



photo: Peter Starkweather

When viewed from Bridge Mountain, Las Vegas and its Strip are dwarfed by the desert landscape.

LAS VEGAS RETREAT CALL FOR PARTICIPATION

In *Unquenchable: America's Water Crisis and What to Do about It*, Robert Glennon asserts, "Water lubricates the American economy just as oil does. It is intimately linked to energy because it takes water to make energy, and it takes energy to divert, pump, move, and cleanse water. Water plays a critical role in virtually every segment of the economy, from heavy industry to food production, from making semiconductors to providing Internet service. A prosperous future depends on a secure and reliable water supply. And we don't have it. To be sure, water still flows from taps, but we're draining our reserves like gamblers at the craps table." [Nice lead-in for a Vegas retreat!—ed.]

Help shape the 2010 retreat content. Propose a session, presentation, workshop, demonstration, or interactive session in one of the following themes related to Water (and other "hot [or wet] topics"):

1. Storm Water Management and Site Design—From urban infrastructure to constructed wetlands—site solutions that address water management
2. Water Conservation—How can our cities, sites, and buildings use less water?
3. Rainwater/Greywater/Blackwater—How can we reuse our water resources?
4. Innovations—From small components to large system solutions, to case studies, how can design-thinking and problem-solving help address our water challenges?
5. Roundtable Discussions or Working Groups—"Hot topic" perspectives from SBSE colleagues to be discussed in informal settings.

Limit your proposal to one page. All sessions will be seventy-five minutes in length, with one to five presenters. Laptops and digital projectors will be available. Proposals must include:

- Name(s) of session organizer/presenter
- Contact information (institution, email, telephone, url)

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SBSE CALENDAR

2010

- Apr 9–11 Windsor Conf/Windsor, UK
- May 12–14 LightFair Int'l/Las Vegas, NV
- May 14–16 SBSE Retreat/Las Vegas, NV
- May 17–22 ASES Conf/Phoenix, AZ
- May TBA SBSE Annual Mtg/Phoenix, AZ
- Jun 23–26 ARCC/EAAE/Washington, DC 🇺🇸

2009 ELECTION RESULTS

Thanks to all who cast ballots! Troy Peters was elected Secretary/Treasurer by a landslide (unopposed). Ihab Elzeyadi received 60% of the vote for President-Elect to Michael McGlynn's 40%. The SBSE Board is now Leonard Bachman (President), Terri Boake (Past-President), Ihab Elzeyadi (President-Elect), Troy Peters (Secy/Treas), Walter Grondzik (Awards & Scholarships Chair), Bruce Haglund (Communications Chair), and Michael McGlynn (Educational Resources Chair).

Thanks to Chris Theis who leaves the board after six years of service as President-Elect, President, and Past-President—he served us well!—and thanks to Michael Zaretsky who served valiantly as Secretary/Treasurer for two years. 🇺🇸

—Bruce Haglund

LETTERS TO THE EDITOR

The Fall issue of *SBSE News* has a disturbing item on the formation and second conference of the Building Technology Educators Society (BTES). The promoters are to be congratulated for efforts to organize educators strongly interested in construction and sustainable design. However, BTES defeats its purpose by creating more fragmentation where its objectives, and those of SBSE, compete for academic membership. BTES should be a division of SBSE and participate with it in ASES. Similarly, professors of real estate, mortgages, even finance should be brought into SBSE. The better passive hands-on use of new building materials (plastics) and new construction methods must be incorporated into the curricula of students and in lectures to professionals in each of the application fields. Such a collaboration with SBSE members would be most productive for BTES efforts. Integration, not fragmentation, must be the thesis.

—Harold Hay, SBSE–BTES

[I would share your concern about BTES if it were true, but SBSE looks at BTES as a strong collaborator, many members belong to both groups. I think that strong support groups for faculty who specialize in specific areas are mutually beneficial to all in the support group and their constituencies. I'm much more comfortable with BTES as a strongly related group of collaborators than as a subdivision of SBSE. Neither group excludes any interested individual membership, and there is cross-over and diversity in the membership of each group, but when the groups meet, there is clarity of purpose.—ed.]



