



photo: Tisha Egashira

SBSEers get together for the traditional photo op on the steps of the Sitka Center for Art and Ecology at Cascade Head, OR.

## RETREAT AT CASCADE HEAD 2004

Cascade Head provided a restorative environment for our 20th anniversary retreat. As a mere 10-year veteran, I sensed the history and dedication of all SBSEers in attendance. To my memory, this group was the largest gathering as well as a record number of junior and student members attending and participating (not to mention, the most Canadians—8 including offspring!). It was a bit disconcerting, though, now to be considered part of the “old guard.” The retreat boasted amazing organization, superb facilities, accommodation, and food—thank you Charlie Brown and Alison Kwok. I fondly remember the fragrance of the salmon baking in spits adjacent to the open coals whilst attempting to concentrate on the finer aspects of environmental design.

My first retreat at Green Gulch in 1994 coincided with the first Vital Signs sessions and the introduction of sustainable design as a significant part of the curriculum. That retreat saw Cris Benton explaining the workings of the “world wide web,” Ray Cole introducing the notion of embodied energy, and Marvin Rosenmann initiating the idea of Greening the Campus. What phenomenal change in only 10 years! I can’t imagine what the 20-year veterans felt. *[We’re simply amazed!—cd.]* The Cascade Head presentations clearly demonstrated that sustainable design has achieved inclusion in the curriculum. We are now fine-tuning the courses, content, and timing of offerings. The Vital Signs case studies are munificent and so much more detailed than those of 10 years ago. They’ve become a point of departure for the evaluation of system–human interactions in buildings. The recent listserve discussion on the merits of LEED only serve to reinforce this point. Ten years ago sustainable design wasn’t a significant architectural “movement.” Today, we debate the merits of a system that has brought the word “sustainable” to the “market” in a positive way—as we all hoped it would.

What more to say? The Retreat was more rejuvenating and rehabilitating than ever. How you can proceed from year-to-year without an SBSE Retreat “hit” is unfathomable. If you didn’t attend, you should consider it! Attending “other” conferences only reinforces my adoration of the SBSE Retreat. Camaraderie, civilization, and education all rolled into one. Wow! ||

–Terri Meyer Soake

## SBSE CALENDAR

### 2004

Oct 14–16 AoC Workshop; Woods Hole, MA

### 2005

Spring ARCC Research Conf.; Jackson, MS

June SBSE Retreat; Savannah, GA

Jun 25–29 ASHRAE Conf.; Denver, CO

Summer AoC Workshop; tba

Aug 8–12 Solar World Congress; Orlando, FL ||



photo: Tisha Egashira

Chefs and SBSEers savor the salmon baking on “traditional” spits at the retreat.

## LETTERS TO THE EDITOR

"Thermal Delight" will be the theme of my talk to the Alaska AIA at their conference at Chena Hot Springs, above the Arctic Circle, near Fairbanks, in early November. The conference theme is "Inside Outside," so courtyards and their delightful arcades should provide quite a contrast to the snow and cold wind. Last time I was in Chena it was 40 below—the point at which Fahrenheit and Celsius agree. I promise to think of SBSE while soaking in the hot-spring-fed, covered pool!

—John Reynolds, *University of Oregon*

[When I get to be famous, will they send me to Nome, too?—ed.]



Steve Baer, Drew Gillett, Rich Komp, and I had a nice workshop on solar heating and natural cooling strategies on July 9 in Portland. About 40 people showed up, including Harold Hay :-). Steve showed pictures of his architectural Cool Cells™, including a 300' spiral of 4" PVC pipe used as a room divider.

One person wanted to heat a new Antarctic research building. Another wanted to heat a 2-story, 2,000 ft<sup>2</sup> Arctic research building that would replace the current collection of tiny buildings to lower their \$400,000 per year fuel bill. They are built on top of 11,000 feet of ice over the soil of northern Greenland, where winters are cold (-107°F) and windy—(80 knots for two weeks at a time) and dark. Every year, another 3' of ice arrives, so they have to raise the buildings 3' or be buried.

—Nick Dine, *Dine Associates*  
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## ARTS FROM THE RETREAT ROUNDTABLE

## 20 MORE YEARS OF DESIGNOSAURS AND ERECTORHEADS?

By invitation from our dauntless editor, some incitement from the retreat crowd, and a large measure of reckless bravado, I'm continuing my SBSE Retreat Roundtable tirade on *The Next Twenty Years*. I'll recap my previous comments and then continue my overstated tantrum. Will I stimulate equally intense response? Criticism, after all, is most worthwhile when aimed directly at those most capable of responding.

