

photo: Alison Kwok

Stephen King Yin Tang, David Bartley, Fai Chong, Nick Rajkovich, Alison Kwok, Frank Sun, David Vogel, Marc Schiler, Sam Jensen Augustine, and Mike Utzinger on the dock at West Lake in Hangzhou.

SBSEERS TAKE ON XIXI WETLANDS PARK

SBSEers participated in a sustainable design charette in the Xixi Wetlands Park in the Yuhang district of Hangzhou, China. Alison Kwok (Oregon) and Frank Sun (Hong Kong) organized a team to develop a conceptual design proposal for a 25,000 s.f. building that incorporates a video production studio, main hall, and education annex. The team members—Sam Jensen Augustine (CCA), David Bartley (Oregon), Fai Chong (SOM), Nick Rajkovich (Michigan), Marc Schiler (USC), Stephen King Yin Tang (Oregon), Mike Utzinger (Wisconsin—Milwaukee), and David Vogel (EHDD Architecture)—met on site from August 25 through September 1.

The local and provincial governments as well as Sally Wu, the well-known news anchor and star host of Phoenix Television, sponsored the charette after the Chinese government designated land in the Xixi Wetlands Park for her video production studio. She expanded the program to include an annex that would serve as a research and education wing for sustainable technologies and post-occupancy evaluation. The case study project is thus named Xixi Li She (XXLS).

Wu brought in a film crew to document the fascinating process. During the spirited debates, computer simulations, hand sketching, model building, and digital model development team members were pulled aside and interviewed about sustainability, their impressions of China, and their individual research work. Team members often found themselves looking into a camera instead of participating in the unfolding drama of the charette.

Our visit began with a press conference with party officials and Wu who welcomed the team and described the importance of sustainability for Hangzhou and the province. To investigate precedents we toured a collection of old buildings being rebuilt on the Xixi Wetlands—houses and shop buildings which were deconstructed in other areas of China

• continued page 3

SBSE CALENDAR

- 2011
- Apr 20–24 ARCC Conf/Detroit, MI
 - May 16–21 ASES Conf/Raleigh, NC
 - Jun 15–18 SBSE Retreat/Albuquerque, NM
 - Jul 13–15 PLEA/Louvain-la-Neuve, BE
 - Aug 4–7 BTES Conf/Toronto, ON 🖐

DUES STILL DUE!

The winter solstice is nigh! It's way beyond time to pay your annual dues. See <<http://www.sbse.org/membership/>> for details. 🖐



photo: Jimmy Buffet?

SBSEers Bruce Haglund, Anna Maria Orru, and Walter Grandzik trekked to Key West to investigate the locals' response to sea-level rise. Findings: Party on! (unfortunately).

LETTERS TO THE EDITOR

I can't open and read SBSE digest topics on my iPad. I just get error messages. Is there anything you (or I) can do to work around this issue?

—Vidar Lerum, Illinois

[Wow! This problem is beyond me! So I directed it to our IT gurus who said, "This glitch is actually an issue with the digesting function of our current Mailman installation, which is fairly outdated. We have plans to upgrade in the next year or so, but not immediately. In the meantime we recommend changing your subscription on the SBSE list to a regular subscription, which is not filtered by our Mailman digest function, so will be displayed properly for you." My alternative solution is to access the list server archive from your iPad when you can't get digest messages. Sorry for the less than robust technology!—ed.]



The International Council for Research and Innovation in Building and Construction (CIB) has recently named BRI one of its two "Recognized Journals" due to its excellence and relevance. CIB now has two categories for journals—"Recognized" and "Endorsed." "Endorsed" has a lower standard and contains 28 journals.

Finally, there's been positive feedback on the contents of BRI's 2010 special issues, as well as papers in the regular issues. Please take some time to draw the attention of appropriate colleagues and students to the special issues or to specific papers. These issues are terrific. 🙌

—Richard Lorch, Building Research & Information

[Well done, you! See the BRI special issue review on page 6.—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>>.

2ND CALL FOR PARTICIPATION—RETREAT 2011

🐼🐼 DEADLINE FOR WORKSHOP PROPOSALS: **MARCH 1, 2011** 🌲🌲🌲

It's time to finalize your workshop proposals for our SBSE 2011 Retreat. Please send submissions and question to Leonard Bachman at <LBachman@mail.uh.edu>.

