

# SOCIETY OF BUILDING SCIENCE EDUCATORS SBSE NEWS

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# SUMMER 2000



Hilltop School, home for our summer retreat, as seen from the road. We're staying at Hilltop, working at Hillside, and eating at the Visitor's Center.



Lawn chairs at Hillside should support retreat objectives.

photos: Jim Wasley

## WHAT'S IN STORE AT HILLTOP?

### PRE-RETREAT FANTASY TOUR

Our Thursday, June 22, fantasy tour from Madison to Taliesin heads off in the wrong direction—at 7 a.m. to Milwaukee to view the Santiago Calatrava-designed Art Museum Addition job site and FLW row-houses. Then off to Racine at 11 to tour FLW's Johnson Wax headquarters. After lunch and back in Milwaukee, we'll enjoy an architect's tour of Johnson Controls' new office facility, one of the first twelve U.S. buildings to qualify for a LEED rating. Later we'll view Holabird and Root's A.O. Smith Research and Engineering Building followed by a 1930s Art Deco daylighted, aluminum curtain-wall building. At 4 we're back in Madison for an architect's tour of Arbor House, a deep green bed and breakfast, visits to Jacobs I, Jacobs II, FLW's Unitarian Church, and a Sullivan-designed bank. Finally, it's Hilltop for dinner. It's the longest day of the year, so what the heck!

—Jim Wasley

### RETREAT 2000, THE NEXT GENERATION

Congratulations to the six recipients of the SBSE Summer Retreat 2000 Scholarships:

Rachel Bannon, Cal Berkeley; I-Hsin Chiang, Hawaii; Elizabeth Holt, Calgary; Steven Sandifer, UCLA; Suvira Shyamlee, Arizona State; Mat Taylor, Oregon.

Their breadth of interests and experiences as well as their gender diversity will add greatly to our retreat. Their geographic diversity presumes there is nothing east of the Rockies—what's up with the east and central regions? Are we reverting to the West Coast ECS Club?

The students will be joined by several first-time retreaters including Simone Medio, SCAD; Tahar Messadi, GA Tech; Huy Ngo SCAD; David Pearson; Catherine Tabor, SCAD; Wendy Talarico, McGraw-Hill; Chris Theis, LSU; and Scott Wing, Arkansas. On the other hand, the old guard will be represented by Emad Afifi, SCAD; Harvey Bryan, ASU; Larry Degelman, TAMU; Steve Dent, UNM; Bruce Haglund, Idaho; Sandra Mallory, Slippery Rock; Murray Milne, UCLA; Victor Olgyay, Hawaii; Mike Utzinger, UWM; and James Wasley, UWM.

—Walter G rondzik  
• continued page 7

## SBSE CALENDAR

### 2000

- Jun 16–21 ASES Solar2000 Conference; Madison, WI
- Jun 21 SBSE Annual Meeting; Madison, WI
- Jun 22–24 SBSE Retreat; Taliesin, WI
- Jul 2–5 PLEA 2000 Conference; Cambridge, UK
- Jul 4–8 ARCC/EAAE 2000 Conference; Paris, FR
- Jul 9–13 UO Teachers' Workshop; Cambridge, MA
- Jul 14–17 ACSA Technology Conf.; Cambridge, MA

### 2001

- Apr 20–25 ASES Solar2001 Conf.; Washington, DC

## ANNUAL MEETING AGENDA

### Wednesday, 21 June 2000, Madison, WI

1. Welcome (Walter Grondzik)
2. Introductions (all)
3. Treasurer's report (Terri Meyer Boake)
4. Newsletter (Bruce Haglund)
5. WWW site (Grondzik)
6. Peer review network (Grondzik)
7. Summer retreat—last-minute details (Jim Wasley/Emad Afifi)
8. ACSA+Technology Conference (Grondzik)
9. Workshops in China (Alison Kwok)
10. Reflections on the health of the organization and future initiatives (all)
11. Adjournment ■

—Walter G rondzik

## LETTERS TO THE EDITOR

My sabbatical next year will include one month in China at the invitation of the Ministry for Science and Technology, China International Science Centre, to introduce green design and technology ideas. I'll find time for trekking/research/play in the Tibetan highlands, kayaking in Idaho in August, and working with the Latvian Ministries of Environment and Education in September. I was there 8 years ago as the lead consultant for the Peace Corps, taking the first group of volunteers into "the former Soviet Union." Meanwhile, my long-standing obsession, the Environmental Technology Center (ETC) at Sonoma State, is currently under construction, so I still have a hand in that. It will be done in late Fall. <<http://www.sonoma.edu/ensp/etc/>>. That's the short story!