I joined SBSE in the late 1980s and still recall my first Retreat in 1991 at Idaho's Clark Fork campus. By the 2002 Retreat at Sorenson's Resort, I was firmly convinced that SBSE strongly influences our discipline. [LB's a quick study!—ed.] I think the direction we choose to look has a formative power over subsequent directions taken. To accentuate that point I related a homily to the effect that what you say leads to what you think, what you think then becomes what you believe, what you believe becomes what you do, and what you do in turn determines who you become. But yet another cautionary tale: I clearly remembered from my semi-lucid undergraduate days in the mid-1970s that there were three things my instructors swore would never be the stuff of architecture: computers, solar, and holistic systems thinking. I daresay that many who made such prognostications are now either in hiding, denial, or out boasting that they were the principal innovators. Please let us be more progressive in our consideration of how the next two decades will unfold.

My continued line of attack is more opinionated and looks at a serious void in what we as an organization have undertaken so far in the interest of building science. Specifically, I am referring to value differences between those I affectionately call *Designosaurs* and those of us I anoint with equal fondness as *Erectorheads*. My complaint is that the segregation of these two belief systems is patently flawed and fundamentally artificial. Neither view is inherently incorrect; the problem is more one of need for inclusive complexity. Designosaurs too often are stereotyped as a cadre of artists who invest significance solely in work that enriches human experience of the built environment through aesthetic insights. Erectorheads meanwhile are pigeonholed too narrowly as test-tube scientists narrowly dedicated to optimizing building function in every imaginable category of service efficacy. The presumption being that Designosaurs are fixated on the fluff-brained aesthetic side of architecture and concerned only with stylistic physical design, while Erectorheads are intent on a totalitarian utopia of soulless optimization and never venture beyond the world of numbers. Designosaurs are thus presumed to focus solely on revealing beauty, and Erectorheads, the embodiment of intelligence. The whole mess is reflective of technophobia versus technophilia arguments that date back to the dawn of the industrial revolution and the Frankenstein view of technical progress. Furthermore, the entire caricature is an exaggerated dichotomy that could persist only in the most simple-minded and territorial of minds. It seems to me that far more progress has been made since the 1850s than that shallow perspective would reveal. I argue that architecture is made of both aspects and insist that the better works have ample evidence of *both/and* integration and that they seldom illustrate *either/or* segregation of the right brain from the left. Architecture demands complete and complex thought. SBSE could, and probably should, take on the more colorful and complex rendering of this still incomplete picture as one of our primary missions.

The constructivist rejection of positivism of *The Illusion of Technique* is one deep-water harbor for the continuing differences between physical and strategic design. In academia it is quite possible to eliminate critical technical issues from the studio in order to narrowly emphasize physical design. It might also be argued that this reverse-reductionism is appropriate to the limited scale of what can be accomplished in a studio: Real integrated design takes a long time and a transdisciplinary (not just multidisciplinary or interdisciplinary) team. That argument would be fine if studio were taught as a separate course in Design; but the fact of the matter is that studio is where our institutions expect students to assimilate their *entire* education of cognitive knowledge and critical thinking skills. There are possible resolutions: Ralph Knowles has argued for a matriculation of studio work requiring progressively more complex solutions to small-scale projects rather than the current convention of increasingly refined solutions to increasingly larger and vaguer programs. Another alternative to technically weak studios is founded in sustainable design and its adoption as a core agenda among students. One needs only listen to the proclamations of recent Pritzker Prize winners to know that Green is now a