The 2011 SBSE Retreat will focus on numerous small-scale, personal interactions and a few large-group summary sessions. As such, many intimate discussions will happen concurrently and each break-out group will present a summary statement to a full gathering of participants. We are planning two such cycles per day with lots of unstructured time for networking, cross-group discussions, and other free-form activities, including mealtime chats, walking in the desert, and plundering each other's syllabi.

Topics The potential scope of sessions is quite broad, but will focus on innovative and emerging pedagogical techniques, assessment, technology, and trends embraced by SBSE members in the realm of teaching and learning within our unique discipline and knowledge areas. Beyond anecdotal discussions of what happened in a unique class offering or two, the idea here is to share perspectives on the changing approaches, principles, and context of architectural education as general and applicable methods. Each session will be formed around relevant "take aways." A nonexclusive list of interests would include at least some of the following:

Assessment

- Defining learning objectives at the course and the program levels
- Designing grading rubrics and grading forms
- Testing and measuring reliability and validity
- Other assessment tools

Pedagogy

- Strategies used to enhance student engagement
- Evolutions in studio culture and the learning environment
- Example pedagogy based on specific projects or course design
- Moving from teacher-centered instruction to student-centered learning
- Identification of active learning strategies in lecture and in studio courses
- Integrated curriculum models, vertical studios, etc.
- What's new in problem- and project-based learning
- Simulation tools for teaching
- Tried-and-true things to remember

Technology and Teaching

- Teaching resources (e.g., online/hybrid classrooms, videos, seminal articles)
- Teaching technologies (e.g., classroom response clickers)
- Time management and workload issues
- Web-based learning platforms (e.g., Blackboard) 🙌

—Leonard and Christine Bachman, Theme Coordinators

COMING IN THE SBSE NEWS SPRING ISSUE

Low-carbon building and climate change expert, Rajat Gupta, has been awarded a major research grant of £1.14 million by the UK's Economic and Social Research Council (ESRC) to lead an interdisciplinary team of researchers from Oxford Brookes University (OBU) and University of Oxford (OU) on a three-year, cutting-edge research project on low-carbon communities. Stay tuned for details! 🙌



Rajat poses with the usual suspects in the Oxfordshire countryside.

SBSEERS TAKE ON XIXI WETLANDS PARK [CONT.]

and painstakingly salvaged, numbered, and reconstructed. Aman Resort <<http://www.aman-resorts.com/amanfayun/home.aspx>>, a beautiful setting for high-end tourism with pathways, rich tones, mud plastered and local rock walls, provided both formal and functional inspiration to the team. Various local materials and construction processes were studied and photographed. Climate and site data were translated, where necessary, then studied and simulated. The resultant design begins with enhanced natural ventilation and careful shading since a significant portion of the year falls within the various extended comfort zones. All spaces are daylighted. The studio lights are vented via a roof lantern and clerestory.

Demands of the video production studio and the banquet functions, coupled with the climate necessitated active systems for both winter heating and summer cooling. Passive cooling was particularly difficult due to high levels of humidity. A ground-source heat pump provides the necessary cooling and heating capacity. In the video production studio space, a raised floor provides displacement cooling and electrical distribution. In the rest of the complex radiant hydronic floors provide heating and fan coil units provide cooling.

The team developed site goals that included “respecting the aquatic environment of the site” through pier penetrations at the water’s edge for the studio; “limiting the use of automobiles on the site” by allowing only pedestrians, bicycles, and electric vehicles to approach the building (though VIP parking was mandated); “preserving the view of the night sky” by specifying light fixtures with severe cut-off angles; “creating a habitat for native species” through the use of native landscaping and aquatic fauna; and “connecting people to the beauty of nature” by providing pathways for walking along the water’s edge and through a sustainability garden featuring demonstrations of cisterns, organic gardens, PV canopies, wind turbines, and water features.

Energy goals were set and met with photovoltaics and a biogas reactor sized to generate approximately 75% of the building’s electricity needs. Unfortunately, Chinese utilities are not yet ready to absorb, let alone purchase, excess power from the site. Consequently, a large battery backup and storage system was needed to buffer loads and augment generating capacity.