All the best, and see ya down the trail!

—Rocky Rohwedder, Sonoma State  
[Geez, sabbaticals are no darn fun! Sorry you have to come to Idaho. ETC, eh? I've been thinking of forming the GAG here (Green Architecture Group).—ed.]



Here's some tasty news—I'm retiring at the end of this quarter, moving to sunny Bakersfield, California, to study sunlighting firsthand—enough of this overcast sky stuff! I've always wanted to live somewhere where you really **need** an artificial overcast sky! I'll still be teaching part-time at UW, either electronically or in-personally [bad pun or bad desk-side manner?—ed.]. And I'll still be in

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*SBSE News* is published quarterly by the Society of Building Science Educators, a not-for-profit corporation. Material for publication should be submitted to Bruce Haglund, Editor; Department of Architecture; University of Idaho; PO Box 442451; Moscow, ID 83844-2451; phone 208-885-6781, fax 208-885-9428; e-mail <[bhaglund@uidaho.edu](mailto:bhaglund@uidaho.edu)>; before the first of March, June, September, or December. Membership and mailing list inquiries should be directed to Terri Meyer Boake, Secretary/Treasurer; School of Architecture; University of Waterloo; Waterloo, ON; Canada N2L 3G1; phone 519-885-1211 x6647; fax 519-746-0512; e-mail <[tboake@cousteau.uwaterloo.ca](mailto:tboake@cousteau.uwaterloo.ca)>. Join the SBSE list server by sending **subscribe sbse** to <[majordomo@uidaho.edu](mailto:majordomo@uidaho.edu)>. Visit our home page <<http://www.polaris.net/~sbse/web/>>. ■

## HIGH TIME TO GROW GREEN

[I had to write this editorial myself. I admit I'm whining throughout. Don't make me do this again. Send me your opinions! This piece won't make Architectural Record; yours might!—ed.]

In the midst of writing a course syllabus for a graduate seminar on sustainable architecture, a course I haven't had the pleasure to teach for over five years, Terri Meyer Boake sent me information from the *WRG Newsletter: May 2000 Issue* "A new kind of newsletter that provides you with links to images, photos and other information concerning sustainable projects around the globe. [You can get a complimentary copy from Mary Colette Wallace, <<http://www.wallaceresearch.net/>>, 425-637-9049, or <[mcw@wallaceresearch.net](mailto:mcw@wallaceresearch.net)>—ed.] This newsletter is meant to be used as a kind of road map." How handy and useful, I thought. Then I looked at it and found an exhaustive, mind-boggling plethora of links to projects, prototypes, reading material, architecture firms, and, of course, more links!

Five years ago I didn't have this problem. I remember using an editorial about a "green" Walmart (for heavens' sake!) to stimulate discussion about the essence of sustainable architecture. It was also hard to target fifteen different architects with sufficient notoriety for fruitful research by each student in the seminar. Now you can check out mainstream firms like <<http://www.hok.com/sustainabledesign/>>! Discover the Coors Field constructed wetlands! Other case study buildings abound, each offering their own special insights and websites such as <<http://www.e-architect.com/pia/cote/earthda00/earth00.asp>>.

