



photo: Terri Meyer Boake

A peanut gallery of SBSEers (Bachman, Zaretsky, LaRoche, and Wasley) join some greats from the past in anticipation of the Oxford Union debate.

THE OXFORD CONFERENCE 2008 IN REVIEW

SBSE proudly sponsored the 2008 Oxford Conference chaired by Sue Roaf, held in the Examination Schools of Oxford University, July 21–23, 2008, and attended by over 370 participants from 40 countries. Conceived as a response to the 1958 Oxford Conference on Architectural Education amidst the hotbed of Modernism, the “New Agenda for Architectural Education” was not articulated pre-conference, but clearly the collective agenda was on climate change, the environment, the social realm of architecture, and other aspects of sustainability. At least a dozen SBSE members presented papers or chaired sessions.

The conference began Monday evening with a thought-provoking debate at the Oxford Union on the proposition “Architecture would be better off without Schools of Architecture.” Peter Buchanan and Robert Adam led the debate for, with Sir Peter Cook and Jeremy Till against. The debate format welcomed attendees to mount the podium and speak for or against, so our Terri Boake and Leonard Bachman dissented eloquently. Fascinating arguments were presented on both sides, with most agreeing both architectural practice and education need significant revision. The evening’s comments were impressive and echoed in discussions and presentations throughout the ensuing conference.

Tuesday morning’s plenary session included a welcome by Bruce Haglund who also led one of the morning fora. Additional plenary presentations were by Sunand Prasad, President, RIBA; Dennis Andrejko, AIA; Chris Johnson, Gensler, UK; Nina Maritz, an inspirational architect from Namibia; and finally Christopher Alexander, Architecture Professor Emeritus, UC Berkeley. The diversity of morning speakers provided a sense of what the conference might offer. Following the plenary sessions, we broke into fora in six parallel sessions. Sessions varied from those specifically addressing architectural education (e.g., Sustaining Studio Education in a Climate of Change) to those addressing broader issues within sustainability (e.g., Human Habitat and Social Responsibility). See <<http://www.oxfordconference2008.co.uk/>> for a complete session list. Sessions were designed to allow 15 minutes per presenter, keeping all on a tight schedule. With no way to attend everything intriguing, we were left to discover noteworthy sessions from colleagues or to

• continued page 6

SBSE CALENDAR

2008

- Oct 22–24 PLEA 2008; Dublin, IE
- Nov 26–28 ANZAScA 2008; Newcastle, AU

2009

- Apr 15–18 ARCC Conf; San Antonio, TX
- May 11–16 ASES Conf; Buffalo, NY
- Jun 22–24 PLEA 2009; Québec City, QB
- Jun 25–27 SBSE Retreat; Québec City, QB
- Jul 27–30 SimBuild 2009; Glasgow, UK

2010

- May tba ASES Conf; Phoenix, AZ 🖐



photo: Bruce Haglund

Sue Roaf and a distinguished guest take in the arguments about architectural education. [Well done, Sue!–ed.]

LETTERS TO THE EDITOR

On one hand, I am very happy that the SBSE retreat was successful; on the other hand, I regret even more not having been able to participate. However, I will read the results on the on-line *SBSE News*. As Dean of Academic Affairs I am helping a new international university with a strong focus on the environment to start up, and I need highly competent and motivated teachers. For that reason I think the SBSE network a wonderful potential resource.

—Mario Grosso, *St. John International*

[We missed you at the retreat, which proved to be a great melting pot. Your faculty needs are mentioned in the Job Ops column on page 7. Best of luck!—ed.]



Autodesk has bought the rights to Ecotect software <<http://sql.com/autodesk>>. Maybe now we'll be able to get a response for some kind of support from Ecotect. Of course, who really knows what it will mean?

—Bill Burke, *Pacific Energy Center*

[I've heard encouraging words from Andrew, and Autodesk is formulating their educational strategy. See page 5. Fingers crossed.—ed.] 🙏



photo: Bruce Haglund

An SBSE crew at Oxford awaits the train to Ashurst to kick off the 2008 Retreat.

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ALL ABOUT THE NEW FOREST RETREAT

SBSE RETREAT 2008—CATCHING UP WITH THE BRITISH?