The theme of “no waste” also meant that rainwater be collected from roofs and stored in cisterns, and that gray water and black water be processed for the entire site. Sewage and waste digesters provide methane for power generation. The water and waste processing, as well as the synchronous inversion and mechanical systems, are on display as educational demonstrations and for post-occupancy monitoring. Goals for the use of materials also strive to eliminate waste by using building materials from the region. Clay roof tiles from an old teahouse buried on the site have been salvaged for reuse on the building roof; local river stone, quarried rock, bamboo glu-lam, and finish materials are specified as low-impact building materials. Recycling is encouraged throughout the complex.

On the final day, at a special province forum organized by the government and hosted by Wu, the schematic design was presented to 300 business representatives, developers, and investors from China and Hong Kong. Alison, Nick, and Sam gave a Powerpoint presentation of the team’s work, along with a two-minute mini-documentary showcasing much of the week’s activities. See it on YouTube <http://www.youtube.com/watch?v=JKIBXwAGu_w>.

We anticipated special foods at every meal and were treated to a variety of Chinese cuisine throughout the week, with lunches and dinners often exceeding 20 courses including specially farmed organic seafood, meats, and vegetables prepared by the Xixi Wetlands staff. Our meals featured a variety of special “eco-food,” such as shrimp, tripe, turtle, duck tongues, taro, fish, jellyfish, soups, crab, and watermelon juice—always ending with a fruit platter.

The government, Sally Wu, and Benji Chou (her business manager and husband) were superb and gracious hosts throughout the experience. The project was enjoyable for all and, we hope, a productive project for Hangzhou. We anticipate that our hosts will produce a number of artifacts from the charette over the next few months, which we hope will be shared with the team (and SBSEers). Stay tuned! 🙌

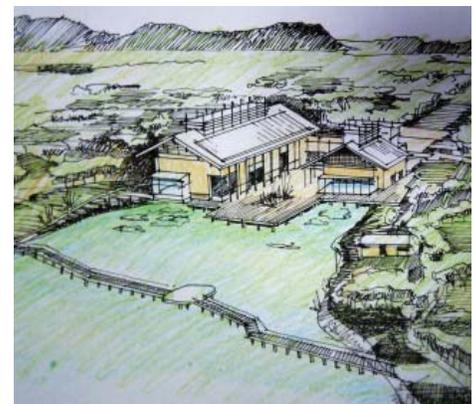
—Marc Schiler



Mike Utzinger and Marc Schiler describe technology systems to Sally Wu and Benji Chou as her camera crew record the discussion.



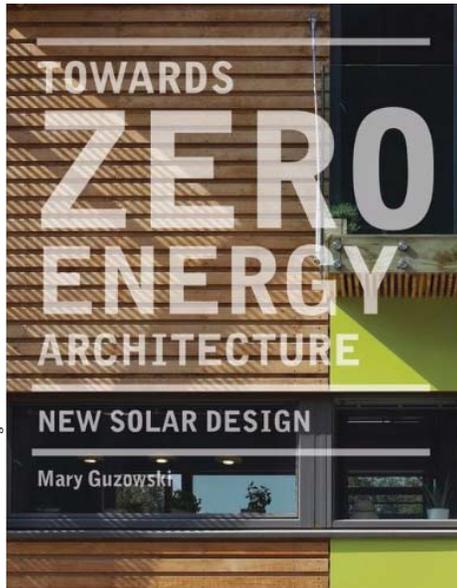
Sam Jensen Augustine, Mike Utzinger, and Marc Schiler work on renderings and calculations.



Xixi Li She (video production hall and community hall on the left and education wing on the right) as rendered by David Vogel.

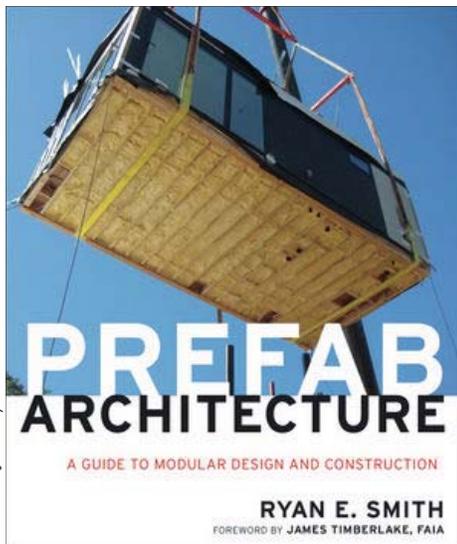
SBSE BOOK PEOPLE

✦ *Towards Zero-Energy Architecture* by **Mary Guzowski** explores the theories, practices, and principles of new approaches to solar architecture that foster both design excellence and low energy use. It argues that architecture students must re-engage the forces of the sun to respond to the profound challenges of global warming and climate change.