The textbook was Vale and Vale's opus *Green Architecture*. Now I'm trying to decide among *A Green Vitruvius*, *Ecological Design*, *Regenerative Design for Sustainable Development*, *Ecological Literacy*, and *Daylighting for Sustainable Design*—I'll probably assign all of them. And then there's delectable summer reading to set the mood for fruitful explorations of sustainability through reading, writing, and design inquiry—works by old favorites like John Muir, James Marston Fitch, Rachel Carson, Edward Abbey, Wallace Stegner, Barry Commoner, Ralph Knowles, Hassan Fahty, Malcolm Wells, Fritjof Capra, Jun'ichiro Tanizaki, and of course, for Northwesterners, Ernest Callenbach's *Ecotopia!*

Back then we struggled to evaluate the greenness of our decisions and our designs. The students liked Malcolm Wells' *Wilderness-Based Checklist for Design and Construction*. Now students can use SBSE's *Regeneration-Based Checklist for Design and Construction*, EBN's *Checklist for Environmentally Responsible Design and Construction*, or governmentally-sanctioned tools such as LEED's *Green Building Rating System*, BREEAM, and *Minnesota Sustainable Design Guide*. Design can be aided by LBL's *Building Design Advisor* or EBN/CREST's *Green Building Advisor*. And just browse the back issues of *SBSE News* to find a wide assortment of other design aids.

Is the age of green architecture upon us, or is it just the floodtide of the information age overwhelming us with facts and opinions about every trivial matter? My students can be kept up-to-date by e-mail newsletters (like *GreenClips*), print newsletters like *Environmental Building News* (with back issues on CD), periodicals like *Solar Today*, *Environmental Design & Construction*, and *Sustainable Energy World*.

I'm confused; I'm excited. I'm wondering how I can help fifteen students digest, internalize, and understand this topic. I'm thinking fifteen blind students and an elephant. If you want to see my plan, I'll have my Arch 510 syllabus posted on our website this month <<http://www.aa.uidaho.arch/>>. Let me know what you think. Help me out! I'm in information overload as it is. ■

—Bruce Haglund

## HELPFUL AND HANDY

### GREENCLIPS

*GreenClips* is a free summary of news on sustainable building design and related government and business issues published every two weeks by Chris Hammer. Subscribe to *GreenClips* the easy way, online at <<http://listserv.energy.wsu.edu/guest/RemoteListSummary/GreenClips>>. Two internet sites host *GreenClips* archives for reference and research: <<http://solstice.crest.org/sustainable/greenclips-info.html>> (keyword search) and <<http://www.greendesign.net/greenclips>> (browse contents), no subscription needed.

### BETA VERSION OF ATHENA AVAILABLE

*Athena* is a lifecycle-based environmental assessment tool that lets building designers compare the relative environmental effects or trade-offs among alternative design solutions at the conceptual stage. A limited-function, free, beta version of the *Athena* software and user's manual is now available at <<http://www.athenaSMI.ca>>. This beta version covers only structural building systems and the first three stages of a building's life cycle: resource extraction, product manufacturing, and on-site construction. You can enter and save project data, make design comparisons, print results, and generally gauge the environmental appropriateness of your structural system designs. We want to hear your reactions and your suggestions for changes or improvements. For info contact Jamie Meil; ATHENA SMI; Ottawa, Canada; ph 613-722-8075; fax 613-722-9628; <[jkmeil@fox.nstn.ca](mailto:jkmeil@fox.nstn.ca)>.

### BUILDING ENERGY SIMULATION USER NEWS

The Mar/Apr 2000 issue of the *Building Energy Simulation User News* is available at <<http://SimulationResearch.lbl.gov/un.html>>. Click on "Mar/Apr 2000" for the PDF file. Starting with this issue, we will regularly carry information about the *Building Design Advisor* and *Energy-10* programs. Any problems or questions, please call Kathy Ellington at 510-486-5711 or e-mail <[KLEllington@lbl.gov](mailto:KLEllington@lbl.gov)>.

### BUILDING ENVELOPE WORKSHOP 1

There is a new web-based course <<http://openet.ola.bc.ca/arct501/>> that teaches building science principles—environmental forces, thermal transfer, movement of moisture, heat and moisture, and wind and rain—in a graphic, interactive way. The course is preparatory to certification as a Building Envelope Professional. This joint venture of the Architects Institute of British Columbia, the Open Learning Agency and Natural Resources Canada may count towards university credits or may be a useful accessory course for your students, much like the *Energy Scheming* course, to round out our often instructor availability-limited curricula! (Lone Ranger syndrome!) [*When I was a kid I wanted to be the Lone Ranger or Hopalong Cassidy.*—ed.] The cost is \$475 CAN.