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## ANNUAL MEETING MINUTES

1. The meeting was called to order at 12:10 pm on 13 July 2004, in Portland, OR, by SBSE President Jim Wasley.
2. The winners of the SBSE/ASES Poster Competition were announced, recognized, and received their awards: First: Daniel Overbey (Ball State); Second: Nu Ri Bae and Hyu-Jin Kim (Yonsei); Third: Daniel Glaser (UC Berkeley).
3. The recipients of the SBSE scholarships and Agents of Change support for participation in the SBSE retreat and/or ASES conference were announced and received their checks. See the SBSE and AoC web sites for details.
4. New SBSE Board members were welcomed—Chris Theis, President-Elect, and Sandra Mallory, Secretary-Treasurer.
5. Sandra Mallory gave the Treasurer's Report. Highlights included—current (07/04/04) account balance of \$8,417 (\$4,346 in checking and \$4,072 in savings); scholarship donations (\$1,500 from the Jeff Cook estate, \$1,000 from Fuller and Jane Moore, and \$2,000 from John Reynolds); substantial income from Sun Angle Calculator sales; membership (2002—101 full, 9 student, 11 affiliate; 2003—116 full, 23 student, 7 developing country, 12 affiliate; 2004 to-date—47 full, 14 student, 8 developing country, 12 affiliate); membership forms and payment details are on our web sites as well as a listing of paid-up members; non-paying “members” will be culled from the membership lists and will not receive *SBSE News* by post.
6. Following a discussion of voting member status, Sandra Mallory moved, seconded by Leonard Bachman, that members from developing countries who have had their dues waived (a policy enacted last year) have full voting status. The motion passed unanimously.
7. Self-introductions were made by attendees. About 40 people were in attendance (not including several who had to leave to participate in the poster presentations).
8. Walter Grondzik gave a report on the SBSE Peer Review network. Those interested in using the network or serving as a reviewer should contact <gzik@polaris.net>.
9. Bruce Haglund gave a report on the *SBSE News*. As always, contributions are sought. Contact <bhaglund@uidaho.edu> with news, opinions, announcements, and photos.
10. Compliments on the SBSE web site were extended to Robert Marcial (in absentia).
11. Acknowledgment and thanks were extended to John Reynolds, Fuller and Jane Moore, and the Agents of Change project for their generous support of students.
12. Harvey Bryan gave a report on Jeff Cook legacy activities, including support of student scholarships via SBSE; development of a slide resource via Arizona State University with a focus in three areas (solar, vernacular, and organic architecture); cataloging Jeff's extensive collection of books and papers; 2004 SBSE Retreat scholarship awarded to Eugenio Collados, University of Santiago de Chile; 2004 PLEA conference scholarship awarded to Aalok Deshmukh, ASU.
13. Walter Grondzik provided an update on the Agents of Change project activities. The August workshop in Santa Barbara was cancelled. The next training workshop is scheduled for Woods Hole in October 2004—with applications due in early August. The final training workshop will likely be held in summer 2005 at a location to be determined.
14. The 2005 SBSE Retreat, “Beginning Design,” will be held in Savannah, GA, with Emad Afifi in charge of logistics; Chris Theis, Leonard Bachman, and Terri Boake in charge of content.
15. Chris Theis will look into the possibility of a 2006 retreat venue in Colorado in conjunction with the Denver ASES conference.
16. Attendees were reminded of the upcoming ASES/ISES conference in Orlando in August 2005. Abstracts are due October 15.
17. Jim Wasley discussed his efforts to build links between SBSE and the US Green Building Council (USGBC), particularly in the areas of education and academic involvement in USGBC. Jim Wasley moved, seconded by Walter Grondzik, that SBSE join USGBC. As well as participating in an organization that espouses the beliefs of many SBSEers, USGBC membership should also bring USGBC benefits to all SBSEers. The motion passed unanimously.
18. Jim Wasley reminded us SBSE is a sponsor of the Cradle-to-Cradle design competition.
19. The meeting was adjourned at 1:45 pm. ■

—Walter Grondzik

## ROUNDTABLE [CONT. FROM P2]

standard of the profession. It also may be that the discredit of postmodern cultural follies of architectural design, coupled with the lessons of post-industrial societal norms, will reassert a modernist paradigm in all design as the pendulum swings back. Surely some radical adaptations must be made to accommodate a national energy code, LEED certification, pre-commissioning, post-occupancy evaluation, and continuous commissioning requirements. To echo the old mantra, these criteria are scarcely the sort that can be pushed aside or farmed out to consultants until after the architectural intent and formal diagram is decided.

In the end, however, what probably matters most is that the constructivist objections be remedied, not that they just be antagonistically denied or refuted, requiring some serious discourse with our peers. (The 2005 SBSE Retreat in Savannah, GA, will be about Early Design Studios. All erectorheads should bring their pet designosaur and vice versa so we can work together on this.)

André Potvin expressed the complementary side of this problem at the Roundtable by proposing that technical strategies of design should always seek, proclaim, and demonstrate aesthetic beauty—that they should do so with the same regard normally attributed to *Designosaururus Rex*. The point is well taken, for as long as erectorheads are thought to dwell in their own exclusive corner of the discipline, the defenses will never come down.

It's time to terminate the polarized debate over which side of design (strategic or physical) should have the upper hand. Students are savvy to the internal fight and are sick of institutional squabbling over such precious resources as their dedicated time and effort. We need to get past this left-brain rationalist vs. right-brain intuitive nonsense if architecture is ever to become whole-minded and progressive. *The alternative is that the field will split (yet again) into two different disciplines with two separate sets of expertise, two different views of history, and two different missions to society.*

The origins of architecture lie in the inclusive complexity of a merged mission for design, not necessarily in Venturi's assertion of messy vitality, rather in the sense that one “side” is not seen as significant (like poetry or metaphysics) while the other is merely important (like income tax or decoration). I hope you'll see fit to express your insights and opinions on this matter here as well. ■

—Leonard Bachman

## SBSE PEOPLE

\* **Eddie Cazayoux** has published *A Manual for the Environmental & Climatic Responsive Restoration & Renovation of Older Houses in Louisiana* (paid by the number of words in the title) written at the request of the Louisiana Department of Natural Resources to help solve mold and rot problems from incorporating improper building science design and adding air conditioning to these historic houses. Free to architects throughout the Gulf states.