book cover: Laurence King

✦ **Ryan Smith** announces the release of *Prefab Architecture*. It's a professional and educational text that includes the history, theory, principles, outputs, materials, fabrication, assembly, and case studies of off-site construction and fabrication. Ryan is teaching with the book in the spring semester in an industry-, fabrication-oriented studio. Educators can order a desk copy through Wiley. See <<http://www.wiley.com/buy/9780470275610>> for more information. 🐾



book cover: John Wiley & Sons

THE LEADING EDGE WINNERS

The 2009–10 Leading Edge Student Design Competition has concluded, and the winners have been announced. Results are posted at <<http://www.leadingedgecompetition.org/winners.htm>>. [Congratulations to SBSEers **Bob Koester** (Ball State), **Sandy Stannard** (Cal Poly SLO), and **Hofu Wu** (Cal Poly Pomona) whose students gained recognition for their studio work.—ed.]

Your enthusiasm for Leading Edge and inclusion of the competition in your curriculum is vital to our continued success. The work of the students is obvious in their entries. The work of faculty and department personnel in making these student entries possible does not go unnoticed. We want to recognize that contribution and have prepared the attached letter of thanks as a small way to acknowledge the good work you do.

We'll be preparing the next Leading Edge Challenges over the coming months for the 2011–12 school year. We hope to again see your school's name on our registration lists.

—Patricia Heatherly

A conversation with Bob Koester alerted me to the just-announced success of his students in the Leading Edge design competition [Challenge 1 First Place and Merit winners.—ed.]. Congratulations, Bob and all! Jury comments can be found at <<http://leadingedgecompetition.org/2009-10/web/judging.htm>>. An important corollary for all of us to ponder is Bob's comment to the Project Manager of the competition, "I would recommend that you make available on the web site the technical support documents. It's simply not informative to have only the jury comment spreadsheet that says 'passed technical judging' as currently presented. The implicit argument is that technical issues are not merely 'design related,' which is reinforced by the segmentation of the very jury titling—Technical Judge and Design Judge. It would be helpful to have comments (post-facto reflections) from the jury on that very issue."

The lack of integration of design and technical features has contributed mightily to the poor energy performance of buildings and continues to do so all too often. Unless well-intentioned juries and the public demand, as a matter of course, a comprehensive and integrated solution to their problems (which we can also call a sustainable solution), we will continue to be distracted by details (of design or of technology) from the real challenge facing us—climate change mitigation in all its complexity. 🐾

—Peter Papesch



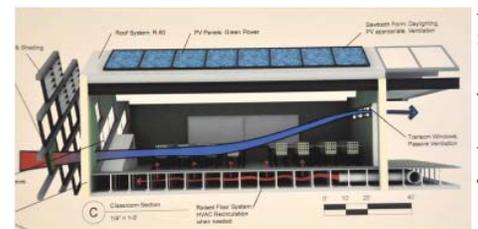
Courtyard view of the winning entry by Ball State students **Erin Chapman, Andrew Hesterman, and Jason Klinker** led by **Bob Koester**.



Courtyard view of the second place entry by CalPoly Pomona students **Rudolph Marnich, Rob Yamnitz, and Michael Yao** led by **Hofu Wu**.



Sandy Stannard and Woody Combrink's student Cindy Wong gained a second place in Challenge 2 for "Habitat for Dynamism."



Ball State students **Xiorelis Ferrer, Kate Lengacher, and Ben McHugh**, led by **Bob Koester**, won a merit award.

images: from the teams' competition boards

NAED DISCUSSES DESIGN RESILIENCY

The National Academy for Environmental Design (NAED) held its second annual council meeting and annual business event in late October at the ASLA Headquarters Building in Washington, DC. NAED promotes research, scholarly cooperation, and a multi-disciplinary knowledge base to advance sustainable design and stewardship of human and natural environments <<http://www.naedonline.org>>.