### NATIONAL FENESTRATION RATING COUNCIL

A new one-stop, on-line resource for information about window, door, and skylight energy performance has been established at <<http://www.nfrc.org>>. The site offers news on NFRC's expanding array of products and services, PDF-format NFRC documents, market statistics on construction and window sales, and links to other window-centric sites. NFRC's *Certified Products Directory* will be available soon.

### TOOLS FROM DOWN UNDER

Murray Milne reports finding a set of new, technically-sophisticated *Energy Design Tools*, developed by Andrew Marsh at the University of Western Australia. *SUNTECT* is an extremely fast and user-friendly sunshade design and analysis tool. It draws an axo of the window and its sunshades, plots the sunpath across the floor, and even has an option to automatically design a sunshade that blocks sun for any day and hour you specify. *SUNTOOL* plots the familiar Sun Angle Calculator and Mazria-type diagrams plus a section through the window showing profile angles. Both tools can be downloaded, free for educational use <<http://fridge.arch.uwa.edu.au/>>. There are a number of other interesting tools, and Andrew seems to be adding new features every day. Great stuff! ■

## LETTERS [CONTINUED]

contact with you all—I wouldn't give up the SBSE listserv! Following John Reynolds' good example, I trust that retirees are still welcome at those fabulous summer retreats. I won't be seeing you at Taliesin (much as I regret it), 'cuz that's when I'll be moving. Maybe next year?

—M arietta M illet, W ashington

*[Good luck trying to fill all the time you now spend in meetings with meaningful activity! I think SBSE fosters a Japanesque attitude toward emeriti; we consider them living national treasures. So, see you next year!—ed.]*



Now I can die happy; my checklist is alive and well again. Thanks very much. "Icon for Apocalypse!" I love it.

Do you ever let dried-up old geeks speak at your gatherings? I could tell you about Patch Adams ... and about how we get energy from the sun. But then I guess you know about that.

—M alcolm W ells, U nderground Art G allery

*[I ordered Malcolm's latest book, Recovering America, and sent him a copy of last year's "Checklist for Regeneration" as well as several back issues of SBSE News describing the Tadoussac retreat. Malcolm, we're all geeks on this bus and we're all getting older—so, the short answer is, "Yes, always!" The long term answer, "Living national treasure!"—ed.]* ■



Hey, SBSE! Let me in!

## SBSE PEOPLE

🏠 **G. Z. 'Charlie' Brown** will co-direct the UO Architecture's Summer Rome Program.

📖 Her proposal to study "Themes of Light: Lighting in Alvar Aalto's Libraries from Viipuri to Mt. Angel" won **Ginger Cartwright** a UO Summer Research Award.

👉 **Paul Clark** is migrating to a new teaching venue at UNCC.

✈️ **Alfredo Fernandez** has accepted the position of resident researcher/educator at CERES; this appointment includes posting as a tenure-track member of the architecture faculty. The staff and faculty are delighted with his decision to come to Ball State. (This position was first advertised last fall through SBSE!)

🏠 **Marc Giaccardo** will attend an intensive 6 day/60-hour course in Berlin, Dessau, and Potsdam, Germany, on building techniques for restoration and remodeling of major historical buildings (e.g., Reichstag, Bauhaus), sponsored by the Center for Advanced Architectural Studies/Conservation Studies, York University, England.

🌟 **Bob Koester** was awarded the 1999 ARCC James Haecker Distinguished Leadership Award for Architectural Research for outstanding contributions to the growth of the research culture of architecture and related fields.

🐟 **Tang Lee** will take a well-deserved sabbatical starting this summer to research methods for growing fish by using waste heat from a power generating plant thereby reducing greenhouse gas emissions. In addition, he may visit Cal Poly Pomona to help with the fish farm at the John Lyle Center and to teach courses in sustainability, indoor air quality, and solar energy.

🏠 At Idaho, **Anne Marshall** was tenured and promoted to Associate Professor and **Wendy McClure** was promoted to Professor.

