's this type of selflessness that sets SBSE apart.—ed.]



Just read the latest issue of the *SBSE News*, and I paused to reflect what a great job you've done over the years. The graphic design. The dogged determination to drag the articles out of the members. And all of this over such a sustained period of time. The membership appreciates it.

—Fuller Moore, emeritus

[Supporting the highly motivated, extremely smart individuals that make up SBSE is a true pleasure that makes the task an anticipated treat! Thanks to all for furthering my understanding of the world.—ed.] 🙌

SBSE News is published quarterly by the Society of Building Science Educators, a not-for-profit corporation. Submit material for publication before the first of March, June, September, or December to Bruce Haglund, Editor; Department of Architecture; University of Idaho; Moscow, ID 83844-2451; tel 208.885.6781; fax 208.885.9428; e-mail <bhaglund@uidaho.edu>. Direct membership and mailing list inquiries to Troy Peters, Secretary-Treasurer; Cal Poly; Architecture; One Grand AV; San Luis Obispo, CA 93407; e-mail <tnpeters@calpoly.edu>. To join our list server or to manage your account go to <<http://www.lists.uidaho.edu/mailman/listinfo/sbse>>. For full membership info and more, visit our home page <<http://www.sbse.org>>.

OUR MAN AT NAED

The National Academy on Environmental Design (NAED) held its third annual business meeting in Washington, DC, on October 26, 2011, at the headquarters of the American Planning Association. NAED promotes research, scholarly cooperation, and an independent, multidisciplinary knowledge base to advance sustainable design and stewardship of human and natural environments (see <<http://www.naedonline.org>>). The meeting was followed by a two-day workshop, *The Green Health: Building Sustainable Schools for Healthy Kids*, co-hosted by NAED and the National Collaborative for Childhood Obesity Research (NCCOR) in partnership with the U.S. Green Building Council Center for Green Schools. Ihab Elzeyadi, SBSE President, attended the meeting representing SBSE on the NAED council.

The gathering provided an opportunity to discuss NAED's on-going efforts to secure a permanent headquarters, engage in fundraising, recruit personnel, obtain operational funding, and establish infrastructure to promote design research collaboration and dissemination. The meeting agenda included elections, budget updates, fundraising, and governance items. As of March 2012, administrative assistance and temporary hosting of the NAED office will be transferred from its current host, ACSA, to the National Building Museum. NAED will follow-up on the memorandum of understanding with Luck Development to secure a site for one of the winning solar decathlon entries to be permanently located at Ni Village, a planned sustainable community in Spotsylvania County, VA, that will offer commercial, residential, retail, and educational facilities <<http://www.nivillage.com>>. NAED headquarters is planning to occupy the Solar Decathlon building at Ni Village in 2013.

Discussion ensued, focused on the NAED research agenda and next year's research workshop topic—The Intelligent City—to be co-hosted by the National Building Museum. See <<http://www.nbm.org/intelligentcities>>.

The ensuing *Green Health* workshop used an interdisciplinary case-study approach to examine: (1) how environmental design strategies can be better used to promote physical activity and healthy eating in school environments, and (2) how childhood obesity prevention can be better integrated into school-based sustainability and green building initiatives. Participants from design, urban planning, and public health as well as representatives from multiple federal agencies focused on improving school environments joined a lively discussion with delegates representing educational designers, planners, and public health researchers. The presentations ranged from discussing results of cutting-edge studies on the topic to using research and evidence-based design applications in school environments. The second day of the workshop explored research opportunities, metrics, tools, and requirements to help develop and evaluate innovative “green health” strategies in schools. For a synopsis of the 22 different presentations and state-of-the-art studies presented at the workshop visit <<http://www.nccor.org/greenhealthworkshop>>. The big message is, “Keep moving!” Sedentary behavior kills more people than cancer, tobacco, and highway crashes. Gotta run now! 🙌

—Ihab Elzeyadi



photo: Bruce Haglund

NBM asserts, “Today, the scale and complexity of neighborhoods, towns, and cities are unprecedented, and so are our tools for understanding them.” How can this Madrid street be better understood?



photo: Bruce Haglund

The very green John Hope Gateway at the Royal Botanic Gardens Edinburgh by Edward Cullinan Architects.