One of the more delightful aspects of the UK retreat was the real sense of an international community as part of SBSE's 21st century essence. It was an enlightening experience to put faces to the names of so many members who have posted and shared their knowledge on the SBSE listserv over the years. The sheer formality of the Oxford Conference contrasted sharply with the information exchange that occurred in the New Forest at WIT. Suits were swapped for jeans and shorts, but the material and ideas shared were no less polished nor critical in content. The Oxford Conference had an overwhelming number of parallel tracks, making it difficult to sense the dialogue occurring in areas that fell outside of issues of either Sustainable Design or Carbon—SBSE had one track. What was quite evident, while hearing speakers discuss carbon-related issues in both venues, was that there is urgency and that North America lags well behind the research and implementation strategies in the UK. Nonetheless the opening debate at Oxford highlighted an extreme disconnect between practice and the present advanced level of research in this field in the UK.

The Retreat in the New Forest was filled with highly developed presentations, both informative and entertaining! Adrian Leaman, Usable Buildings Trust, regaled us and provided a thorough look at their research web site <<http://www.usablebuildings.co.uk/>>, which also contains great humor and one-liners! Long time SBSEer Donald Watson gave an insightful overview of the history of sustainable design. Carbon, or how **not** to carbon, was a not so subtle link that tied together many of the talks. As we in North America are struggling with LEED protocols, and in forming our Carbon-Neutral Design Project (defining protocols for Zero Energy, Zero Carbon Emissions design)—Sue Roaf was quick to point out that CO₂ in the UK has given way to research in CO₂c. Presentations of the SBSE Low Carbon Studios and our Carbon-Neutral Design Project (Wasley, Quale, Guzowski, Boake, and others) give hope that we will catch up as we push forward. For me the highlight of the Retreat had to be the Dennis Andrejko-inspired BBQ. Dennis cooked up nothing short of a feast on the lawn, under the trees, of WIT where we ate, drank, and talked pedagogy.

Please browse my retreat and UK travel images at <http://www.architecture.uwaterloo.ca/faculty_projects/terri/sbse/2008/> as well as links to the retreat presentations, crucial web sites, and other shared information! *[A must-see site!—ed.]*

—Terri Meyer Boake

SCHOLARSHIP AWARDEES SPEAK OUT

I'm finally at the end of my summer travel! After Oxford and SBSE Retreat in the UK, I went on to SimBuild (Berkeley, CA) followed by Boston, New York, and Richmond (VA), until here I am at Virginia Tech, Blacksburg, to start a semester of PhD studies in building science.

The SBSE Retreat 2008 was a most wonderful experience! Meeting and coming to know those whose names had become familiar from the SBSE list server was the highlight of the gathering. Now, as I read their postings, their messages read much more vividly and true. The presentations were very good as well. Being presented in a circle of comrades, rather than at a formal conference setting, they had an unpretentious tone. The venue was charming, "far from the madding crowd," and it lived up very well to its name "retreat." One unforgettable surprise was stumbling on the Bangladeshi Restaurant in remote Ashurst, New Forest, on our first night out for dinner! The Saturday morning activity was an anti-climax for me. If we could have squeezed that in as a late-night finale on Friday evening, allowing participants to leave early on Saturday morning, many could have used the day much more effectively to explore London or the surroundings.



Michael Zaretsky and Shamim Javed pause at the Oxford train station on their way to Ashurst.

photo: Alison Kwok

• *continued next page*

DON WATSON'S SIDEBAR

Jim and John deserve special thanks for orchestrating this wonderful event! Bruce remains the unsung hero! Looking forward to many more wonderful encounters!

—Shamim Javed

I was glad to visit the New Forest again, particularly with so many fantastic people. My whole trip was absolutely fabulous as well as eye-opening. I love how visits to the UK help fix architectural tunnel vision; I am going to visit the UK annually or at the least every two years.

—Sean Nelson

It was an honor to be able to attend the SBSE Retreat 2008. I was thrilled by the relaxed, yet information-packed, sessions. Moreover, to top it all, the meals at the pub, walks in the forest, and the BBQ made it a wonderful and unforgettable experience. I seriously rank this retreat as the highlight of my UK trip. I look forward to attending forthcoming retreats and would love to be a regular SBSEer.

—Shraddha Marathe

SBSE—A Sustainable Think Tank.

With SBSE being my first conference experience, I was astonished with the seemingly endless knowledge that everyone had to offer. It was great to see how professors from different universities were approaching the unique problem of implementing such challenging criteria as carbon-neutral design into their studios. I learned that the term itself is problematic, and after the retreat, its definition has both expanded and contracted in my repertoire of design knowledge. Luckily, we just focused on the zero energy use in buildings vs. getting into the mess of embodied energy, carbon trails, and resource cycles. Yet this side of carbon neutrality was quite deep as well. From the building science aspects of building simulation software to exploring the theoretical and pedagogical aspects of sustainability, everyone at the retreat had a unique perspective to offer. I think the retreat's most astonishing aspects were the energy and the enthusiasm that emerged from gathering passionate people to convene on something that they truly love. It was inspiring, motivational, and energizing to see the success that some had attained in allowing sustainability to permeate their teachings and students. Too often in academia some get lulled into being dragged along by the status quo, and this meeting proved that change is possible.