SBSE was represented at the meeting by Dennis Andrejko, who also holds a seat on the council as a representative of the AIA. The meeting provided an opportunity to tour the intimate and creatively curved green roof atop the American Society of Landscape Architecture's Eye Street office and included time for socializing and refreshments with views of the city. The meeting agenda included a robust discussion on advancing NAED's strategic goals and finalizing an MOU with Luck Development for office space at Ni Village, which NAED intends to occupy in 2011. Ni Village is a planned sustainability community in Spotsylvania County, VA, that will offer commercial, residential, retail, and educational facilities <<http://www.nivillage.com>>.



A gaggle of NAED annual meeting attendees gathered on the ASLA HQ's green roof to socialize and refresh.

A two-day workshop held at the Keck Center was aligned with the annual meeting and attended by over 150 delegates. The workshop, "Disaster Resilient Design," focused on disaster relief and design resiliency. NAED and the National Academies Disasters Roundtable co-sponsored the event, which was the fruition of extraordinary planning and effort by NAED council member James Westcoat of MIT. The workshop began with several position statements offering diverse perspectives on sustainability and resiliency. These "Ignition Sessions" included brief discussions on topics ranging from Resilient Communities to Vascular Analogy, to Fracture Critical (by Tom Fisher, UMin). Day Two of the workshop included additional presentations and a panel on Resilience and Sustainability moderated by NAED President Kim Tanzer (UVa). Three breakout sessions provided in-depth discussion on Integrating Sustainable and Disaster-Resilient Design, New Models for Disaster-Resilient Design Research and Education, and Disaster-Resilient Design in International Contexts. A summary of the Integrating Sustainable and Disaster Resilient Design Working Group was provided by SBSEer Victor Olgay, and then an overall workshop summary concluded the second day. Look for a position paper on the workshop event by NAED and the National Academies in early 2011, in addition to postings on the NAED web site. 🖱



SBSEer Victor Olgay presents his working group's summary to the Disaster Resilient Design workshop delegates. [No, they're not wearing empty seat suits!-ed.]

—Dennis Andrejko

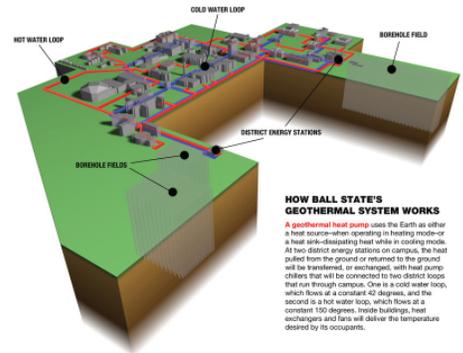
KUDOS FOR BALL STATE

AWARD FOR EXCELLENCE IN CLIMATE LEADERSHIP

Ball State University received Second Nature's First Annual Climate Leadership Award for Institutional Excellence in Climate Leadership. Award recipients were recognized at the Fourth Annual American College & University Presidents' Climate Commitment (ACUPCC) Summit in Denver, CO, on October 12, 2010.

2010 TECHNOLOGY INNOVATOR OF THE YEAR AWARD

The Hoosier Environmental Council (HEC) recognized Ball State University with this award during its third annual Green Policy Forum on November 6, 2010.



HOW BALL STATE'S GEOTHERMAL SYSTEM WORKS
A geothermal heat pump uses the Earth as either a heat source when operating in heating mode or a heat sink—dissipating heat while in cooling mode. All two district energy stations on campus, the heat pulled from the ground or returned to the ground will be transferred, in exchange, with heat pump chillers that will be connected to two district loops that run through campus. One is a cold water loop, which flows at a constant 50 degrees, and the second is a hot water loop, which flows at a constant 150 degrees. Inside buildings, heat exchangers and fans will deliver the temperature desired by its occupants.

image: Ball State web site

In 2009, Ball State University broke ground on a new ground-source geothermal district heating and cooling system that, once completed, will be the largest district system in the country. The project will serve as a national model, demonstrating that district geothermal is a feasible and economically viable option. When complete, the system will replace four coal-fired boilers and save the university significant operating costs—not to mention reducing its carbon footprint by approximately half. The project is stimulating jobs in Indiana as well, creating work for 44 firms in 15 counties from Fort Wayne to Evansville. More information about the project can be found at <<http://www.bsu.edu/geothermal>>. 🖱

