SBSE RETREATS—PAST, PRESENT, FUTURE

PAST: NOTES ON SBSE RETREAT 2019

It was my first time to attend an SBSE retreat; I was not sure what to expect. I was pleasantly surprised by the laid back pace and setting of the retreat at the Taft Nicholson Center, so starkly different from the more formal settings of a conference. The tone of the settings provided excellent opportunities to interact with people who have made ground-breaking contributions to the field of architecture and building science. For someone who is considered a greenhorn in the field of building science education, this experience was priceless.

The retreat featured time slots for formal presentations which showcased pertinent issues we all face today. In addition, a couple of presentations by environmental scientists of renown were incredibly intriguing and provided a strong context to the venue’s setting. The presentations also provided a subtle hint at how we can work together across disciplines to address pertinent issues. However, my most cherished memory of the retreat was the “Poetry Slam” when attendees had to come up with words describing their perception of Thermal Delight. There were some incredibly innovative interpretations proving that building science can, indeed, be fun!

—Jaya Mukhopadhyay, MSU

Convening the retreat in Montana’s beautiful landscape has given me an opportunity to explore the beauty of the place. As people say, “Nothing ever becomes real till it is experienced”—who would not be overwhelmed to be in the midst of great presence—from the awe-inspiring landscape to professors and authors from around the world. The retreat was filled with opportunities to gather and share as much as we could. There was something inexpressible about the retreat—something that makes you feel blessed to be comfortable, be yourself in a warm environment, leaving behind a rich emotional residue.

The SBSE retreat was not just about exchanging ideas and knowledge, but also was a platform filled with energy, joy, and fun. Frontiers of knowledge and practice around teaching building science in the 21st century was the highlight of the overall retreat. The retreat was the most unperishable omiyage I have ever received.

—Beniya Shakya, UIIdaho

PRESENT: RETREAT 2020

We’ll meet at Manresa Retreat Center, Bloomfield Hills, MI, Mon, 3 Aug–Thu, 6 Aug.

“Sustainable Urban Systems” is the thematic focus of the retreat, but we don’t have a snazzy title yet. We are planning to do an optional tour...
I have recently rejoined SBSE. I want to let you know I really enjoyed reading the newsletter, very well thought out and put together. Indeed, lots of interesting news and viewpoints (especially, the different opinions from Roaf and Bordass). What a wonderful place where scholars freely and constructively express their thoughts!!

—Ming Hu, Maryland

Thanks, Ming. I think you’ll especially like page 5 of this issue, el?—ed.

Hat’s off for the summer issue, and especially for the editorial comment relative to NAAB 2020 Option C of Student Learning Criteria!

—Peter Papesch, BAC

Thanks for the latest SBSE News. The article on the next iteration of the NAAB Conditions of Accreditation Student Learning Criteria reflects the naïveté of the NAAB folks, especially Option C! Integration is what architecture and planning is all about. I have written and practiced integrated design for 45+ years. My definition is: “Integrated Design and Construction (IDC), where integration is both a process and a result.” IDC is both a process involving all the stakeholders of a project coming together in a systematic effort to define and solve complex urban and building-related problems, and a result where the completed project and its systems come together as a harmonious whole. It is apparent that great skill and care have gone into planning, designing, and constructing the project. 

—Michael Holtz

Many thanks, gents!—ed.

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**SBSE Retreats [cont. from page 1]**

day on 6 Aug, so people may want to book a room in town (we can suggest some places—see below) for that night.

Manresa is a bit outside the city, but very close to FLW’s Affleck House, which is built over and passively-cooled by a stream. It is also very close to the Cranbrook campus. We plan to visit both. Also, northern Michigan and the Upper Peninsula are beautiful and may appeal to any wishing to extend the trip into a vacation.