As for Monday's activities, I think everyone loved the Portcullis House tour. It was great to be guided by engineers and building managers who shared knowledge about the building's sustainable systems. The lectures were great, a bit overscheduled, but what do you expect, right? Everyone was really interested in all the presentations, though, and were bursting with questions after each session. Despite some room overheating issues (I had to scramble to rig up some old-fashioned fan ventilation), I think everything went very well!

—Jake Dunn

I had a wonderful trip to England: The SBSE retreat was the highlight of the whole trip. "To teach is harder than to learn." I like to learn, but I think passing on what I've learned is more powerful than to practice the idea alone. I am so grateful to have been there—seeing you folks sharing ideas and experiences together was so inspiring. I am encouraged and will keep walking this path because I know I'm not alone. 🖐

—Eve Lin



Owen, Paul, Katy, and Michael enjoy the New Forest pub.

Photo: Bruce Hagglund

[A teaser on Don's notes on his discussion at the SBSE 2008 Retreat. For full notes, see below. Comments welcome <lakesideDJ@aol.com>.-ed.]

PART I: DEFINING SUSTAINABILITY

Review of terms used since the early 1900s reveals that climate and health issues have been part of architectural and city planning manifestos, theory, and practice for over 100 years, with earlier precedents in late 19th-century writing on the design of buildings and cities.

A brief list of citations [*exact references to be checked*] indicates the continuing history of the idea. A good way to start a seminar or studio discussion to frame the term "sustainability" (and to allow students to define their own interpretation and position) is to have students find the earliest historical reference of these terms.

- Natural architecture (19th c)
- Natural lighting (19th c)
- Organic architecture (FLW 1910)
- Sun angles/access to light (Atkinson 1894)
- Hygiene & city planning (Hannes Meyer 1926)
- Bioregionalism (Neutra 1920s)
- Anticipatory design science (B Fuller 1930s)
- Solar house design (Kecks 1938)
- Ekistics (Doxiadis et al. 1940s)
- Bioclimatic regionalism (Olgyays 1958)
- Solar control (Olgyays 1958)
- Environmental design (McHarg et al. 1960s)
- and more ... see <<http://www.sbse.org/retreat2008/docs/Watson%20SBSE%20Retreat%202008.doc>>.

PART II: BEING THE CHANGE

Leadership through research and innovation is exemplified in the Vital Signs/Agents of Change projects under taken by SBSEers Cris Benton and Alison Kwok, among others [*insert full references please!*]. Projects such as the proposed carbon-neutral design studio within schools of architecture can serve as catalysts for change and innovation.

I prepared a rough (and unedited) framework, which indicates a range of catalyst examples and opportunities, progressing from curricula and academic-based research as foundation and vertically through practice and policy initiatives. The advantage of viewing catalysts in broad scope is to see how they can interact and reinforce one another. The proposed Carbon Zero Design Studio project can link to and build on these catalysts. 🖐

—Don Watson



Dennis Andrejko bbqs bangers for Don Watson et al.

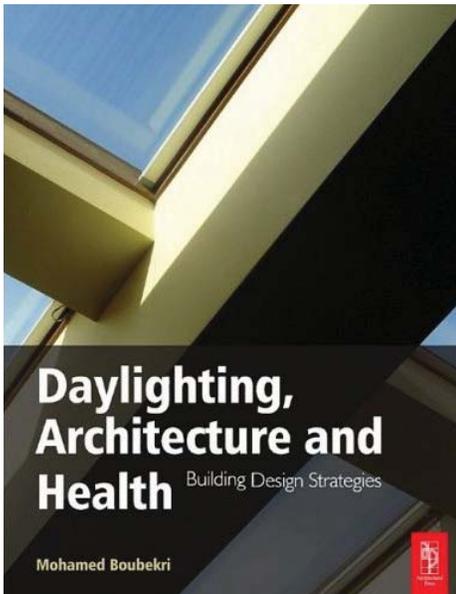
Photo: Bruce Hagglund

SBSE PEOPLE

★ **Jim Benya** has become *Architectural Lighting's* newest blogger. Look for new postings from Jim each month. His first series of postings were “Code Crazy” and “Heads Up—Inflation.”

★ **Terri Meyer Boake's** students David Schellingerhoudt and Lindsey Nette won second place in the 8th Annual ACSA/AISC Student Design Competition in Category I, Assembling Housing. You can view their project at <http://www.architecture.uwaterloo.ca/faculty_projects/terri/competitions/w_08/dave_lindsey.html>.