—Bob Koester



photo: Bruce Haglund

STUFF FOR YOU

SBSEERS DISCOUNT FOR MAKING SENSE OF GREEN MATERIAL CERTIFICATIONS



image: BuildingGreen

The number of “green certifications” is large and growing, there are more than 100 in the U.S. alone. The experts at BuildingGreen.com have put together a new report, *Green Building Product Certifications*, to show you how to cut through the confusion in order to identify the handful that are truly relevant to sustainable building projects. This 87-page PDF guide helps you steer clear of irrelevant claims and focus on what’s important:

- * a bird’s-eye view of the certification world
- * the key green certifications spanning multiple building product sectors AND within each product group
- * a sector-by-sector look at certifications.

We’re offering a special 25% discount for SBSE members—full price: \$79; SBSE members: \$59. Just go to <<http://www.BuildingGreen.com/uc/SBSEcertreport>> to take advantage.

—Jerelyn Wilson

DOE’S EXCELLENCE IN BUILDING SCIENCE EDUCATION WORKSHOP

Please note the Building America web site announcement for the Excellence in Building Science Education workshop on January 13, 2011, in Orlando, FL. See <http://www1.eere.energy.gov/buildings/building_america/building_science_mtg.html>. 🖱

—Sam Taylor

BOOKS AND STUFF REVIEW NOOK

STORMS OF MY GRANDCHILDREN: THE TRUTH ABOUT THE COMING CLIMATE CATASTROPHE AND OUR LAST CHANCE TO SAVE HUMANITY

I highly recommend James Hansen’s latest book not because it is well-written (it is not), but because of its content. Hansen is the director of the NASA Goddard Institute for Space Studies and an adjunct professor in the Department of Earth and Environmental Science at Columbia University’s Earth Institute. He is an internationally recognized scientist in regard to climate.

Hansen chronicles how he became aware of the crisis facing us. He shows how the evidence for severe climate change has been building to the point where it is quite clear that the climate is likely to tip and cause extreme changes to the planet. It is his conviction that the world must get serious or face severe consequences. “Business-as-usual greenhouse gas emissions, without any doubt, will commit the planet to global warming of a magnitude that will lead eventually to an ice-free planet. An ice-free planet means a sea level rise of about 75 meters (almost 250 feet).” (p. 250) He repeats this 75-meter warning at least twice. It is not a slip of the pen.

We usually do not hear such extreme scenarios from scientists, in part because the culture requires an emphasis on facts, not predictions or speculations. Unfortunately, such restraint gives the public false hope, denying the severity of the situation. Hansen feels he owes it to his grandchildren to alert us to the danger to the world’s people and even to civilization. His research has shown that there were many times in the past when the earth experienced rapid climate change in decades, not just centuries. Thus, it is possible for the climate to tip and change radically in a short period of time.

—Norbert Lechner

BRI SPECIAL ISSUE

Building Research and Information Journal (BRI) published a special issue in October 2010, guest edited by SBSEers Fionn Stevenson and Adrian Leaman. Its focus is linking behaviors and performance through housing occupancy feedback. The issue includes a collection of research papers that should enrich the architectural discourse on evidence-based design in relation to the design of low-energy houses. Scholars from the UK, Canada, Australia, New Zealand, the Netherlands, and Japan took a critical look at residential case studies using surveys and performance monitoring to link occupants’ behavior to building performance. This scientific research represents a fine, rigorous investigative work supported by a critical mass of high-performance and zero-carbon houses found in Europe, in the British Commonwealth, and in Japan. Data and feedback refer to regularly occupied houses and not houses built for demonstration purposes. With the still emerging interest in similar new directions in the U.S., topics covered in this special issue should be of interest to SBSEers. Findings would complement some of the current initiatives, such as the Architecture2030 Challenge and Energy Star. For more information visit <<http://www.rbri.co.uk>>. A number of articles are free to download from the web site. This special issue can be purchased for \$55 via the web from the publisher <<http://www.tandf.co.uk/journals/spissue/rbri-si2.asp>>.