■ A forthcoming issue of *Solar Today* will have short statements by and some illustrations of the work of **Polly Cooper, Ken Haggard, and John Reynolds**. Also included are Ed Mazria and Mike Nicklas. The issue might be ready for distribution at the USGBC Conference in Portland, OR, in November.

✕ **Anat Geva** and Nancy J. Volkman have been named editors of *ARRIS*, the Journal of the Southeastern Society of Architectural Historians (SESAH), for the the next three academic years. *ARRIS* is published annually with a paper submittal deadline of January 1. The journal publishes scholarly articles on architectural history and related fields such as historic preservation, history of landscape architecture and urban planning, and **history of building technology**. Guidelines for submissions at <<http://www.sesah.org/ARRIS.guidelines.html>>.

➤ **Fatih Rifki** was recently promoted to Professor and plans to begin a year-long leave in January, gladly giving up administrative duties after 8 years.

⊛ The IIDA Student Sustainable Design Competition Grand Prize Winner is Kate Hauge, an Interior Design senior at Washington State University—Spokane in a studio taught by **Judy Theodorson**. Kate received a check for \$3,500 that she will use for graduate school. ■



photo: Bruce Haglund

Fresh FASES Murray Milne and Harvey Bryan at the ASES banquet in Portland, OR.

## THE BUZZ: SBSE TAKES ON LEED

[Rick Diamond read my mind by compiling the following “Best of the List Server” sequence. It started with a simple request then evolved when Dru had a pet peeve and Terri mentioned teaching. I’ve had to reduce the dialogue to fit the News, but true aficionados can relive the discussion by accessing the list server archives through <<http://www.sbse.org/membership/>>.—ed.]

The 8/30–9/3 exchange about “balanced articles on LEED” has been fascinating [*and still going on!*—ed.]—clearly evoking strong opinions. I will send a copy of the remarks to folks at EPA who are considering funding a study evaluating LEED buildings. My purpose is twofold—to share our diverse views and to allow them to discuss these issues directly with the USGBC.

A new project is underway at LBNL and EPRI on forming a research center to evaluate the performance of green buildings, with a preliminary focus on LEED buildings. See <<http://www.green-buildings-research.org>>. Once we get more established (i.e., funded) we hope to include SBSE as a partner.

—Rick Diamond

**The original August 30 request:** Can anyone recommend an article that offers a balanced, critical perspective of LEED? I am looking for something to give students that doesn’t simply glorify LEED, but simultaneously talks about its limitations and highest priority needs for future development.

—Gail Brager, UC Berkeley

My favorite criticism of LEED: a bike rack is equivalent to 10% energy savings = 1 point.

—Dru Starley, US DOE

In response to Dru’s favorite criticism—there are times when I, a bicycle commuter, have chosen not to ride to a destination because of lack of bicycle parking. A 10% energy savings for the Schlitz Audubon Building is about 3,000 BTU/SF/yr. My annual energy savings on the bicycle is about 7.7 million BTU per year, equivalent to a 10% energy savings for 2,500 sf of building. Four bicycle commuters per 10,000 SF of building would be roughly equivalent in energy terms. Most bicycle racks hold 6 to 12 bicycles.

—Mike Utzinger, University of Wisconsin—Milwaukee

I have both my 3rd- and 4th-year students (4th-year doing their NCARB driven Comprehensive Building Design project) design their buildings (without calculations) to approximate LEED gold standards. As a teaching tool, it seems a great way to force them to examine all aspects of sustainable design in buildings—not just energy, interiors, and envelope. The goal of LEED is to engage practitioners in all aspects of sustainable design. If you look at their motivation—market change—it is not a bad tool.

The students also suggested appending negative points. There are buildings that include energy hogging aspects and excesses in materials that can still be LEED certified.

—Terri Meyer Soake, University of Waterloo

Terri’s students’ point about adding negative credits to LEED is right on, and a problem with all the checklists save one—Malcolm Wells’ brilliant Wilderness-Based Checklist which SBSEers transmogrified into the Regeneration-Based Checklist. It gives positive and negative scores AND zero is sustainability (LEED-compliant could easily score zero or less!). We all need to do better than LEED requires—soon LEED gold may be the worst building that can legally be built. This checklist is available for download (in many languages) from the SBSE web site.