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RESEARCH NEWS

UNIVERSITY OF HOUSTON—THE SWATCHIDON

This heliodon was built as a project for a capstone course in mechanical engineering at the University of Houston. It uses variable-voltage step motors and linear actuators for both latitude and declination tilt as well as for axial rotation. A graphic user interface (GUI) allows for precise positioning and control through a laptop computer and custom software. The framework is cut from one-inch plexiglas. All details are forthcoming in published form, including parts, assembly details, and C++ software code along with the compiled executable software. We'll make these plans and descriptions available through SBSE at no cost beyond that of reproduction and distribution.

This project was stimulated by relations between the UH College of Architecture Building Performance Lab (BPL), project sponsor, and the College of Engineering, whose students executed it as a semester-long exercise. Next semester's collaboration will upgrade the BPL small-scale wind tunnel along with a helium bubble machine for tracing air flow patterns.

For obvious aesthetic reasons, we've dubbed this instrument, the Swatchidon. It's been successfully calibrated and demonstrated. Further programming is still required to link the computational software with the GUI, but it's expected to be completed by colleagues in electrical engineering in January 2010.

The student team reported: "The team of Robert Goyen, Michelle Holt, Antonio Pavisich, and Dustin Stubbs designed and built this tilt-table heliodon for Richard Bannerot's capstone design course in Mechanical Engineering. The team's device has the ability to perform two major program functions: (1) simulate one 24-hour day at any time of the year, or (2) simulate one year at any specific time of day. Through the use of a graphical user interface, either of these two programs can be chosen for any location on the earth. The project is considered complete after all four milestones are complete—design, construction, programming, and calibration of the device. The project cost approximately \$1,300." 🖐

—Leonard Bachman



photo: Leonard Bachman

Engineering student Robert Goyen puts the swatchidon through its paces under simulated solar glare at the final review.

TOOL DAY PHOENIX ANTICIPATED

We've submitted a proposal to conduct the 10th annual Tool Day on Saturday, May 22 at ASES in Phoenix. When we get the thumbs up, full info will be posted to the SBSE listserver and to <<http://www.sbse.org/toolday/>> along with its nine predecessors. The new ASU Cronkite School of Journalism building in downtown Phoenix, two blocks from the convention center, is the tentative subject. The building looks promising, and the location will make it easily accessible. Check it out <<http://cronkite.asu.edu/news/newBuilding-022107.php>>, and plan to join us in Phoenix for an insider's look at the building. 🖐



photo: Alison Kwok

Discover the secret life of the Cronkite Building at Tool Day, we hope.

—Grondzik, Haglund, Kwok, and Peters

SBSE BOARD REPORT

The SBSE Board met by telephone on Oct 15. Four agenda items were discussed.

1. Peter Papesch's efforts to further influence NAAB to require schools to teach carbon-neutral design. It was the board's consensus that the Québec City missive was a one-time, last-minute effort to lobby NAAB to do the noble thing, but the time has passed for further change in this cycle. SBSEers will continue to work toward improving the NAAB criteria, which, much like the building codes, set a minimum standard and are an evolving guideline. Leonard volunteered to share the board's point-of-view with Peter.
2. Rating schools. Ed Mazria suggested to Jim Wasley that the schools that are providing sustainability/zero net energy/carbon-neutral instruction be recognized. Self-serving as an SBSE activity, ratings accomplished by a third party, like *Environmental Building News*, could rank programs in the same manner as AASHE ranks entire Colleges' and Universities' greenness.
3. The scholarship committee requires a budget to use in planning awards. Walter was encouraged to submit a budget request. (He subsequently did so, and the Board approved it.) The status of the Cook trust sponsorship of travel awards is unknown at this time, and the trust-sponsored design competition has not yet occurred. Chris was designated to attain some clarity in the situation. Follow-up with Harvey Bryan and Greg Thomson was suggested. We assume support for travel awards to PLEA and the Retreat are on-going.
4. The resource committee is shaping up with many volunteers—Augustine, Fernández-González, Haberl, Kwok, R. Smith, Utzinger, Wasley, and A. Wilson included. A small core group will seek input from the larger group as the committee agenda evolves.

The next meeting was scheduled for December 1. Notes to follow. 🖱

—Bruce Haglund

LETTERS [CONT.]

I'm wondering what retired folks like me do about SBSE membership? Is there a one-time, life-membership fee?

—Tom Bartuska, WSU Emeritus

[This idea sounds like an agenda item for the next SBSE Board meeting! For now, you'll have to muster the \$25 annually.—ed.]