Manresa accommodations are mostly single beds with half baths, with a few units with private showers. There is a large assembly space with AV capability that can seat 50+. There is a smaller classroom-like space with rolling tables, chairs, and AV capability. There will be a newly renovated smaller meeting room with tables, chairs, and nearby break-out spaces (which might be good if we plan discussion sessions). For meals we are assuming dinner on night of arrival, three meals a day for two days, and breakfast on day of departure. Rough estimate for room and board is $275 per person.

Midtown Detroit suggestions for after the optional tour following the retreat: The Inn on Ferry Street is a series of historic homes, now run as a hotel and includes a very nice breakfast with your stay for about $180 per night. If people act together, they can book an entire mansion. See <https://innonferrystreet.com/events/>. There are also nice hotel rooms in our apartment building, The El Moore Lodge. These range from $75 for “garden level” rooms, $150 for first-floor rooms, and $200 for rooftop cabins. They have a nice continental breakfast, too. These cannot be booked in blocks. See <https://elmoore.com/lobby/>.

—James Leach

**Future: 2021 Retreat Proposal**

Mary Guzowski seeks collaborators and mostly an appropriate site for a retreat focused on biophilic and biocentric approaches to net-positive and low-energy design. We may be well aware of the performance and pragmatic aspects of net-positive design, but what are its poetic and experiential implications? Aesthetics, beauty, health, and well-being are as important to net-positive design as are reducing waste, energy consumption, and environmental impacts. A biophilic approach to net-positive design encourages students to investigate the intersections between regenerative design responses to ecosystems, habitat, environmental and bioregional forces, passive strategies (for daylight, natural ventilation, and passive heating/cooling), and health and wellbeing. A biophilic approach to net-positive design provides an opportunity to explore experiential and atmospheric dimensions of design that may not be readily apparent from a performance-based focus. A beautiful retreat location that fosters biophilic connections is sought.

—Mary Guzowski

**3 SBSE Board Candidates Have Declared**

Currently one person for each position has declared her or his candidacy—for President-Elect, Troy Peters (Wentworth); Treasurer, Tom Collins (Ball State); and Secretary, Emily McGlohn (Auburn). See full candidate statements on our web site at <https://www.sbse.org/news>.

It’s not too late to join the field or nominate someone, just send a statement and mug shot to Ulrike Passe <upasse@iastate.edu> and to me <bghlund@uidaho.edu> by 1 Oct.

—Bruce Haglund

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SBSE Annual Meeting held at SBSE Retreat 2019, Centennial Valley, MT, 23 Jul 2019, 9:30am–10:30am Mountain Time

Present: Omar Al Hassawi (OAH); Sam Jensen Augustine (SJA); Jonathan Bean, Awards & Scholarships Committee Chair (JB); Tom Collins, Treasurer (TC); Fasika Gebremeskel (FG); Walter Grondzik (WG); Alison Krook (AK); Ulrike Passe, President (UP); Georg Reichard, President-Elect (GR); Mary Rogero (MR); Ryan Smith (RS); Judy Theodorson (JT); Jonathan Woolley (JW); Andrzej Zarzycki (AZ).

Online: Bruce Haglund, Communication Committee Chair (BH); Emily McGlohn, Secretary (EM).

1. Announcements. None.

2. Treasurer’s Report (TC). We’ve renegotiated Cook Trust financial support. And have secured an AIA annual donation for the retreat. Sun angle calculator sales support scholarships and awards. Sales: 2018, $4,000; 2019, $1,100 to-date. I suggest having a Sun Angle Calculator workshop at the retreat next year to encourage sales.

Membership is the source of most of our funds, and there are increases in membership. Wild Apricot seems to work well and doesn’t require much work from us.

We are financially sound.

3. Membership Survey (one year later and final report) (UP). We recognize not everyone can attend the annual meeting at the retreat, but it seems to work for the moment. P&T Review List: if you want to move onto the list, let UP know. If you know of someone who needs a reviewer, UP can send the list.