—Bruce Haglund, University of Idaho

Is LEED appropriate in the studio or classroom? I would say “no.” It is a checklist to measure a building design, construction, and operation in terms of technical and measurable elements. Its limitations are:

1. LEED begins with a design, and thus excludes the creative work that must occur in pre-design programming. It does not give credit for real economies of building programming, such as double and triple uses of spaces, placing program outdoors or in non-conditioned spaces, and reducing energy and environmental impact by building less. Granted these design moves could be driven by market forces of economy, but in any attempt at green design these opportunities are prompted by knowledge of bioclimatic design.

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## ASES 2004 THANK-YOUS

I was very happy with both the quality and quantity of the architecture papers at Solar 2004. I had the impression that SBSEers were going to USGBC in place of ASES lately, so this strong SBSE presence in Portland was a huge reward for my work as Chair—a job that's a whole lot easier to do when mostly retired!

First, my thanks to these architectural educator presenters, workshop leaders, and chairs—32 SBSEers by my count and a host of their students [*40+ at the annual meeting.—ed.*]. One of the great long-term teaching rewards is seeing former students succeed, and for this, I thank mine: In addition to quite a few SBSEers, presenters and exhibitors Kathy Bash [GBD Architects], Sean Denniston, Kent Duffy [SRG Partnership], John Hogan [City of Seattle], John Jennings [NEEA], Kelly Lerner and Carol Venolia, Bob Lorenzen [EWEB], Jason McLennan [BNIM], Adam Robins, John Rowell, and Greg Thomsen [Goody Clancy].

There were many notable papers from outside SBSE, including the Don Aitken, Christine Ervin, and Denis Hayes keynotes and two hilarious presentations by the Solar Cat and Larry Kazmersky. I was moved by Nina Maritz's poignant work from Namibia and want to also especially cite papers such as Peter Clegg's impressive work from the UK, David Orr's Oberlin report, Tjerk Reijenga's PV-studded architecture from the Netherlands, Heinz Rudolph's Oregon schools, Stu White's ongoing design work at the Society for the Preservation of New Hampshire Forests, and Martin Yoklic's Cooletower issues.

So, after all those names, a few highlights: Best-attended ASES Conference outside DC since 1991, a nice profit margin thanks to the generosity of Oregon utilities and energy groups, and the loan of digital projectors by Oregon's InFocus Corporation.

I hope you all munched your bag of Kettle Chips (produced with help from their big rooftop PV array in Salem), and enjoyed your chocolate slug at the closing luncheon. We wanted to be regional, after all. Mmmmm, good! ■

—John Reynolds

## THE BUZZ: SBSE TAKES ON LEED [CONT.]

- LEED is not a trigger to the far more effective ecological imagination at the core of design. Calatrava exemplifies this mindset in his approach to structures; Aalto exemplified it in his approach to daylighting—building as a daylighting fixture.

Given the power of imagination in conveying to students these substantially different ways of thinking and designing, LEED and similar checklists may be worthy of discussion in the context of professional practices, but not as triggers to design imagination.

—Don Watson, Professor & Dean Emeritus, RIT

Right on, brother!!! A discussion of the needed paradigm shift is in our forthcoming book *Adapting Buildings and Cities for Climate Change*, by Roaf and Nicol, Architectural Press, Oxford.

—Eue Roaf, Oxford Brookes University

I am still very concerned that durability or Life Cycle Assessment is not a prominent component of LEED. The addition of durability (LEED Canada Credit 8.1) is laudable but carries little weight and is difficult to quantify. Is it worth the effort to design an environmental separation [*a wall folks!—ed.*] that has a service life of 50 years certified for merely one point?

I'm presently writing a book titled, *Designing the Exterior Wall: An Architectural Guide to the Vertical Building*. It has become more and more apparent to me that durability is the lynchpin of sustainability when looking at individual buildings. If the exterior wall were designed with good maintenance to last 50 years, sustainability would be advanced much farther than by many other LEED items.

—Linda Brock, University of British Columbia

[If you haven't listened in, check the SBSE list server archives via <http://www.sbse.org/membership/> for the post-September 3 discussion. It has become even more interesting!—ed.] ■

## LETTERS [CONT. FROM PAGE 2]

[Talk about polar opposites! You all can start giving polar solar workshops!—ed.]