SBSE AUTHORS' WINTER BOOK BONANZA

[Three of these new tomes are available as perfect stocking stuffers for your loved ones!—ed.]

LEONARD BACHMAN, TWO SPHERES

Leonard Bachman's forthcoming book, *Two Spheres: physical and strategic design in architecture* (Routledge, spring 2012) is entering production mode after the summer's work focused on writing.

TERRI MEYER BOAKE, UNDERSTANDING STEEL DESIGN

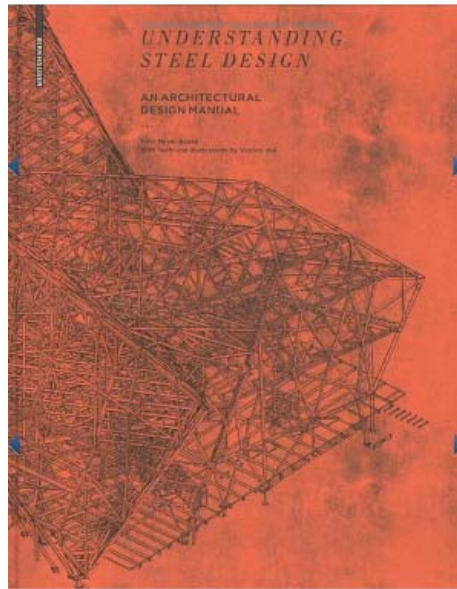
Terri Meyer Boake's new book, *Understanding Steel Design: an architectural design manual*, is finally out! Birkhauser is the publisher. There are about 550 color images and 100 line drawings. It's a no-numbers approach to understanding steel construction and includes a variety of areas of innovative application. The photos are about 95% Terri's. Vincent Hui of Ryerson University assisted with the technical drawings, which supplement some amazing drawings supplied by steel fabricators, who made a nice monetary donation to the book to allow full color and a longer page count than delineated in the original contract. For more info and images see <<http://issuu.com/birkhauser.ch/docs/understanding-steel-design>>.

NORBERT LECHNER, PLUMBING, ELECTRICITY, ACOUSTICS

Norbert Lechner just published his second book, *Plumbing, Electricity, Acoustics: sustainable design methods for architecture*, John Wiley & Sons, 2012. Although not mentioned in the title, it also covers fire protection and building conveyance systems. It's a companion book for his *Heating, Cooling, Lighting: sustainable design methods for architects*. Together the two books cover the subjects normally taught in environmental control courses.

FRANÇOIS LÉVY, BIM IN SMALL-SCALE SUSTAINABLE DESIGN

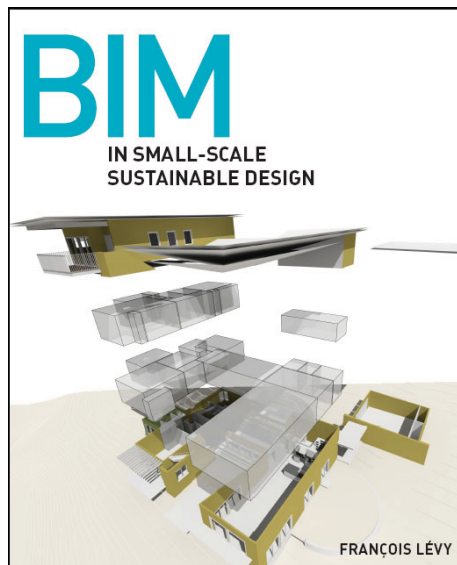
Wiley has just published François Lévy's new book, *BIM in Small-Scale Sustainable Design*, a guide to sustainable architecture within a building information modeling (BIM) workflow, emphasizing the quantitative validation of decisions when designing climate-load dominated buildings. Each chapter addresses specific topics, such as passive cooling and heating, rainwater harvesting and building hydrology, optimizing material use and reducing construction waste, and collaborating with other building professionals—all in the context of BIM. 🖱



cover: Birkhauser



cover: John Wiley & Sons



cover: John Wiley & Sons

2011 SBSE ELECTION RESULTS

PRESIDENT—ELECT

Pablo LaRoche—California Polytechnic State University, Pomona

SECRETARY—TREASURER

Troy Peters—ArchiPhysics and California Polytechnic State University, San Luis Obispo

Ihab Elzeyadi now begins his term as SBSE President, as Leonard Bachman becomes Past-President. Terri Meyer Boake rotates off the board, but we all know she will remain a committed core member of SBSE.