🏠 **Victor Olgyay** is moving to Boulder, Colorado, to join Greg Franta at the ENSAR Group

✈️ **Werner Osterhaus** has assumed the position [*use your imagination!—ed.*] of Head of the School of Architecture, Victoria University of Wellington. ||

## SBSE JOB MART

### VICTORIA UNIVERSITY OF WELLINGTON

Victoria University of Wellington, located in New Zealand's capital city, invites applications and nominations for current vacancies in the School of Architecture. The School is seeking highly accomplished and motivated educators, researchers, or architects in professional practice who can provide intellectual leadership in teaching, research, and creative endeavour.

New Zealand follows the British academic classification, where an Associate Professor is equivalent to an American Professor, Senior Lectureship is equivalent to an Associate Professor, and a Lecturer to an Assistant Professor. Professors in the British system might be considered equivalent to Distinguished Professors or Regents' Professors, directly responsible to the Vice-Chancellor, not the Head of School.

**SA209 Professor of Architecture.** As a persuasive advocate for architecture and building science, the Professor will provide vision and leadership to staff, students, and the profession. Teaching may occur at all levels of the programme. Building on her or his own research and the existing strengths of the school, the Professor will work closely with the Associate Pro-Dean for Research to identify and analyse emerging research directions, and with the Head of School and all academic staff to define, focus, and strengthen the academic mission, particularly in responding to New Zealand's unique social, cultural, and economic environment. She or he is also expected to take a leadership role in cultivating ties to other programmes and disciplines within the university, to the design and building professions, and to related academic and cultural institutions in the Wellington Region, New Zealand, and the international community.

**SA208 Associate Professor of Architecture.** The Associate Professor is expected to help facilitate a creative and scholarly environment in the school and provide leadership in integrating art and science in the production of architecture. He or she will be expected to develop and coordinate advanced subjects in architecture and building science, including studio and elective papers, serve on design reviews and postgraduate thesis committees, and participate in administrative tasks and curricular planning.

Candidates for these positions should hold a terminal degree in architecture or an allied discipline, preferably a doctorate. Individuals must have achieved professional distinction at an international level through any combination of teaching, research, and/or professional practice in architecture or closely allied discipline. Strong communications skills, a broad knowledge of architecture and building science, and a commitment to pursuing high-profile research and/or professional activity are essential. Professional registration is highly desired. In addition, candidates for the professorship will have proven skills in financial resources development, staff mentoring, and project management.

Although all academic interests will be considered, the school particularly invites applications from candidates with demonstrated excellence in sustainable architecture, including urban or landscape architecture, digital media/computer applications, professional practice management, building science, or architectural history/theory.

**SA949 Lectureship/Senior Lectureship in Building Construction.** Candidates hold a professional degree in architecture or a closely allied discipline, preferably at the postgraduate level. Previous academic experience and several years' experience in the production of architecture is highly desirable. Excellent written and verbal communication skills are required. Computer literacy in project documentation would be a great advantage. Enthusiasm for the rewarding and challenging task of teaching students in architecture, building science, and interior design as well as a strong commitment to integrate design and construction in both teaching and research are vital. The appointee will contribute to the teaching and development of the core construction curriculum and take responsibility for coordinating and teaching one of the three levels of construction core courses. It is likely that the successful applicant will develop a construction-related elective based on her or his particular research interests. A modest amount of consultancy will help maintain practical and professional skills and provide experience to enrich both teaching and research. Other teaching involvements could, depending on aptitude and experience, include coordinating or tutoring design studio or computer-aided design courses. Supervision of postgraduate students will be expected of suitably qualified appointees in addition to undergraduate teaching.

## SBSE JOB MART [CONTINUED]

For all enquiries and applications, please quote the relevant reference number. Screening of applicants will commence on 17 July 2000, but applications will be accepted until the positions are filled. Starting dates are anticipated for the 2001 academic year. Further information may be obtained from Werner Osterhaus, Head of the School of Architecture, e-mail <werner.osterhaus@vuw.ac.nz>, +64-4-463-6209; fax: +64-4-463-6204, or <<http://www.arch.vuw.ac.nz>>.