☒ Architectural Press has just published *Daylighting, Architecture and Health: Building Design Strategies*, by **Mohamed Boubekri**, the first work to consider the relationship between natural light in buildings and human health, including their effects on architecture and architectural design.



book cover: Architectural Press

🎓 In recognition of achievements in research, teaching, and international leadership, **G. Z. “Charlie” Brown** was among 3 who received a UO Philip H. Knight Professorship. Dean Frances Bronet said “These 3 faculty members ... continually represent the cutting edge of research in their fields—breaking important new ground repeatedly. Their international status has been attracting the best students to the University of Oregon for decades drawn by sustained and innovative research, pedagogy, and critical engagement.” Brown is the founding director of the Energy Studies in Buildings Laboratory at the UO, which has performed more than \$16 million in externally funded research since 1977 when Brown joined the

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QUÉBEC IS WHERE IT'S AT IN 2009

PLEA 2009, QUÉBEC CITY, 22–24 JUNE



photo: Victor Rodrigue, M.Sc.-Student

Courtyard, School of Architecture, Université Laval.

The International Conference on Passive and Low Energy in Architecture, “Architecture, Energy, and the Occupant’s Perspective,” will be held at Université Laval’s School of Architecture, a 350-year-old, passive, low-energy building in the heart of historic Québec City. Following an old European tradition, the 1773 sundial in the central courtyard reads, “*Dies Nostri Quasi Umbra*” (*Days fly like shadows*), reminding SBSEers to quickly submit abstracts for PLEA2009! The sundial should also preclude excuses for late delegates, except on rainy days, which are very uncommon here. “Architecture, Energy and the Occupant’s Perspective” will be enriched by leisurely strolls through the environmental diversity of Québec City’s close-knit urban fabric between the event’s various venues (including the Chapelle de l’Amérique Française, the Promotions Hall of the Séminaire de Québec, and the Great Hall of the Civilisation Museum), fueled by low-carbon, but high-tasting, energy breaks such as a gala dinner at the Chateau Frontenac <<http://www.fairmont.com/Frontenac>> supervised by chef Jean Soulard specializing in homegrown terroir treats. [*Not terrier treats?!—ed.*].

PLEA 2009 local organizers love kids—the occupants of our low-carbon society of tomorrow. Accompanying children and possibly teenagers will be invited to engage in intellectual, hands-on “scientific” activities supervised by professionals from La Boîte à Sciences (The Science Box) through the PLEA kids’ sessions (no fee). Results of these sessions will be presented during the closing PLEA day session. Please suggest your choice of exemplary activities to the organizers.

Send your extended abstract of 750 to 1,000 words by **1 October 2008**, to ensure its evaluation in time for final acceptance. Extended abstracts may include illustrations and should be written in English, the official language of the conference. Submission forms are available at <<http://www.plea2009.arc.ulaval.ca/E/formPlea.php>>.

Upcoming—PLEA 2009 Zero Carbon Wood Design Charette, involving students and willing participants of the conference, will take place linking PLEA 2009 to the SBSE 2009 retreat. Further information will be posted soon. Suggestions welcome.

We’re looking forward to meeting you all in Québec City!

—Claude Demers and André Potvin

SBSE RETREAT 2009, QUÉBEC CITY, 24–27 JUNE

SBSE 2009 “The Leap to Zero Carbon” will also be held at Université Laval’s School of Architecture to allow SBSEers a travel and scholarship two-fer. Content coordinators will be Terri Meyer Boake, UWaterloo, and Mary Guzowski, UMinnesota, assisted in logistics by Claude Demers and André Potvin. Building on the PLEA Conference, following Oxford’s, “Resetting the Agenda,” Carbon-Neutral is the new agenda! In this retreat we intend to get to the essence of SBSE by *sharing* carbon-neutral knowledge, solutions, resources, studio projects, and case studies—SBSE members will help SBSE members to Teach+Reach the 2030 Challenge. Everyone participating in “The Leap to Zero Carbon” should return home fully equipped to teach Carbon Neutrality! Imagine that we all contribute ... Stay tuned. 🖐