I received some interesting news recently. The next two upcoming Beginning Design Conferences after the one this spring are going to focus on sustainability. Jim Wasley and I tried to sow the seeds for this agenda at the BDC held here in Baton Rouge last spring. I believe the conferences will be hosted by Penn State in 2011 and Nebraska in 2012. 🖱

—Chris Theis, LSU

ARCC UPDATE

An agreement has been announced between the Architectural Research Centers Consortium (ARCC) <<http://www.arccweb.org>> and the Council on Innovation and Research in Buildings <<http://www.cibworld.nl>>. This agreement complements ARCC's ongoing work with the European Association of Architectural Educators <<http://www.eaae.be>> and their joint biennial international conference on architectural research. The 2008 Copenhagen conference will be followed by the fourth such international conference next year in Washington, DC, at the Building Museum and the AIA Headquarters (Maryland, Howard, and Virginia are among the host universities). CIB and ARCC have been exploring this agreement for the last few years and finally signed the MOU at the ACSA Administrators' Conference in November. The new interaction will increase the opportunities in, and visibility of, architectural research. 🖱

—Leonard R. Bachman

DAYLECTRIC UP CLOSE

"Under the Microscope," pp. 46–51, in the Nov/Dec issue of *Architectural Lighting* <<http://www.archlighting.com>> describes Bob Koester's Daylectric Integrated Design Studio in six lavish pages! Check it out! 🖱

—Bruce Haglund

LAS VEGAS 2010 RETREAT CALL [CONT.FROM P.1]

- Theme(s) addressed by your proposal
- Title of session, presentation, workshop, demonstration, or hands-on activity
- Length of your presentation, workshop, demonstration, or interactive session (select 15, 30, 45, 60, or 75 minutes)
- Summary of objectives, specific issues addressed, questions raised, and/or activities implemented
- Intended outcomes and deliverables.

Submission Deadline: Proposals with "Subject: SBSE Retreat Proposal" should be e-mailed by Monday, Feb 1, 2010, 5:00 pm PST to both Mark Barnhouse <mark.barnhouse@ndsu.edu> and Cindy Urness <cindy.urness@ndsu.edu>.

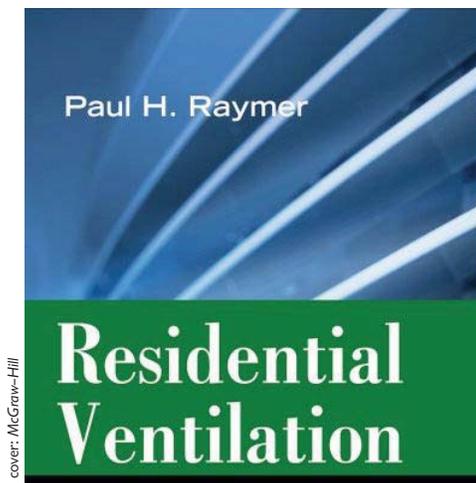
Notification of acceptance will be Monday, March 1, 2010. Accepted presenters must then register for the retreat by Monday, March 15, 2010, 5:00 pm PDT to ensure her or his place. Alfredo and Deborah will reserve your room at the Sahara Hotel; transportation will be provided between the hotel and the Springs Preserve. Rooms will be held until May 1 for retreat registrants. (If you register later, you may have to book an alternative accommodation.) A draft retreat schedule will be posted on March 8, 2010, to the SBSE listserv and retreat web site (soon to be linked from <<http://www.sbse.org/retreat/>>). 🖱

—Mark Barnhouse and Cindy Urness



Lied Animal Shelter (Las Vegas), a COTE top-ten building.

Photo: Alfredo Fernández-González

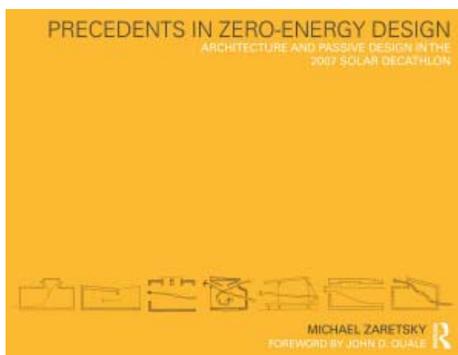


cover: McGraw-Hill

■ **Paul Raymer's** *Residential Ventilation Handbook* was published by McGraw-Hill this fall. It is intended to be useful in designing both existing and new residential ventilation situations. [Anyone interested in reviewing Paul's book?—ed.]