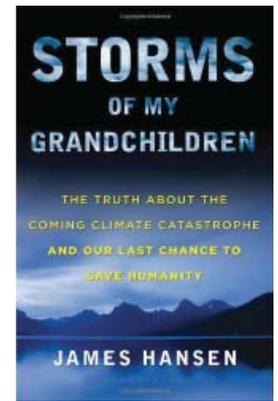
—Khaled Mansy

SLOAN-C INTERNATIONAL CONFERENCE ON ONLINE LEARNING

Here is a brief summary of key research and trends in online education as presented at the 2010 Sloan-C Conference held in Orlando, FL, Nov 3–5.

Online teaching and learning is growing at a tremendous rate in K–12. Virtual schools are offering new options to educators and students nationwide leading to an explosion of online learning opportunities for children. NACOL reported that a 1,500,000 K–12 children were enrolled in online learning courses in 2009. The number of high school students and now middle school students enrolled in online courses is exploding.

• continued next page



book cover: Bloomsbury

WORKSHOPS TOWARD A GREEN FUTURE

Proof that the building sector community is interested in green futures rests in fully subscribed workshops at various conferences or conventions. At Build Boston 2010, the three workshops for which I acted as moderator and presenter were full and resulted in lots of audience participation during the Q&A sessions. The workshops were Living Systems Thinking and Ecological Literacy (with Bill Reed), Green Modular Building Delivery (with Chuck Savage of Kullman and a GSD grad student presenting Lumenhouse), and Green IPD and Fair Compensation for Contribution to Value (with Scott Simpson and Emma Corbalan of Kling–Stubbins). The same cast of characters will also participate in a day-long workshop series at the 2011 AIA Convention in New Orleans, augmented by our Green BIM workshop participants (Karen Kensek of USC; Mara Baum of Anshen & Allen; and Jim Bedrick of Webcor). All these workshops are aimed at summarizing the cutting edge tools, skills, and methods available to building sector professionals collaborating on sustainable and living systems projects.

Separately, our committee is still pushing on several fronts to inspire institutions that educate building sector professionals to develop their own curricula, which will ensure that all graduates are competent and armed with the arsenal of tools, skills, and methods to design sustainable and living systems projects.

On another front we are grappling with the strategies for having architects recognized for their imaginative, creative, and coordinating skills by their teaching in other departments of their various institutions of higher education (especially in engineering and business, but also in the humanities and the sciences).

Finally, we are asking our members to envisage a day 25 or 50 years out, and what they hope their children or grandchildren will be able to say about the condition of the world we have left them. By formulating such visions we hope to establish missions within the compass points of ethics, beauty, planetary regeneration (by way of climate change mitigation), justice, and economic self-sufficiency. We are guided by the Living Building Institute's question "What if every single act of design and construction made the world a better place?" 🖐

—Peter Papesch

BOOKS AND STUFF REVIEW NOOK [CONT.]

Students in 2010: A Pew Internet study reports that 87% of youth between 12 and 17 use the Internet. The reform and redesign in K–12 nationwide focus on virtual schools and online courses, and thus will provide a range of courses available to students. The DOE National Education Technology Plan recommends that every student have access to e-learning and that each teacher have access to e-learning training. These changes suggest that in 2020 college students will require education suited to their K–12 experiences.

Several meta analyses, one of which was conducted by the Department of Education, report that online learning is "as good or better" than traditional learning. The Department of Education review indicates that, on average, students who took all or some of their classes online performed better than those who took the same courses in a traditional classroom probably because students in online learning spent more time on-task. Similarly, an article recently published by the *Chronicle of Higher Education* research division focuses on the benefits of online learning and future of education over the next decade. The authors discuss the "fundamental transformation" in higher education, what students want, and ways to get there. **The traditional model of education is never coming back and educators need to address the needs of today's students.** [*ed.'s emphasis*] For instance, the full-time residential model of higher education is too expensive, and, thus, we need lower-cost alternatives. Retention and graduation rates need to be addressed too. This report also indicates that "students want to design their own curricula to fit their learning style." Institutions and educators that hold on to traditional forms of course delivery may find themselves noncompetitive in the very near future.