—Terri Meyer Boake and Mary Guzowski

OTHER CONFERENCE OPPORTUNITIES

ARCC 2009 CALL FOR ABSTRACTS

The 2009 spring research conference of the Architectural Research Centers' Consortium (ARCC), "Leadership in Architectural Research: Between Academia and the Profession," will be hosted by the University of Texas at San Antonio College of Architecture 15–18 April 2009. This year's conference theme invites an exploration of existing and future trends in leadership in architectural research, the effect of these trends on research subjects and methodologies, and how this leadership can foster an integrated design research culture. In this context, the conference will explore a variety of topics in which architectural research is used to enhance design quality, expand the knowledge base, and systematically analyze and address central design challenges, while at the same time responding to regional and local influences. The conference invites papers by architectural researchers in both academia and the profession that address issues of architectural research leadership and the fostering of an integrated research culture. Papers by PhD candidates and other graduate students are encouraged and will be included in a special session. The deadline for abstracts submission is **October 17, 2008**. Full conference information may be found at <<http://www.utsa.edu/architecture/arcc2009>>.

—Hazem RashedAli

PLEA 2008 DUBLIN

Over 400 professional architects, engineers, scientists, academics, and post-graduate students, among them some of the most influential professionals and researchers in the area of low energy building, will converge on University College Dublin to participate in the Passive and Low Energy Architecture (PLEA) 2008 International Conference, 22–24 October 2008. Since 1982 PLEA has organized a series of highly influential international conferences across the globe, and PLEA's 25th anniversary conference will be hosted by the UCD Energy Research Group with the exceptionally timely theme, "Towards Zero Energy Building." The conference aim is to provide a forum for exchange and discussion around the many aspects of Zero-Energy Building, including regulation and policy; sustainable urban design; innovative materials, components, and systems; natural ventilation; occupant and climate-sensitive architecture; environmental theory and architecture; the role of education; and more.

Sustainable Energy Ireland (SEI) is the main sponsor of the conference. On conference day two, similar to SEI's annual "See the Light" conference, one strand will focus on Irish low-energy building projects, with organized project visits in the afternoon. The Department of Environment, Heritage, and Local Government is also a conference sponsor, and Green Party Minister John Gormley, TD, will open the event. Keynote speakers will include world renowned architects William McDonough, Maryland; Alison Kwok, Oregon; Mario Cucinella, Bologna; and Alexandros Tombazis, Athens. Ensure your place at this prestigious event; register now at <<http://www.plea2008.org>>.

—Paul Kenny

BUILDING SIMULATION 2009 GLASGOW

IBPSA will hold its 11th biannual international conference, the leading international conference in building performance simulation, 27–30 July 2009, at the University of Strathclyde in Glasgow. The conference organizers are seeking high-quality papers and will limit the number of peer-reviewed oral presentations through rigorous review. We welcome simulation-based papers on advances in building physics, human aspects of the indoor environment, building services, commissioning and operation, energy capture and conversion, advances in applications, validation and calibration, software issues, simulation in design practice, regulation/code compliance, and application day case studies. One day of the conference will be devoted to practical applications, particularly focusing on simulation in practice with illustrative case studies. Therefore, a limited number of additional papers are invited in order to enable practitioners to demonstrate the benefits flowing from the recent upsurge in the use of simulation in building design. If you wish to contribute such a paper, please ensure it is marked as an application day case study in the abstract submission. Abstracts in plain text and of no more than 500 words should clearly explain the research objectives and new knowledge arising from the research. Abstracts may be submitted via our web site <<http://www.bs2009.org.uk>>. Please note that abstracts were due by 1 September 2008 when the review process started, but late abstracts will be accepted up to a cut-off date of **22 September**. 🖐

—Larry Degelman

SBSE PEOPLE [CONT. FROM P.4]

faculty. The lab has supported more than 200 graduate research assistants and provided design assistance in energy-conscious design on over 17 million square feet in the U.S. and abroad.

🖐 This fall **Keelan Kaiser** has moved from Judson University to the School of the Art Institute of Chicago (SAIC). A faculty member at Judson for ten years, Kaiser helped teach and lead a new professional program in architecture and marshaled Judson through a new building project, serving as campus architect, and culminating with a celebrated mixed-mode, naturally ventilated architecture facility designed by British architecture firm, Alan Short and Associates. His primary practice and teaching revolve around the design studio and professional practice with a keen interest in and knowledge of the natural systems and flows that intersect with the built environment.

🏠 **Michelle Roberts** is Vice Chair of the Residential Sector for the Massachusetts Governor's Net Zero Energy Task Force, and needs more info about affordable Zero Energy in retrofitting of vernacular designs and in new construction. 🖐

AUTODESK ECOTECH

On June 26, 2008, Autodesk announced it had completed the acquisition of substantially all the assets related to the Ecotect software tools for conceptual building performance analysis from Square One Research Ltd and Andrew Marsh. As an Ecotect education customer, we wanted to confirm that your Ecotect license will continue to operate and be supported. All Ecotect network licenses are hosted on a local server on your institutions' LAN, therefore you will receive uninterrupted service. For more info on Ecotect licensing visit <<http://ecotect.com/software/network>>.