■ Director of the Integrated Technology in Architecture Center at the University of Utah School of Architecture, **Ryan Smith**, and colleague Joerg Ruegamer were awarded an AIA Upjohn Research Grant to perform a comparative study of energy-efficiency rating systems for housing during the 2009–10 academic year. The study is in connection with a project that Ryan and Joerg are monitoring and evaluating for the Department of Energy—a 14-unit workforce housing project in Park City, UT, that employs passive and active strategies. For more project information e-mail Ryan at <rsmith@arch.utah.edu>.

■ **Chris Theis** is one of four who will receive ACSA Distinguished Professor Awards for sustained creative achievement in the advancement of architectural education through teaching, design, scholarship, research, or service at the ACSA Annual Meeting in New Orleans in March.



cover: Routledge Press

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The 2009 Solar Decathlon marked my first visit and the first time our school (Waterloo–Team North) entered. As a passionate supporter of passive design and a newbie I imagined I could tour all 20 houses between 1pm on Friday and 3pm on Saturday October 9 and 10. I could not have been more wrong! The weather was hot on the 9th—upwards of 28°C. The sun and the fine day brought out the crowds. SBSEer Michael Zaretsky and I toured as many houses as possible. I bumped into Fuller and Jane Moore in the line to our Team North house. Even with Saturday's drop in temperatures, the end-of-the-day line-ups were 40 minutes long and I had managed to see only half of the houses.

I had to tour reported top contenders, Germany and California, and visit the houses of some of our hard working SBSE Team Leaders. Greg Thomson's Wisconsin team had a rough start, dealing with impossible bridge clearances on the roads leading into DC. They almost had to remove their roof, but were saved in the nick of time by an alternate route tip. Their carbon-neutral house was unique. Ulrike Passe's Team Iowa House was right across the Mall from Waterloo. They made a point to use passive strategies in addition to the technologies that would help them in the net-metering contest. I had to see the rest of the houses, so booked a return trip for the following weekend to witness the judging as well.



photos: Terri Meyer Booke

Solar Decathlon "postcards" from the Mall.

The range of architectural responses to the problem was incredible. Nobody was surprised at Germany's first place, but Urbana–Champaign's very simple vernacular solution taking second was startling. The California house exhibited a great effort by a team of undergraduates. Arizona had a very large solar popcorn maker and an amazing water wall for thermal storage. Louisiana's dog-trot style provided a wonderful separation of spaces and flexibility for seasonal change. It was also hurricane proof! Rice came in with the smallest budget and a house that had a specific destination for a real owner. Spain's shiny house and its movable tracking PV roof was pretty cool. Alberta's house (SBSEer Tang Lee) used an intriguing range of materials. Cornell's use of 3 silos made the architecture captivating, but the space planning a challenge! Virginia Tech had gorgeous water-based gardens as well as some enormous moving external shading walls that provided a colorful nighttime glow. Puerto Rico had a potentially dangerous bathroom/bedroom combo where the separating wall slid back and forth to create larger or smaller spaces. The variety of movable walls/objects was astounding, not all practical, but astounding nonetheless. The Minnesota House had one of the nicer outdoor eating spaces and some innovative phase change inventions. Penn State (SBSEer Lisa Iulo) had a well-arranged entrance and landscape ramp system for crowd control. Boston Architectural College (SBSEer Peter Papesch) had a very spacious interior with a novel drop down "tailgate" style door to provide streetside viewing of their mechanical systems. Ohio's interior was also quite open,

• continued next column

and its plan seemed charmingly pragmatic, less focussed on movable elements than on creating open space. Missouri's house was quite linear and again seemed to create a model that could be adapted easily for real use. And Team North managed to make a virtual glass box (glass on 3 sides, insulated north face) come in #2 in comfort and net metered positive. A system of exterior blinds and a phase change material under the wood floor were responsible for much of the delicate balancing act.

One of the difficulties of the contest is that the students design houses for their own climate, and then the houses are tested in DC in October. This year the weather was particularly cruel, perhaps more representative of a rigorous climate-based test. After the hot opening day, the following week saw clouds, cooler temperatures, and concluded with several miserable rainy, cold days. That any house could net meter positive in such conditions is impressive.