### LAWRENCE BERKELEY NATIONAL LABORATORY

We have four new job openings in the Building Technologies Department at LBNL. Most of this work is associated with a new multiyear project on "High Performance Commercial Building Systems." The Environmental Energy Technologies Division at LBNL has a \$20M+/year RD&D activity with over 200 staff working in the building science area. For more information about Building Science at LBNL visit <<http://eetd.lbl.gov>>.

**011861 Architect Staff Scientist/Engineer**—lead international technical advisory group in development of an Information Technology roadmap for the building industry; provide advanced DOE-2 modeling support for innovative, high performance building designs.

**011997 Senior Research Associate**—assist in coordination and communication support for a new, large research program on commercial buildings, with multiple projects, funding sources and partners (~50%). Technical work will include research on performance metrics, benchmarking, commissioning, and diagnostics (~50%).

**012000 Principal Research Associate**—conduct research on building information technologies related to HVAC systems performance, low energy cooling systems, commissioning and diagnostics; includes model development, field monitoring, and data analysis.

**012003 Mechanical Engineer or Staff Mechanical Engineer**—(this position is posted at two different levels; only one position will be filled, level dependent on qualifications) Conduct research in the area of HVAC diagnostics and interoperability; create model-based fault detection and diagnostics techniques; participate in effort to create standardized HVAC data model using Industry Foundation Classes (IFC).

Additional details are available on the LBNL website <<http://cjo.lbl.gov/>>, search by Department, then select Environmental Energy Technologies. If you have questions about the positions contact Steve Selkowitz, 510-486-5064, fax 510-486-4089, or <[SESelkowitz@lbl.gov](mailto:SESelkowitz@lbl.gov)>. ■

## BOY OH BOY OH BOY

**4/3/2000** I am so proud to share that our three healthy sons were delivered this morning at 8:00 a.m., Sacred Heart Medical Center, Spokane, Washington. I don't have length measurements but am very happy to report that each and every baby weighs five pounds eleven ounces. All three babies entered the world yelling at the top of their lungs. The last one out, "C", had to be pulled kicking and screaming into the world and several times managed to regain the safety of the womb before finally being extracted. Babies A & C are currently sipping oxygen inside little tents while B is living large and making do with plain old atmosphere. *[I haven't heard from Judy since April 3. Maybe she's busy.-ed.]* ■

—Judy Theodorson



photos: Judy Theodorson

Judy's sons A, B, and C upon entering the world of environmental technologies.

## BOOK PREVIEW

The second edition of *Heating Cooling Lighting: Design Methods for Architects* by Lechner will be published by John Wiley & Sons later this summer just in time for fall classes. The new edition has been revised, updated, and expanded. There's a new chapter on energy-related sustainable design and another new chapter on building-integrated photovoltaics. The discussion on psychometrics has been greatly expanded, and sideboxes are used to introduce basic formulas and some mathematical examples. The Commerzbank by Foster and Partners and The Real Goods Solar Living Center by Van der Ryn Architects are some of the new case studies presented in detail. The appendices now include such items as elevational sun-path diagrams, constructing a solar site analysis tool, and an extensive list of resources including organizations related to energy-conscious design and sustainability. ■

—Norbert Lechner

## SBSE AT ACSA 2001—BALTIMORE

Mary Guzowski, Associate Professor, Department of Architecture, University of Minnesota, and Joyce S. Lee, AIA Committee on the Environment, will co-chair the Environment session at the next ACSA Annual Meeting (Baltimore 2001). The topic for the conference is “The Paradoxes of Progress: Architecture and Education in a Post-Utopian Era.” According to ACSA, the conference will explore whether we can “have progress without utopia? Can we, in other words, improve the lives of people, the health of cities, the condition of the environment, and the quality of architecture without the reductive, one-size-fits-all solutions of the past? Can we control the paradoxical nature of progress, where advances in one area seem to cause decline in others? And can we come to grips with the notion that progress itself, viewed with such skepticism in many quarters, is also inextricably tied to what we do as architects and educators when we design new things, create new knowledge, educate new students?” —Thomas Fisher, co-chair, ACSA Annual Meeting 2001

Faculty, practitioners, and students are invited to respond to ACSA's call for a discussion on education in the “post-Utopian era” through the Environment Session, “Conversations on Ecological Design Education and Practice.” In his book *Out of Place*, landscape architect Michael Hough distinguishes between the word Eutopia (good place) and the word Utopia (no place). Hough argues that “Eutopia is assured when culture and ecology become part of design thinking. Utopia is the consequence of ignoring them.” Perhaps the concept of Eutopia can provide a post-utopian framework that integrates culture, environment, and design thinking in ecological education and practice. Is it possible that “all education is environmental education” as proposed by David Orr in *Ecological Literacy*? The Environment Session of ACSA's 89<sup>th</sup> Annual Meeting invites discussions of the cultural and environmental implications of ecological design literacy.