Autodesk continues to integrate the Ecotect tools with Autodesk's Building Information Modeling (BIM) portfolio and looks forward to working with you. To learn more about Autodesk's BIM portfolio for post-secondary education and to access free Revit Architecture BIM software, professionally developed curriculum, interactive tutorials, worldwide discussion groups, and more, join the Autodesk Student Engineering and Design Community. We appreciate your patience during this transition. 🖐

—Autodesk

STUFF FOR YOU

BRI SUBSCRIPTION DISCOUNTS

SBSE members can obtain a BRI subscription for \$99 from <<http://www.tandf.co.uk/journals/offer/rbri-so.asp>>.

—Richard Lorch

NEW FROM MURRAY MILNE

Climate Consultant 4.0 adds a number of new features, including new graphic screens such as a Monthly Diurnal Averages plot and the Top 20 Design Guidelines based on your unique climate and passive design strategies selected from the Psychrometric Chart. Based on *Climatic Building Design* (Watson and Labs), and on *Regional Guidelines for Building Passive Energy Conserving Homes* (Loftness, et al), each guideline has a sketch illustrating its application. Climate data are available for over 2,000 locations from the EnergyPlus web site.

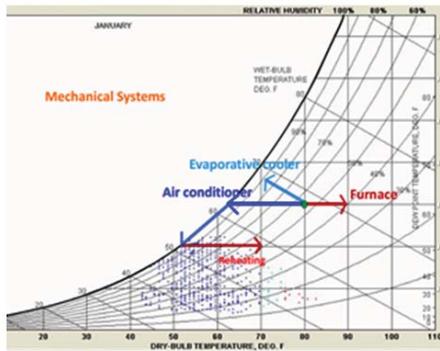


image: Murray Milne

The Psychrometric Chart Tutorial is a web-based dynamic graphic and audio presentation (Flash) that explains the relationship between air temperature and humidity and their influence on human thermal comfort and HVAC systems design. Get the free Flash Player from <<http://www.adobe.com/products/flashplayer/>>.

Download both tools from <<http://www.aud.ucla.edu/energy-design-tools>>.

—Murray Milne

KEN LABS ARCHIVE

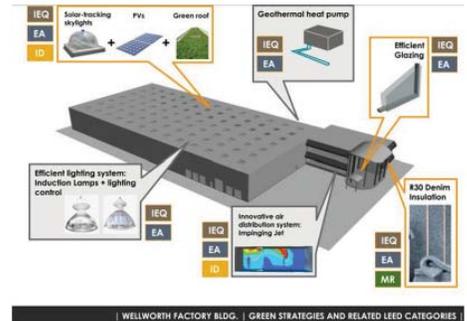
Wayne Labs, brother of the late Ken Labs, has set up an on-line archive, which includes Ken's master's thesis, a foundation of much that followed. Wayne says, "Reproducing the thesis was a big task, but there is quite a lot that is still relevant today. If we as a nation had built on the "Energy Crisis" in the 1970s and started doing the research back then, would we be in the same pickle as today?" You'll find Ken Labs' tribute and thesis at <<http://www.waynelabs.com/KenLabs>>. It's a useful record for any bibliography on climatic design, earth-sheltering, and related building science. 🖐

—Don Watson

MICHIGAN FUNDS GREEN BUILDING RESEARCH

Mojtaba Navvab has received a total of \$240,000 in research funding from Full Spectrum Solutions of Jackson, MI, toward research and development (R&D) of innovative techniques to quantify the sustainable building design systems and their components that contribute to energy efficiency of the built environment. R&D in the sustainability and building energy efficiency design areas and applied research is targeted at the USGBC LEED rating system and/or specific design areas relating to advancement of sustainable design for commercial/industrial buildings and system components. The following are examples of the Sustainable Building Design Research (SBDR) laboratory efforts to-date.