In truth, the most compelling aspect of the competition was the students who took us through each house, through heat and rain and cold, with increasing enthusiasm and unceasing energy. Their passion and learning through the Decathlon is unparalleled in any other school project. I'm convinced it's worth continuing. My criticism lies in the focus on technology above passive principles. The requirements for the comfort zone (72°–76°F and 40–55% RH) are far too tight for any passive house. Is this range realistic in practice? I think not. Homes are about living. Would I ever lead a team? No way! Will I go to DC in 2011? You betcha! And next time I'm booking a full 3 days to lower my carbon footprint. 🖐

—Terri Meyer Boake

PLEA 2009 FAREWELL

As our farewell gesture for the PLEA2009 Conference “Architecture, Energy and the Occupant's Perspective” held in Québec City, we invite you to visit the final version of the conference web site <<http://www.plea2009.arc.ulaval.ca/>>.

The PLEA2009 award was presented to SBSE pioneer G. Z. “Charlie” Brown. Read the presentation discourse delivered at the Chateau Frontenac. Thanks to Kevin van den Wymelenberg, we know that *Sun, Wind and Light* is well known in PLEA—he asked us to stand up to acknowledge how Brown had influenced low-energy architecture. A huge ovation followed. The best oral paper was attributed to SBSEer Ihab Elzeyadi for “Architectural Pride and Environmental Prejudice: The Effect of Personal Status, Historical Value, and Indoor Decor on Occupants' Indoor Environmental Quality in Offices,” an awesome title, with a French accent. The best poster paper was presented to Faisal Aljawabra from Bath University for “Outdoor Thermal Comfort in the Hot-Arid Climate: The effect of socio-economic background and cultural differences.” Do not hesitate to read the list of nominees and their papers (the competition for best papers was outstanding) accessible via the awards page.

Please indulge. All conference oral and poster papers can be downloaded either as an all-paper, single searchable pdf document, or individually by clicking on the number appearing to the left of each paper title. For those who could not attend, we are also providing the publisher's web link to obtain proceedings by mail—<<http://www.pulaval.com/catalogue/architecture-energy-and-the-occupant-perspective-9375.html>>.

Some of you were impressed by our fully daylighted and naturally ventilated conference rooms and catering area. We hope these spaces remind you that occupants are happier in Passive Low Energy Architecture! We have included as many pictures as possible in the gallery showing tightly packed conference rooms, even though we had full sunshine and great food in the courtyard. Quite an achievement and vivid proof that you all made outstanding presentations! 🖐

—André Potvin



Peter Papesch and Charlie Brown enjoying a daylighted classroom at Laval.

✧ **Michael Zaretsky** is very excited to have recently received his first copy of *Precedents in Zero-Energy Design*, which was recently published by Routledge Press. The book is modeled on Michael Pause and Roger Clarke's *Precedents in Architecture*, though this book is an analysis of the architecture and passive design of the 20 houses of the 2007 Solar Decathlon competition. The book is intended to benefit students, educators, and practitioners of architecture, sustainable design, building performance, and zero-energy design. It includes extensive graphic comparisons and analyses of these 20 off-grid projects as well as critique of these issues within the Solar Decathlon competition. Check out <<http://www.routledge.com/9780415778756>>, where you can peruse the pages and read more about the book. 🖐

ISLANDWOOD UPDATE



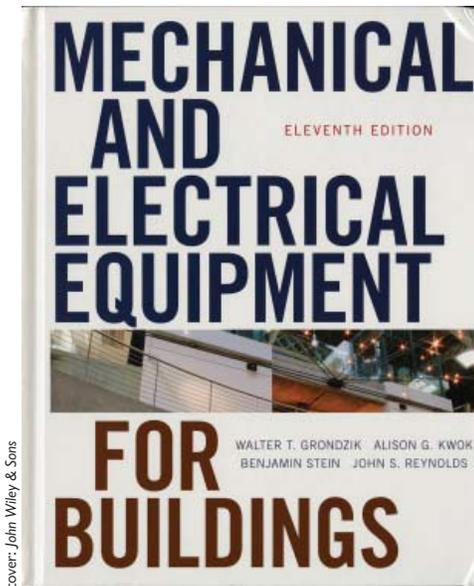
The Forest Canopy Tower rises among the mature trees in the ravine at IslandWood.