The Sloan–C Conference message was clear. Federal funding is available to innovate and develop K–12 online curricula. The sessions focused on: (1) various ways to transform teaching and learning, (2) the dire need for change, and (3) focus on the pros and cons of online education. 🖐

—Christine Bachman

JOB OPS

AMERICAN SOLAR ENERGY SOCIETY

The Board of Directors is seeking an Executive Director who will be the "face of ASES" and guide the organization through a period of rapid change and growth, working to catalyze a movement of champions in this industry including members, technical divisions, chapters, community leaders, board members, donors, and solar advocates. A full position summary including responsibilities, qualifications, and experience required is available at <<http://www.ases.org/jobs>>. To apply send a PDF that includes a cover letter detailing your qualifications and salary requirements, as well as a résumé including education and experience. We will not consider applications that exceed three pages total including cover letter and résumé. All correspondence must be electronic and sent to <jobs@ases.org>. Applications will be received until January 15, 2011.

KANSAS STATE UNIVERSITY

The Department of Architecture at KSU invites applications for two tenure-track faculty positions beginning August 2011. Appointments will be at the assistant or associate professor rank, salary will be commensurate with the candidate's qualifications.

Design/Technology: The successful candidate will demonstrate the potential for excellence in teaching architectural design studios across the curriculum and ability to develop and teach seminar and large lecture classes in either: (1) contemporary building materials and construction systems or (2) climate-responsive design and passive/active environmental systems.

To apply candidates shall send a letter of interest addressing qualifications above, a curriculum vitae, a list of three academic and/or professional references with complete contact information, and non-returnable examples of creative/scholarly work to: Prof. Bob Condia; Chair, Faculty Search Committee; Department of Architecture; 211 Seaton Hall; Kansas State University; Manhattan, KS 66506–2901. Digital submissions are not acceptable. Additional contact information: e-mail <condia@ksu.edu>; tel 785.532.5953; fax 785.532.6722; web: <<https://webmail.k-state.edu/service/home/~capd.ksu.edu/about/employment>> and <<http://capd.ksu.edu/arch>>. Applications must be postmarked by January 12, 2011. 🖐

MORE SBSE PEOPLE

✦ At Greenbuild in November, **Alex Wilson** received the 2010 Hanley Award for Vision and Leadership in Sustainable Housing. He was deeply honored and appreciative of this acknowledgement of his three decades of dedicated research and writing on sustainable building issues. Wilson pushed the envelope through the publication he founded in 1992, *Environmental Building News*, moving the building industry forward in his quiet and determined way. Alex is highlighted in a feature article in the most recent *EcoHome* magazine, available digitally at <<http://www.ecohomemagazine.com/toc/the-magazine.aspx>>.

✦ **Robert Young** won a University of Utah Distinguished Teaching Award that recognizes “consistent outstanding teaching” that integrates “innovative pedagogy” and “demonstrates exceptional abilities to motivate student learning.” The award also recognizes “concern for students and their wider education” and “exemplary contributions to the educational process outside the classroom.” His teaching and research focus on environmental systems and stewardship of the built environment using historic preservation and reuse of existing buildings to enhance sustainability. 🙌



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

NEW GREEN ARCHITECTURE PHD AT OREGON

The University of Oregon Department of Architecture is thrilled to now offer a PhD in Architecture with a focus on sustainable design. Alison Kwok has been appointed our first PhD Program Director. The development of this post-professional doctoral program has been a collaborative effort involving a dynamic faculty team with expertise in the fields of building science, urban design, design theory, and historic preservation. Below is excerpted from our press release.

—Christine Theodoropoulos

The University of Oregon announces the state’s first PhD in architecture, focusing on the art and science of sustainable design. The new doctoral program offers students pursuing an advanced degree the opportunity to examine sustainability at multiple scales—city, building, and material. The Oregon University System Board approved the program at its meeting on October 28. Applications will be accepted starting November 15. The application postmark deadline for fall term admission is January 3, 2011.

The curriculum fosters close collaborations between prospective doctoral students and the active research agenda and signature labs directed by architecture department faculty. Such mentorship and collaboration ensure that doctoral students are engaged in teaching and research fellowships that provide them with up to four years of funding support.

For more information about the program and to obtain application material and requirements please visit our web site at <<http://architecture.uoregon.edu>>, e-mail <archadms@uoregon.edu>, or call us at 541.346.3656. 🙌

SPRING ISSUE SUBMITTAL DEADLINE—MARCH 1

FIRST CLASS MAIL