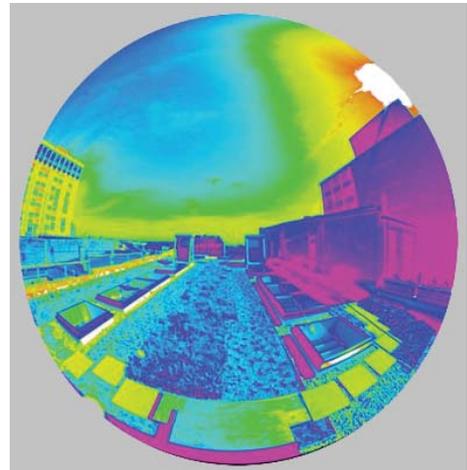
Building Design. The first project is a new green building designed for a 72,000-sqft mixed office and light industrial use in Jackson County, MI, on a brownfield site. The new facility (under construction) will feature a two-story office and a large factory bay with several assembly lines. The exterior walls will be denim insulated, interior office carpet will be made of corn, and wispy white clouds will float over the cubicles. PV panels on the roof will power the building's office and manufacturing spaces, which are daylighted by skylights designed to harvest the daylight at all hours of the day. A closed geothermal system will heat and cool the building. Rainwater will be captured to flush the toilets and feed the irrigation system.



Six major green strategies are used in the building.

Green Roofing. Environmentally-friendly installation of green roofs provides an opportunity to use vegetation in urban settings. The green roofing research is in progress in collaboration with A3C, an architecture firm in downtown Ann Arbor <<http://www.A3C.com>>. Various roof coverings including different green roof types are being tested for protection of the roof membrane from deterioration caused by ultraviolet light and puncture of buffering action by the vegetation medium. The SBDR lab has also measured key variables every 4 minutes since June 19 to estimate the potential energy savings from using different green roof technologies. 🖐

—Mojji Navvab



Infrared image of the green roof test bed.

images: Mojji Navvab

THE OXFORD CONFERENCE 2008 [CONT. FROM P.1]

seek them in the proceedings compiled by WIT Press. The closing session began with presentations by architect Rab Bennetts, Sunand Prasad, and conference chair Sue Roaf, followed by a review of all the fora by the eleven forum leaders. These brief presentations attempted to encapsulate the themes running through the presentations in their sessions, a fascinating way to provide everyone an overview of what had transpired in the sessions. There was tremendous variety within the sessions and the discussions were quite lively.

Lunches and breaks were spent networking with participants from around the world in the Examination Schools courtyard and a tent installed to house vendors and poster presentations. The tent was ordered, presumably to serve as protection from English rain during meals, but the skies cleared for most of the week, and we were able to sit outside during most breaks. There were evening events on smaller scales and many used this time to explore the city of Oxford.

Seeing what is occurring at institutions around the world was profoundly inspiring and will serve us well over the upcoming years. Simply discussing the future of architecture in the historic setting of Oxford, within one of the great institutions of the world was a momentous event. 🖐

—Michael Zaretsky

CONFERENCE REVIEWS

SIMBUILD 2008 NATIONAL CONFERENCE

IBPSA–USA held its third highly successful national conference on building simulation July 30–Aug 1 at the Clark Kerr Convention Center at the University of California, Berkeley. The conference attracted over 160 registrants, including some 34 student participants. Countries represented were Australia, Belgium, Bangladesh, Canada, China, Germany, India, Ireland, Korea, New Zealand, Pakistan, UK, U.S., and Wales. There were 35 peer-reviewed technical papers, 31 seminars, and 3 plenary speeches presented. Training workshops by various software vendors were offered in both pre- and post-conference sessions.



Harvey Bryan and other SimBuild delegates gather for lunch and conversation.

Photo: Larry Degelman

IBPSA–USA awarded 34 traveling/housing scholarships to the students, 3 best-poster awards to students, a best paper award, a young contributor award, 2 lifetime achievement awards, and a practitioner award. PDFs of all technical papers can be downloaded from the conference web site <<http://www.ibpsa.us/simbuild2008/>>, which also has PDFs of most of the conference's PowerPoints. In the near future, IBPSA–USA plans to make all papers from its first two conferences, held at Colorado and MIT, available on its home page.

—Larry Degelman

YONSEI INTERNATIONAL SYMPOSIUM



The international crowd, including student participants, gather for a group photo at Yonsei University.

Photo: Chungyoon Chun

The human and building environmental laboratory at Yonsei University, carrying out a National Research Laboratory (NRL) project supported by Ministry of Education, Science, and Technology in Korea, held an international symposium about the interaction between humans and environment 2–3 July at Yonsei University. Speakers—4 domestic and 9 foreign from 7 countries (Edward Arens, Richard de Dear, Alison Kwok, Veronica Soebarto, Takashi Akimoto, Fergus Nicol, Jorn Toftum, Zhang Hui, and Tham Kwok Wai)—presented and discussed their research at this symposium. Selected symposium papers will be published in *Building and Environment* as a special issue. 📖