I just accepted a new tenured teaching position at the University of Texas at San Antonio School of Architecture. The plan is to start a degree program in construction science. Two aspects of this program are to focus on sustainable construction practice and be collaborative with the existing architecture and interior design programs. I will continue to teach a graduate design studio on sustainability. Also, I just closed on a small cottage close to downtown SA and plan to make it a sustainable demonstration project remodel and addition. There's lots of interest in San Antonio, including the San Antonio Sustainable Building Coalition. This enthusiasm is a far cry from the situation in Lubbock, TX, and is very encouraging.

—Marc Giaccardo, UTSA

[It's good to hear that total integration and cross-disciplinary learning are on the agenda at UTSA.—ed.] ■

## MORE LEED CRITIQUES

Respondents to Gail's enquiry supplied the following sources of articles on LEED.

Best review: <http://fire.nist.gov/bfrlpubs/build02/PDF/b02170.pdf>.

A two-page summary: [http://www.bfrl.nist.gov/oa/publications/gcrs/02836\\_summary.pdf](http://www.bfrl.nist.gov/oa/publications/gcrs/02836_summary.pdf).

A more digestible paper: [http://www.athenasmi.ca/papers/down\\_papers/LCA\\_Tool\\_%20Integr\\_Paper.pdf](http://www.athenasmi.ca/papers/down_papers/LCA_Tool_%20Integr_Paper.pdf).

BD&C white paper on sustainability: <http://www.bdcmag.com/newstrends/BDCWhitePaperR2.pdf>.

<http://www.dc.lbl.gov/~kumar/Downloads/Introducing%20Comparative%20Analysis%20to%20the%20LEED%20System.pdf>.

*Environmental Building News*, Dec 2003. ■

—Bruce Taglund

## LEONARD'S ONE-LINERS

Here are some condensed one-liners collected at the SBSE roundtable and other SBSE or ASES events. Apologies for misquotes or incorrect attributions; thanks for your unwitting contributions.

### SBSE Retreat

- ✦ *Architecture is not: 1. Understood by drawing, 2. A shaper of people, or 3. Any different from building.* Charlie Brown
- ✦ *We are going to win this one... because we share.* Terri Boake
- ✦ *We must learn by doing, not just by knowing.* Unknown
- ✦ *It is not the information; it's the critical thinking.* Mary Guzowski
- ✦ *Technology is meaningless until it is com-modified to human experience.* Tang Lee
- ✦ *Since torture is not allowed as a means of making students learn, we should see ourselves as facilitators, not as teachers.* Walter Grondzik
- ✦ *Not only were we never trained to teach, we were never trained how to learn.* Terri Boake
- ✦ *...go in a horizontal line of knowledge and be connective.* Ihab Elzeyadi
- ✦ *... not to find a faster way to get where we are going, but to find a new place to go.* Norbert Lechner
- ✦ *When I am king, there will be a north arrow on every drawing.* Norbert Lechner

### ASES Conference

- ✦ ASES Plenary themes: *How did our oil get under their soil?* and *How did our gas get under their grass?*
- ✦ *In God We Trust. Everyone else shows data.* Stanford Ovshinsky
- ✦ *In the next 50 years, we will construct more buildings around the world than we have in the last 5,000 years.* David Orr
- ✦ *Buildings are means, not ends.* David Orr ||  
—Leonard Bachman



photo: Dale Brentrup

The astute Leonard Bachman with Rob Peña and quotable Mary Guzowski at the retreat.

## HELP IT HAPPEN!

Put sustainable design information into the hands of students, professors, and facility managers at your university or college. If your campus library were to subscribe to BuildingGreen's online service, the *BuildingGreen Suite*, you and your students would have unlimited access to all back issues of *Environmental Building News*, information on green building products, and a wide variety of case studies of high performance buildings. The *BuildingGreen Suite* is a searchable online resource that can help bring the best in green design information into the hands of your entire educational community. For \$995/year your library can subscribe to campus-wide access. That's about the cost of 25 students at the \$39 semester rate offered to professors who sign up a whole class.

With this online reference tool, both students and professors can stay ahead of the sustainable design field by quickly researching reliable information on a wide range of topics including green materials, energy-savings ideas, best green practices, and case studies of high performance buildings. It's easy to share this information between professor and student and among participants in any class. In addition to maintaining your library's print copy of *EBN*, the *BuildingGreen Suite* gives access to:

- ▣ *A virtual green building library of more than 2,000 articles from 12 years of Environmental Building News.* Articles that describe projects, dissect strategies, review products—all cross-referenced with GreenSpec listings and searchable by CSI, LEED credit, and green topics.
- ▣ *An electronic copy of Environmental Building News.* The latest monthly issue, in full-color PDF, available before print copies are mailed. View and print articles just as they appear in print.
- ▣ *Online access to in-depth case studies of more than 90 high performance buildings,* cross-referenced with articles and product listings, and searchable by location, building type, LEED rating, and others.
- ▣ *Instant access to a robust database of more than 1,800 green products from the GreenSpec® Directory* of products, cross-referenced with articles and case studies and searchable by CSI MasterFormat™, LEED® credit, and green topics.
- ▣ *A powerful search engine* that enables users to pinpoint information on green strategies, building products, news, opinions, and trends in the industry.