—Mary Guzowski and Joyce S. Lee

P.S. If you would like to participate in the Environment Session for the next ACSA Annual Meeting (as a session moderator, paper reviewer, or to help conceive and organize a special roundtable discussion on ecological design education and practice), please contact Mary Guzowski <guzow001@tc.umn.edu>. ■



Roberts room 1—our meeting room at Hillside



The Visitor's Center at Taliesin will host SBSE's retreat dining.

## RESEARCH NOTES

### ENVIRONMENTALLY RESPONSIVE WORKSTATIONS

I read with interest Alison Kwok's article, "Are You Thermally Bored" in the spring *SBSE News*. I have been concerned with the same issues for over 20 years, however, I have come to a different conclusion. Just as much as we do not know what individuals need to be thermally comfortable, we wouldn't know how much to vary the conditions to introduce some delight and excitement.

Our present thermal comfort standards are as outdated as they could possibly be. Just check out the assumptions that go with the Psychrometric or Bioclimatic Chart. When we remember that the PPD factor (Percent Population Dissatisfied) for thermal comfort and luminous comfort is around 30%, and the fact that in the U.S. we are still designing sick buildings, obviously something is wrong. My position is that architectural design will, by its very nature, intentionally or unintentionally create thermal variety or problems of discomfort in buildings. These differences are caused by such things as the dynamics of nature, changes in the urban context, and churn-rates in the interior. To make a long story short, what we need to do is provide an environmental menu to occupants so they can satisfy their environmental sensory hunger themselves, rather than having it served up by architects, engineers, and facility managers. We can never predict who is in the building, their physiological profile, their activity, the equipment they will use, for how long, and where; nor can we predict what they are wearing or having for lunch.

David Wyon, others, and I are the proponents of the development and integration of Environmentally Responsive Workstations (ERW). You may call them environmentally responsive and individually controllable technologies. Our work, particularly on the West Bend Mutual Study, has shown that these technologies not only exist, integrated wonderfully with other building technologies (that serve the building itself), but more important, ERWs increase productivity from 3% to 5%. When an employer pays \$10 million per year in salaries, \$300,000 per year is not small potatoes. *[Another Idaho reference! Eerie! No, that's PA. -ed.]* If you would like to have a copy of the *West Bend Mutual Study*, please let me know. It usually sells for \$18.50, but for my SBSE friends it's free. *[I took Walter up on this offer. You should too! -ed.]* Europe has developed several fantastic ERWs and is using them. ERWs are the most energy-efficient way of delivering a gourmet platter of environmental experiences—including thermal, luminous, acoustic, and air quality. Keep up the push for change, excitement, responsiveness to individuals, and a 0% PPD factor in architecture. ■

—Walter K roner

## EVENTS

### PLEA 2000

The 17th International Conference on Passive and Low Energy Architecture, **July 2–5, 2000**, will be held in Cambridge, England. Check out the new web page for abstract/paper details <<http://www.arct.cam.ac.uk/plea2000/index.html>>.

### CERF SYMPOSIUM AND TRADESHOW

*Moving Innovation into Practice for a Sustainable Future*, **August 14–17, 2000**, will be held in Washington, DC. Refer to their web page for info, <<http://www.cerf.org>>.

### 2000 ACEEE SUMMER STUDY

*Efficiency and Sustainability*, **August 20–25, 2000**, will be held in Pacific Grove, CA. Scope the web page for details, <<http://aceee.org>>.

### ENERGY 2000

*Energy 2000* sponsored by U.S. DOE, GSA, and DOD, **August 21–23, 2000**, will be held in Pittsburgh, PA. Included are Green Building and Whole Building Design tracks. For more info browse <<http://www.energy2000.ee.doe.gov>>.