Walter Grondzik will continue as Awards and Scholarship Committee Chair and Michael McGlynn will remain Educational Resources Committee Chair. Bruce Haglund is the editor and Communication Committee Chair in perpetuity and Martha Bohm remains Webmaster.

My thanks to all for their efforts, time, and resources over the past two years of my term as President, and I look forward to continuing to serve SBSE in my new role as Past-President. Please renew your support for SBSE and commit yourself to the mission and objectives that we serve. Architectural education is at an important cusp. You can help make the difference.

My very best wishes to Ihab, Pablo, and Troy. 🖱

—Leonard Bachman



photo: Liliana Beltrán

John Reynolds and Liliana O. Beltrán visiting Passivhauses in Kassel, Germany, during the last ISES 2011 Conference.

✧ **Liliana Beltrán** was elected to represent ASES as an ISES Board Director, and the ISES Board Directors elected her to serve as Vice-President of Conference Affairs and as member of the Executive Committee (ExCo) for the 2012–13 term.

🏠 **Harvey Bryan** will be leading an ASU team that was awarded a DOE SunShot Rooftop Solar Challenge Grant for Arizona. This project will identify best practices in finance, permitting, and zoning to accelerate solar installation and reduce PV Balance-of-Systems costs. The project will drive adoption of an online solar permitting system for use by Arizona cities.



photo: Ralph Knowles

★ The University of Southern California (USC) School of Architecture is proud to announce that Emeritus Professor **Ralph Knowles** is the recipient of the 2010/11 Architectural Research Centers Consortium (ARCC) James Haecker Distinguished Leadership Award for Architectural Research. The Award, named in honor of ARCC's founding Executive Secretary, recognizes an individual who has made outstanding contributions to the growth of the research culture of architecture and related fields, including urban and regional planning, landscape architecture, and interior design. The award was presented on Saturday, November 12, at the ACSA Administrator's Conference in Hollywood, CA.

🏠 **Fionn Stevenson** has left Oxford Brookes University to take on a new role as Professor of Sustainable Design at the University of Sheffield. 🖐

SB11 IN HELSINKI

I recently had the opportunity to attend SB11 in Helsinki, October 18–21. SB11 was this year's World Sustainable Building Conference and its goal, as expressed on its web site, was to share leading knowledge and to find new solutions that could enhance sustainable ways of living and working within built environments. The conference was well-attended with more than 1,000 present from all over the world and featured 310 oral presentations and 200 posters. Since there were so many interesting presentations in parallel sessions, the only problem was deciding which ones to choose.

The first keynote session, organized by Richard Lorch, consisted of a group of four short presentations following the key theme, *Time*, in which the presenters were asked to look back 40 years, consider the present, and look ahead 40 years. Eighty years, an average human lifespan, was a reasonable yardstick to measure changes. Bill Bordass, Raymond Cole, Baizhan Li, and Alfred Ngowi presented their views, which were less about buildings and more about systems and communities, the importance of people, the importance of reducing GHG emissions, and the experiences in different continents. A second keynote group presentation included Michael Grätzel presenting a molecular photovoltaic device based on the sensitization of nanostructured oxide films by a dye or a semiconductor quantum dot. Another group of keynotes organized by G. Foliente emphasized the importance of quality of life and included Christophe Lalande, Human Settlements Officer, UN-HABITAT, and Cameron Sinclair, Co-Founder and CEO of Architects for Humanity. The relationship between climate change and human development becomes more important every day and particularly affects the world's poorest countries. I don't think we in the United States address this issue as much as we should. In our drive to increase performance and use the latest gadgets, we forget simple ideas that could benefit the many who don't have much.