—Chungyoon Chun

DOE TO PURSUE NET-ZERO ENERGY BUILDINGS

U.S. Department of Energy (DOE) Deputy Assistant Secretary for Energy Efficiency David Rodgers today announced the launch of DOE's Net-Zero Energy Commercial Building Initiative (CBI) with establishment of the National Laboratory Collaborative on Building Technologies (NLCBT). These two efforts both focus on DOE's ongoing efforts to develop marketable Net-Zero Energy Commercial Buildings, buildings that use cutting-edge efficiency technologies, and on-site renewable energy generation to offset their energy use from the electricity grid by 2025. To learn more visit <<http://buildings.energy.gov/>>. 📖

—Dru Crawley

JOB OPS

ST. JOHN INTERN'L UNIVERSITY

The architecture department announces the following faculty positions for the B.S. program in Environmental Architecture, beginning August 24, 2008, or January 20, 2009, at its campus in Vinovo–Torino Italy: Intro to Env. Design, Intro to Arch; Arch Studio I, Climate and Arch, and Building Physics. Initial screening will be based on CV; letter of interest that specifies the position sought and outlines teaching objectives; two references; and examples of relevant professional or scholarly work. Ten pages maximum and submitted in Adobe PDF format. Send to Mario Grosso, Dean of Academic Affairs, <m.grosso@sju.it>. Additional info at <<http://www.sju.it>>.

UNIVERSITY OF FLORIDA

The School of Architecture invites applications for two tenure-track assistant or associate professor positions in building technology—Architectural Structures as well as Technology and Sustainability. Applicants should communicate their ability to inspire and engage students in critical thinking and research. Initial screening of the applications will begin on October 1, 2008, continuing until filled. Submit letter of application outlining coursework, research interests and goals, scholarly or creative work, and at least 3 references to Michael W. Kuenstle; via e-mail <kuenstle@ufl.edu>.

UNIVERSITY OF IDAHO

The UI Integrated Design Lab (UI-IDL) in Boise, ID, seeks a Building Simulation Specialist to conduct research projects in areas of energy efficiency and human factors related to the design and operation of daylighting, passive and hybrid cooling, and alternative heating and ventilating systems. Apply to <https://www.sites.uidaho.edu/AppTrack/Agency/Applicant/ViewAnnouncement.asp?announcement_no=12311061362>.

UNIV OF TEXAS AT SAN ANTONIO

The architecture department invites applications for a full-time, nine-month, tenure-track Structures/Building Technology position at the rank of Assistant Professor, beginning August 2009, pending budget approval. Ours is a design studio-based architectural program in downtown San Antonio. The successful candidate will demonstrate the ability to teach technology and to conduct scholarly research and/or design practice at a level that promises future recognition. Address applications to <arcsearch@utsa.edu>. 📖



photo: Nick Pine

Terri Booth's Long Branch home shows off its SE façade's great solar potential.



photo: Nathan Hurst and Paul Harrison

An Australian example of the car radiator as a low-tech air-to-water heat exchanger.

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CARBON-NEUTRAL ONE HOUSE AT A TIME

What could we do for Terri Booth, who has hired me as her solar house heating consultant? I gave her *Kill-a-Watt*, *Solar Cat Book*, and a \$9 Casio fx-260 calculator. Then we spent 5 hours on a Sunday learning to do basic heat flow calculations. She lives with her younger brother and sister in a house with a promising southeast façade in Long Branch, NJ, about 10 miles south of Sandy Hook. She works as an artist with a low income and has never taken a physics course, but she would like to save the planet, and she's very intelligent and willing to try carpentry.

They already have a new 95%-efficient condensing natural gas furnace. They might airseal next, with a blower door test, then blow cellulose insulation into existing walls, then glaze in the porch and the roof above with very clear 10-mil, 20-year GE HP92W Lexan from a 4'x100' 25-pound roll to make a very large, low-mass sunspace. Next, they could add some Dynaglas corrugated polycarbonate "solar siding" to the upper part of the southwest wall to make a thermosyphoning air heater and add thermal mass to the house so it can better keep itself warm overnight with warm air circulating between the house and the sunspace during the day, then put a car radiator with its pair of 12-volt fans in series (1,000 cfm with 20 watts, from a PV panel) in the sunspace to heat water in a 4'x8'x3' tall EPDM-lined plywood box tank in the basement and use the same radiator and fans and tank water to heat the house on a cloudy day, with a \$75 2-watt Norhtec 486 clone running Ubuntu linux on a 1 GB flash RAM and Dallas 1-wire sensors and controls. A \$60 1"x300' 13-gallon pressurized black plastic water pipe coil in the tank could preheat water for showers. 🖐

—Nick Pine

WINTER ISSUE SUBMITTAL DEADLINE—DECEMBER 1

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