### SUSTAINABLE BUILDING 2000

A joint conference of Buildings and the Environment and the Green Building Challenge, **October 22–25, 2000**, will be held in Maastricht, The Netherlands. For more information look at <<http://www.novem.nl/sb2000>>.

### DESIGN FOR THE NEW MILLENNIUM

The World Congress on Environmental Design for the New Millennium, **November 8–22, 2000**, will be held in Seoul, Korea. Especially pertinent to SBSEers is the included World Conference on Green Design, **Nov. 13–17**. For more information check out <<http://www.millenniumED.org>>.

### ANZASCA 2000 CONFERENCE

The Australia and New Zealand Architectural Science Association (ANZAScA) 34th annual conference will be held at the University of Adelaide, **December 1–3, 2000**. For further information e-mail Terry Williamson <[twilliam@arch.adelaide.edu.au](mailto:twilliam@arch.adelaide.edu.au)>.

### BLDG PERFORMANCE SIMULATION

The next IBPSA Building Simulation conference will be held in Rio de Janeiro, Brazil, **August 13–15, 2001**. Abstracts due September 15, 2000. Visit <<http://www.labee.uisc.br/bs2001/>> for conference information. ■

## WHAT'S IN STORE AT HILLTOP? [CONTINUED]

### GREEN DESIGN CHARETTE

This charette will address the initial conceptual, adaptive reuse design of an athletic and recreational facility in one of two sets of warehouse-like sheds located at the western edge of the historic district of Savannah. Track-I teams will generate new schematic design ideas. Track-II teams will critique and develop design ideas already generated by fourth-year architecture students at the Savannah College of Art and Design (SCAD). More in-depth analysis and detailing will be possible in this track. Please bring your favorite analytical tools, including calculation worksheets, rules of thumb, and computer programs. We will also try to secure a connection to the internet for additional resources.

The charette program and SCAD student designs will be posted on the internet before the retreat, and the SBSE design proposals will be posted for everyone's viewing pleasure later this summer. ■

—E mad Afifi



photo: Jim Wasley

The skylighted drafting room at Hillside awaits retreating SBSEers.


## HATS (AND EYESHADES) OFF TO ED ALLEN

Ed Allen and I have been editing newsletters directed toward architectural technology educators since 1992. Parallel paths, you think. Hardly! In announcing his spring 2000 decision to step down as the editor of *Connector: A Forum for Teachers of Technology in Schools of Architecture*, he observed that “the debate cooled, spontaneous letters became much rarer, and *Connector* became more a collection of carefully-prepared essays on teaching technique than a forum for argument.” In contrast, *SBSE News* vibrates with contributions from members and far-flung factions *[sometimes—ed.’s ed.]*. Ed concedes that, “SBSE is the most efficient, effective organization in the tired old world of architecture, hands down.”

The difference is not Ed Allen’s fault. He was a benevolent editor who printed the heartfelt opinions of a widespread audience. *[My tactics are less dignified: begging, whining, and nagging—to name three.—ed.]* Each of his offerings was anticipated with relish and read cover-to-cover. Perhaps the difference is circumstantial. His publication focused on structures, ours on environmental forces. The 1970s energy crisis inspired schools to hire architects to teach environmental technology and design, while no parallel crisis has supplanted engineers, many who as adjuncts are the mainstay of structural instruction. At Idaho, we’ve tried to hire someone to teach design and structures for at least 18 years. Ed has done a memorable job of trying to marshal a discussion and form a critical mass of cooperating structures teachers without the enthusiastic backing of a community like SBSE that networks vigorously through retreats, newsletters, shared teaching resources, a list server, and a web presence.

Thanks, Ed, for your high expectations and valiant efforts past and future to weld architecture’s disparate courses into a single discipline. There’s always support for you from SBSE. But, are you really going to pass on “the editor’s green eyeshade and elastic sleeve holders?” I’m jealous! ■

—Bruce Haglund

 printed on recycled paper

SBSE NEWS  
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FALL ISSUE SUBMITTAL DEADLINE—SEPTEMBER 1

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