I chaired a session on appropriate sustainable technologies, and it was interesting to see the difficulties in introducing low-tech sustainable technologies in different countries—challenges to implementing these technologies in less developed countries. I had the opportunity to present HMC's Frontier project in one of the parallel events called the Sustainable Building Challenge. In these sessions which have continued to be part of the conference since 1998, 47 buildings from around the world were selected as exemplary innovative sustainable building design concepts and key performance indicators in a one-day session and via booths and publications.

The many interesting sessions included the obligatory zero net energy building and Nearly Zero Energy Building (NZEB) sessions made important by the Energy Performance of Buildings Directive (EPBD), which requires all new buildings in the EU be NZEB by 2020. It was also interesting to see different rating systems from Japan, Europe, China, and Hong Kong, and how there is an increasing tendency to emphasize the importance of the neighborhood and larger urban scales. Many of these ratings reminded me of the importance of considering buildings as parts of systems and of how we should now think not only about better buildings, but also about better neighborhoods. Social events and a banquet that was out of my budget rounded out a very interesting conference.

There was live webcasting of sessions in the Main Hall on Monday and Tuesday, and it was also possible to send comments and questions using SMS-based technology. The videolinks to the main conferences are available at the conference web site. You can see many of the presentations online at <<http://www.sb11.org/sb11-helsinki/home.html>>.



photo: Pablo LaRoche

Hall in Finland—the Museum of Contemporary Art Kiasma.

—Pablo LaRoche

• continued next page

PLDC2011 IN MADRID

The 2012 Professional Lighting Designers Conference in Madrid this October was a first-time experience for me. First PLDC, first time in Madrid. Both impressed. It was no surprise I found Madrid to be an engaging city with perfect October weather. However, PLDC was a mystery that revealed itself as an amazing venue for discussing unfolding teaching and research efforts in lighting technology. Although heavily underwritten by the electric lighting industry, sustainability issues including daylighting were given serious consideration. There was a pre-conference session dedicated to lighting education. I imagined that a small gathering of a dozen or two would attend, but over one hundred educators jammed the venue. A good omen.

Although the keynote speakers were totally unknown to me, they proved to be inspirational. See for yourself at <http://www.pld-c.com/keynote-speakers/>. The conference sessions, attended by over 1,200 people, proved to be an intriguing four-ring circus, which unfortunately couldn't be observed all at one time, so I mostly hung out in the Lighting Application Research track, where substantive research and education issues were presented and discussed. But, as usual, we all desire clones to help take in the entirety of such events. It was hard to play hookey to explore Madrid, but I managed to break free for a long afternoon ramble, also quite rewarding.

The exhibition floor was dominated by lighting companies' displays of their latest LED fixtures. Most subtle among them was Philips, whose LEDs served as backdrop for chef Christer Elfving created world tapas (wapas) inspired by innovative lighting design case studies—imagine oysters, sushi, and paté combined with perfect condiments and washed down with champagne. I confess, they tasted like light! Corporate sponsorship also fueled daily receptions and special events. I was delighted to accept an invitation to Xicato's cosy 100-attendee, catered event on Friday night, and went home with a sample Xicato OLED lamp. The industry also supported conference content by offering presenters air fare subsidy, one night's lodging, exemption from conference registration, and an honorarium!

The conference venue was an inspired choice—Circulo del Bella Artes founded by Pablo Picasso, an art moderne high-rise in central Madrid. The building's small footprint meant that the conference was held on multiple floors, so that attendees enjoyed considerable aerobic exercise on the grand staircase connecting the five floors of conference space. Conference hotels inspired short walks to the venue and throughout the heart of Madrid. The exercise was an antidote for the generous catering provided—coffee and treats, luncheons, and nightly receptions (as well as Philips' wapas). Between being well-fed and highly engaged, I found it hard to spend my Euros in Madrid.