Construction has been completed on IslandWood's latest outdoor classroom/studio, the Forest Canopy Tower. It's a recycled forest lookout tower from near Mt. Rainier, which has been updated with code-compliant stairs. The ~120' tower offers unique educational experiences as well as astonishing views of the forest. Sandy Stannard's Cal Poly students had fun exploring the tower on November 7 while exploring IslandWood. 🖐

—Tom Bartuska

STUFF FOR YOU

MEEB XI OUT AND GROOVING



cover: John Wiley & Sons

The 11th edition of *Mechanical and Electrical Equipment for Buildings* is now in circulation. It's the only textbook cool enough (and heavy enough) to be immortalized in music on YouTube <http://www.youtube.com/watch?v=mpzmb37G_6A>.

—Leonard R. Bachman

[OMG!!! That was hilarious! It really can stop bullets! Now I know what to do with my 9th edition. Got the 11th ed. last week. :)]—Amanda Tullio, Wiley]

[Only SBSEers like Grondzik and Kwok can make building physics mesh with popular culture! Well done, you two!—ed.]

2010 WINDSOR CONFERENCE

The first call for papers for “Adapting to Change: New Thinking on Comfort,” 9–11 April 2010, Cumberland Lodge Conference Centre, Windsor, UK, is available at <<http://www.nceub.org.uk/>>.

Atze Boerstra, Humphreys, Nicol, Roaf, and Touhy are working on two papers for the January volume of *Australian Science Review*: Part 1—thermal comfort standards in the 20th century; and Part 2—thermal comfort standards in the 21st century. Paul Touhy has modeled a London office block with 3 different standards—PMV, Adaptive, and 18–28°C (just letting people choose a temperature in that range that's comfortable). Very interesting! See the results at Windsor! 🖐

—Sue Roaf

A CURE FOR THE RECESSION? JOB OPS GALORE!

THE CATHOLIC UNIVERSITY OF AMERICA

Sustainable Design—Materials Science (Full-Time, Tenure-Track). The successful candidate shall demonstrate significant expertise in the investigation of building materials and construction processes with respect to their suitability for sustainable design solutions. Expertise in the following areas is sought: eco-labeling, toxicity, embodied energy, life-cycle assessment, national and international rating tools, and deconstruction and recycling of materials. Primary duties will include teaching at both the graduate and undergraduate levels. Graduate-level teaching will include materials and assembly courses in the school's newly established and highly subscribed M.S. in Sustainable Design program. For additional information see <<http://architecture.cua.edu/>> or e-mail Chris Grech at <grech@cua.edu>.

ICF INTERNATIONAL—BUILDING ENERGY ANALYTICS

We're searching for an undergraduate student to join us as a Research Assistant in our Building Energy Analytics team's Energy, Climate, & Transportation practice, typically working on multiple projects with all levels of staff. RAs will apply their experience and academic knowledge, gain exposure to major projects, and interact with experts and clients in the field while building content knowledge and consulting skills. Key responsibilities include analyzing residential and/or commercial building systems with energy modeling tools, interpreting sustainable design practices, and in-depth analysis using spreadsheets, databases, and Visual Basic functions. You must have a Bachelor's degree in Mechanical or Architectural Engineering, Building Science, or related subject and a GPA of 3.0. To apply submit your résumé, a 3–5 page writing sample, and transcript to the Jobs section at <<http://www.icfi.com>>.

IOWA STATE UNIVERSITY

The Department of Architecture seeks applicants for a full-time, tenure-track/tenured position at the rank of Assistant, Associate, or Professor. We're seeking individuals who can address the prominent technical and design issues of the beginning 21st century (sustainability, carbon-neutral buildings, and BIM) through interdisciplinary research and teaching in building technology and design. Responsibilities will include initiating, developing, and teaching undergraduate and/or graduate design studios, core technology courses, and lecture, seminar, or laboratory coursework related to the candidate's area of specialization. To ensure consideration, apply by 18 December 2009, with a cover letter, statement of scholarly/research/creative objectives, and a CV with four references to <<https://www.iastatejobs.com>> (vacancy ID #090670). A portfolio of design and scholarly work (no more than one 1" letter-sized binder) is required and is to be mailed to Department of Architecture Faculty Search; 156 College of Design; Iowa State University; Ames, IA 50011.