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—Jerelyn Wilson

## OPPORTUNITY

BuildingGreen, Inc., publisher of *Environmental Building News* and the *GreenSpec Directory*, is offering a ten-month paid internship beginning September 2004. Tasks include entering data from case studies of high performance buildings for online publication, verifying and updating GreenSpec product listings, editorial support for *EBN*, and general clerical support.

BuildingGreen has a staff of a dozen knowledgeable, dedicated employees whose work is well-connected to the cutting edge of sustainable building design and construction. The office environment is professional, casual, personal, and focused.

Compensation is \$8.50/hour, plus possible housing benefits. Potential to learn a lot and make a contribution to a company whose mission is to effect positive change in the building industry. See <<http://www.buildinggreen.com/index.cfm>>.

Please send a résumé and cover letter to <[Jerelyn@BuildingGreen.com](mailto:Jerelyn@BuildingGreen.com)> or by post to—Jerelyn Wilson; BuildingGreen, Inc.; 122 Birge ST, Suite 30; Brattleboro, VT 05301. ▣

—Jerelyn Wilson

## CONFERENCE REVIEWS

### GREENING THE (CANADIAN) CURRICULUM, QUÉBEC CITY, JUNE 2004

It was interesting attending the Retreat at Cascade Head with Tang, André, and Claude after having just met with the same in Québec City at the second colloquium on attempts to green the architectural curriculum at the 11 Canadian schools of architecture. We four felt privileged to bring our collective SBSE experience to the table. Although the Canadian green education initiative is in its infancy, it has had the advantage of having a jump start, thanks in part to dedicated work on the part of many faculty who have been greening their respective courses for several years.

The first meeting was held 2 years ago in Montréal and focussed on greening core courses. The effort for the intervening 2 years was to create and promote green studios or green studio project initiatives. A school's success varied as a function of the role that the environmental professor plays in the school politically, as well as in the nature of the courses she or he is allowed to teach. There were fewer green "studios" than green projects. The ACSA Labs 21 Competition proved an excellent basis for this work, with major entries coming from Calgary, Toronto, and Laval, with Laval taking some key prizes. The proceedings of the GC meeting are published on a web site that showcases green student projects from the 11 schools.

The Québec City meeting was held in the ancient halls of the Laval School of Architecture, under the co-direction of Ray Cole (UBC), Richard Kroeker (Dalhousie), Danny Pearl (Montréal), and André Potvin (Laval). Among the 50 in attendance were many students and members of "industry," showing a growing and healthy concern for this important initiative. Peter Busby of Busby+Associates in Vancouver, "author" of a significant number of green buildings, spoke strongly of the need for faculty involved in this work to gain LEED certification. KEEN Engineering, one of Canada's pre-eminent sustainable design consultancies, echoed this need, and a parallel need in mechanical and electrical engineering schools. Firms like KEEN cite a severe shortage of environmentally-educated engineers who can take an active role in the integrated design process for sustainable buildings.

See what the Canadians are up to <<http://www.greening-verdir.arc.ulaval.ca/index.html>>.

*-Terri Meyer Zoake*

### ASES SOLAR 2004 REVIEW

After a successful retreat at Cascade Head, OR, a large SBSE contingent made their way to Portland for Solar 2004. Chaired by John Reynolds, it drew 1,248 attendees—the best-attended ASES Conference since the mid-'80s. Attendance at ASES conferences has been steadily increasing, clearly demonstrating a re-emerging national interest in renewable energy.

Solar 2004 was well-organized, unlike any ASES Conference I can remember. There were several very strong political statements made during the course of the conference. At the Opening Passive Plenary David Orr made it very clear that the solar community needs a regime change in Washington. At the Closing Conference Plenary Dennis Hayes reminded everyone that John Kerry was Massachusetts coordinator for Earth Day #1 and his administration would place strategic importance on developing renewable energy. I came away believing that Dennis might very well be our next Secretary of Energy. At the Conference Banquet Larry Kazmerski, Director of NREL's PV Program, provided a satire of several DOE officials in a video he prepared (not on DOE time) of these officials' heads superimposed on the Village People singing ASES to the tune of that '80s disco hit, *YMCA*.