A few SBSEers were in attendance, but I'm sure a larger cadre will attend PLDC2013 in Copenhagen. No date has been specified yet. Stay tuned. 🖐



Chef Christer Elfving at work in the Philips exhibit.



PLDC delegates enjoyed the Circulo's fan-ventilated café.

JOB OPS

THE CATHOLIC UNIVERSITY OF AMERICA

The School of Architecture and Planning at CUA in Washington, DC, is conducting six faculty searches this year. Of particular interest to those involved in SBSE are the position in Environmental Systems and the two positions in Sustainable Design. Details can be found by clicking on the link at the bottom of <http://architecture.cua.edu/people/facultyposition-sopen.cfm>.

PENNSYLVANIA STATE UNIVERSITY

The PSU Department of Architecture announces an opening for a tenure-track position at a rank commensurate with experience, with the appointment beginning Fall 2012. The successful candidate is expected to integrate digital design throughout the architectural curriculum. A demonstrated interest in inter- and cross-disciplinary collaboration in teaching and research within the college and university is desired.

For further info contact Chair of Architecture Search Committee Ute Poerschke or Mary Cavanaugh <mcc6@psu.edu>. Application review will begin January 9, 2012, and continue until the position is filled.

UTEXAS SAN ANTONIO

The Department of Architecture at the University of Texas at San Antonio invites qualified individuals to apply for three to four tenure-track positions at the rank of Assistant or Associate Professor, beginning in August 2012, pending budget approval.

Architectural Design positions' responsibilities include teaching architectural design studios and lecture/seminar courses. Current areas of interest within the program include building technology, sustainability, architectural history, urban design, regionalism, historic preservation, theory, and criticism. For full description see our web site <http://www.utsa.edu/architecture>. 🖐

OPPORTUNITY KNOCKS

Uganda Martyrs' University is currently gearing up to host a conference—*Sustainable Futures: architecture and urbanism in the global south* to be held in Kampala, June 27–30, 2012. Further details are available on the conference web site www.sfc2012.org. This conference will be a good opportunity to promote SBSE in Africa. 🖐

—Mark Olweny

—Bruce Haglund

BALL STATE GOES GEO



photos: Ball State University

The BSU geothermal project is operational—half the buildings on campus (~20) are on line and the second phase (south half of campus) is underway.

Pictured above is the north energy station with its green roof. Its two ground source geothermal heat pump chillers eliminate two coal-fired boilers and will reduce GHG by some 40,000 MT. *[Well done, you!—ed.]*

More info available at <http://cms.bsu.edu/About/Geothermal.aspx>. 🖱

—Bob Koester

SOLAR ENERGY MAKES SENSE

When someone learns that I'm in the solar industry, the first question is almost always, "Do you think that solar energy makes sense now?" My only answer that fits neatly into a casual conversation is, "Given that solar energy is responsible for the creation and sustenance of all life on Earth, I'd say that it makes a fair amount of sense."

Truly, there's a perceptual problem when people think of solar energy as cute bluish panels on roof tops. This image needs desperately to be overcome! I like PV, I teach about PV, but if you consider that the sun not only heats our buildings but grows our food, provides the vast majority of energy used by human civilization (including chemical storage as fossil fuels), and, fundamentally, warms the Earth enough for liquid water and allows life to overcome thermodynamic oblivion—really, we are essentially a form of solar energy. We're just complicated sunlight.

So, yes, it makes sense. It would make even more sense if we started acknowledging that all cultures around the world and all their economies are powered by solar energy, and the question encompasses how we apply ourselves individually and collectively to participate most wisely and beautifully in the torrential flow of light. 🖱

—Christopher Gronbeck



photos: Bruce Haglund

Quiz: Explain how this aggressive, four-story green wall at Caixa Forum in Madrid is solar powered.



SBSE NEWS
C/O BRUCE HAGLUND
DEPARTMENT OF ARCHITECTURE
UNIVERSITY OF IDAHO
PO BOX 442451
MOSCOW, ID 83844-2451

SPRING ISSUE SUBMITTAL DEADLINE—MARCH 1

FIRST CLASS MAIL