LAWRENCE BERKELEY NATIONAL LABORATORY (LBNL)

LBNL has openings in its research team at all career levels—Principal Investigators, early career scientists, Project Managers, recent Ph.D. and M.S. graduates, and research support staff. We are looking for technical experts with backgrounds in the physical and computational sciences, mechanical and electrical engineering, architectural design, and related disciplines who are passionate about applying those skills to help solve the nation's pressing energy and environmental challenges. For detailed information and to apply on line, please visit our jobs web site at <<http://www.jobclub.com/banman/a.aspx?ZoneID=0&BannerID=71&AdvertiserID=28&CampaignID=191&Task=Click&SiteID=1&RandomNumber=696728>>. Select “Environmental Energy Technologies” as the Division. Or send your résumé to Susan McAllister, <SLMcallister@lbl.gov>.

LOUISIANA STATE UNIVERSITY

We invite applicants for a full-time, nine-month, tenure-track, Assistant Professor position (Sustainable) Ref: #006731 beginning in the fall 2010. Expertise in environmental principles and sustainable practices with the capability to apply and integrate this expertise into the design studios at the undergraduate and graduate levels is desired. Responsibilities: teach studios and lecture/seminar courses in the field of sustainability; participate in scholarly and professional research activities; provide service to the School, College, and University; help in program development. Apply online at <<http://www.lsusystemcareers.lsu.edu>>.

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A PEEK AT GREENBUILD

UNIVERSITY AT BUFFALO

The Department of Architecture at the University at Buffalo, SUNY, is seeking applicants for two tenured/tenure-track positions at the rank of Assistant or Associate. Successful candidates will teach graduate and undergraduate design studios, required courses, and advanced seminars. Curricular areas include building environmental performance, teaching required environmental systems and performance courses. Candidates are expected to take a leadership role in the integration of these areas within the curriculum. Applicants must apply online for posting number 0900366 at <<http://www.ubjobs.buffalo.edu/applicants/Central?quickFind=52937>>.

UNIVERSITY OF KANSAS

The Architectural Engineering Program seeks an Illumination/Power Engineering professor. For details see <<https://jobs.ku.edu/applicants/jsp/shared/frameSet/FrameSet.jsp?time=1256851296633>>.

UNIVERSITY OF NORTH CAROLINA CHARLOTTE

We invite applications for three tenure-track positions including Sustainable Design Integration and Sustainable Technology Integration. Qualified applicants must complete the online faculty application at <<https://jobs/unc.edu>>. Application requirements include a cover letter indicating position sought, a curriculum vita, a letter of interest including statements of pedagogical and research objectives, and contact information for three references. Additionally, each candidate must submit an abridged (maximum 20 pages) portfolio to Faculty Search Committee, c/o Michele Wallace; School of Architecture—Storrs Hall; UNC Charlotte; 9201 University City BLVD; Charlotte, NC 28223. Review of applications will commence Jan 15, 2010.

UNIVERSITY OF OKLAHOMA

We seek Tenure-Track Assistant or Associate Professors with an emphasis in building technologies and in architectural design with an emphasis in systems. The successful candidate will be expected to have a M.Arch. and professional licensure. Desirable areas of expertise include performance analysis, system design methodologies, emerging energy technologies, and sustainable strategies. Applicants should submit a letter of intent, statement of teaching philosophy, three letters of recommendation, and a portfolio of work. All inquires must be addressed to Joel K. Dietrich, Chair, Architecture Faculty Search Committee; The University of Oklahoma; Division of Architecture; 504 West Main ST; Norman, OK 73069. Applications received by Jan 15, 2010, will be assured full consideration.

UNIVERSITY OF OREGON

We seek a national leader in sustainable design education and research for a tenure-track position in Architectural Design + Structures. Application requirements and a complete position description are posted at <<http://hr.uoregon.edu/jobs/unclassified.php?id=2814>> and further details are available from <<http://architecture.uoregon.edu/people/positions>>. Review of applications will begin Jan 8, 2010.