The quality of the conference papers and presentations was extremely good, so good it made deciding which session to attend very difficult. The only complaint I heard—there were too many parallel sessions (6 in most cases) and too many papers in each 1½-hour session (also 6 in most cases). It was not an easy task scheduling opening and closing sessions and nearly 200 papers into 3½ days.

SBSEers presented their latest research, and a number of first timers at the Retreat were also in attendance. SBSE was not only a Participating Organization for Solar 2004, but also sponsored a Student Poster Competition, Best Student Paper and Presentation Awards, and several student scholarships. High visibility for SBSE prevailed.

• *continued next column*

John and his National Organizing Committee did a great job, the week's weather was spectacular, and Portland was a wonderful host city. I was so impressed I'm planning to return to Portland for the GreenBuild 2004 Conference in November.

*-Carrey Bryan*

### SESCI (SOLAR ENERGY SOCIETY OF CANADA) CONFERENCE, AUG 2004

Although I had never attended a Canadian Solar Conference, its location at the University of Waterloo seemed to beg my participation. It was interesting to see the status of the Canadian Solar scene as compared to that of the United States. The Canadian conference was remarkably smaller than ASES. Yet, this year demonstrated a revival of SESCO after having nearly disappeared.

The most dismaying aspect was the lack of architectural participation. Charles Simon (architect of a YMCA Environmental Centre) and I were the two most noticeable architects at the venue. The majority of attendees were engineers, presenting focused research on active (solar thermal and PV) solar systems. Unlike the U.S. conference, there is no distinct passive stream, and the sustainable buildings session (Charles and I presented) was an anomaly.

There was an interesting tour of the brand new Spherical Solar Systems plant, a subsidiary of ATS Systems—the only Canadian plant producing PV panels. Their unique technology uses small "balls" of silicon, treated with boron and phosphorus. These balls are forced into an aluminum fine mesh to form squares of PV that are set into larger flexible sheets. One of the end products, targeting the recreational industry, is sold in sheets about 30" x 36". Take it out on the weekend! The other line will be mounted in hard mounts, suitable for roofing applications. For more info <<http://www.spheralsolar.com>>. Not a pitch, just a cool product!

Next year's venue is Vancouver in August. I'm planning on seeding the event with aspirations to West Coast sustainable design. Stay tuned. ■

*-Terri Meyer Zoake*

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**TOOL DAY 2004**


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photo: Roger Ota

Tool Day 2004 participants tinker with a lightshelf. For results and more see <<http://www.sbse.org/toolday/>>.

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**FREE\* POE SURVEY**

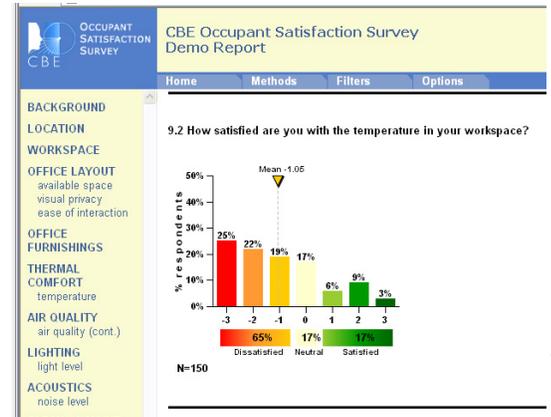

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Nobody knows a building like the people living and working in it. The Center for the Built Environment (CBE) at UC Berkeley has developed a web-based Occupant Indoor Environmental Quality Satisfaction Survey <<http://www.cbesurvey.org>> to assess occupant perception of thermal comfort, air quality, lighting, acoustics, office layout, furnishings, and cleanliness. We've implemented the survey in over 150 buildings across the U.S. and Europe and hope that our growing database will become an excellent resource for analyzing the effects of building design features on occupant satisfaction.

CBE extends a special offer to SBSE members by waiving the implementation fee for one survey (normally \$1,000). You will be able to use our automated on-line reporting tool to help analyze the survey results for your own research. We are particularly interested in adding buildings with LEED certification to our database. If you are interested in taking advantage of our offer or discussing other collaborative ideas, drop us an email at <[cbe-survey@berkeley.edu](mailto:cbe-survey@berkeley.edu)>. ■

—Charlie Huizenga

\*while supplies last!



Excerpt from the CBE on-line survey analysis tool..

graphic: Charlie Huizenga

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RETREAT PIX—[HTTP://WWW.FES.UWATERLOO.CA/ARCHITECTURE/FACULTY\\_PROJECTS/TERRI/SBSE\\_O4\\_1.HTML](http://www.fes.uwaterloo.ca/architecture/faculty_projects/terri/sbse_o4_1.html)

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