UNIVERSITY OF SOUTHERN CALIFORNIA

We seek tenure-track faculty in sustainable technology and design who will teach core technology courses in the undergraduate and graduate architecture programs and participate in design studios as well as advise graduate and Ph.D. students with their thesis or dissertation work. Applicants must send a printed copy of a letter describing practice, research, and teaching interests; curriculum vita; samples of selected work; and contact information for three references to Sustainability Faculty Search Committee; USC School of Architecture; Watt Hall, Room 204; Los Angeles, CA 90089-0291.

UNIVERSITY OF WYOMING

Civil and Architectural Engineering invites applications for an Assistant Lecturer position in Architectural Engineering to teach undergraduate and graduate courses in architecture. See <<http://uwadmnweb.uwyo.edu/hremployment/showjob.asp?jobid=6045>>. Review of applications will begin Jan 11, 2010. Submit applications electronically to <ARE_Search@uwyo.edu>. 🐾



photo: Alison Kwok

Darren Petrucci, Director of ASU's School of Architecture & Landscape Architecture (l) and Harvey Bryan (r) pose among the "solar trees" at GreenBuild.

The coolest designs at the Greenbuild Expo booth were for the ASU campus. They're educational kiosks, with PVs, an IV bag of nutrients that flow to a particular species of plants, and LED displays. After their exhibit at the Expo, they'll be installed around campus. Each tree plays a different video from an individual school or department that's addressing sustainability. Architecture students did most of the design and construction for the trees. Harvey Bryan did the PV, which works, but not in the exhibit hall. They also received one of the four President's Leadership Awards! Congratulations, Harvey! 🐾

—Alison Kwok

SBSE AND LABOR PARTY!



photo: Anna Maria Orru

Anna Maria Orru took the opportunity to schmooze with PM Gordon Brown during an event to celebrate "the contribution of architects, designers, and other creative professionals in building Britain's future" on 12 November, at 10 Downing Street. It would have been great if she'd mentioned her new systems design toolkit launched at <<http://www.scene-thinking.com>>. Oh well!

TOP-10 GREEN PRODUCTS

BuildingGreen announced its eighth annual Top-10 Green Building Products at Green-Build. Complete descriptions and contact information for the products are provided at <http://www.BuildingGreen.com>. 🖐



photo: Project Frog

One of the Top-10, Project FROG modular green classrooms feature high-performance envelopes, daylighting, high-efficiency mechanical systems, healthy materials, and green components.

THANK YOU MALCOLM WELLS!

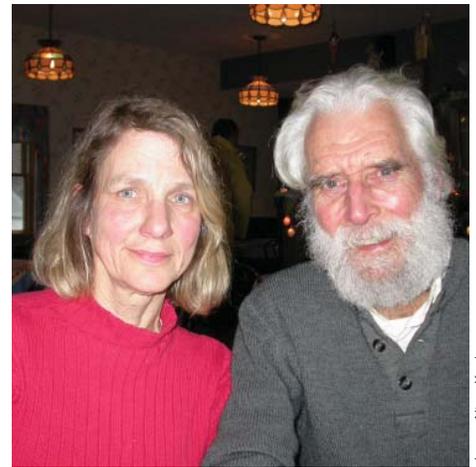
Mac Wells passed away on November 27. Though not unexpected, as he's endured health issues for the last decade, I'm saddened nonetheless. Wells has been an inspiration for decades. He's been ahead of the times forever. His wilderness-based checklist was developed in 1969, before the 1970s oil embargo, when we thought energy was going to be free and limitless. He was appalled by the built environment's role in environmental degradation when we were enthralled by the power of design.

I vetted the 1999 SBSE checklist for regenerative design with Malcolm. He loved it! Mac was my best correspondent. We never traded e-mails. We wrote letters. He always included a beautiful polemic watercolor with each exchange. And he wrote/drew *Talking Baseball* as well as *Gentle Architecture!* I'm going to miss him forever and remember him all the time.

If you want to read a longer eulogy see <http://www.nytimes.com/2009/12/06/arts/design/06wells.html>. Mac would find ironic the bright lights of Broadway shining on his career. Rest easy, Mac! Thanks for your kind heart and ever-generous soul. 🖐

—Bruce Haglund

[John Reynolds has started a thread of remembrances of Malcolm on the SBSE listserver at <https://www.lists.uidaho.edu/pipermail/sbse/2009-December/004118.html> .-ed.]



Malcolm and Karen Wells.

photo: Alison Kwok

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