4. Scholarship Report (JB). A good year for scholarships. $9,500 in scholarships and awards were bestowed last year. (TC) We’re experimenting with 5 scholarships for early-career faculty. All the paper applicants to the Reynolds Symposium were automatically included in the scholarship pool.

5. Education and Resource Committee (MM, read by UP). GR: trying to get feedback on the needs for young and emerging faculty. More case studies? More tutorials?

6. Communication Committee Report (BH). Need a social media coordinator. Links to social media are not working on the web site. UP: the new web site is extraordinary. Updated archive: retreats, newsletter, full body of knowledge to the SBSE membership.

7. Cook Trust Relations (UP) The trust renewed their commitment this past winter.

SCHOLARSHIP UPDATE

SBSE welcomed five scholarship recipients to the 2019 retreat. Two joined us as Jeffrey Cook Memorial Faculty Scholars—Fasika Sahlemariam Gebremeskel of the Ethiopian Institute of Architecture, Building Construction and City Development, and Chitrarekha Kabre, Deenbandhu Chhotu Ram University of Science and Technology, Murthal (Sonepat), in India. We are grateful to both for making the long journey to join us in Montana. We also welcomed three student scholars—Jonathan Woolley, affiliated with UC Berkeley’s Center for the Built Environment; Al Mitchell, Ball State University, and Beniya Shakya, University of Idaho.

SBSE will award scholarships to five junior faculty members to support presentations at the Reynolds Symposium in Portland, OR, in October 2019, and is currently accepting applications for two student scholarship programs. There are up to four $750 scholarships available to support students attending the 2019 North American Passive House Conference in Washington, DC. For eligibility and application details see <https://www.sbse.org/scholarships/sbse-student-naphc>. SBSE is also accepting applications for the Open Scholarship for Students (more information at <https://www.sbse.org/sbse-open-conference-student-scholarship>). This $700 scholarship supports attendance at any building science-related conference—a good fit for students who are working to expand the boundaries of our field, and an excellent way for SBSE to introduce itself to new audiences. On that note, I kindly urge you to take a moment to make sure your students and colleagues are aware of SBSE’s generous scholarship offerings, and encourage them to apply. We are all busy, but often all it takes is an email, text, or brief mention in passing to inspire an excellent candidate to submit an application. Information on all SBSE scholarships is regularly updated at <https://www.sbse.org/scholarships>.

—Jonathan Bean

Society Notes

SBSEers at the retreat form the traditional circle to share omiyage, Georg Reichard presenting.

—Emily McGlohn
Visit Portland, OR; just register for the Reynolds Symposium and attend! Faculty, practitioners, content experts, and students from 21 universities and 4 countries will present their inspiring, reflective, and effective lessons that represent a shift in process from creating fossil fuel-based communities to building environments that are healthy, resilient, and carbon-emissions free.

The Symposium begins on Friday, 18 Oct at 5:00pm with a keynote lecture, “From sustainability to resilience—preaching outside the choir,” by Nina Maritz <http://www.ninamaritzarchitects.com/>, an architect from Windhoek, Namibia. We welcome Nina back to Oregon to enchant us with her climate-responsive wisdom and ethos.

Saturday, 19 Oct begins with a keynote, “Redefining Design Excellence for a Climate Positive World,” by Marsha Maytum and Bill Leddy <https://www.lmsarch.com/>. We are proud to welcome these principals of their award-winning firm dedicated to addressing issues of climate change and educational leadership. It’s a full day of parallel paper sessions and poster presentations on Design Integration, Design with Climate, and Digital Approaches. The day ends with an In-Practice Panel: How Did You Get There? This panel features the Oregon Zoo Education Center, a 2019 AIA COTE Top Ten Award project and the design team, led by Alec Holser and Heather DeGrella with other OPSIS team members discussing their design approach and the Top Ten measurable impacts. The Symposium will end with a celebratory reception, sponsored by the SBSE.

On Sunday, 20 Oct a behind-the-scenes tour of the Oregon Zoo Education Center will be available 9:30–11:00 am, led by Alec Holser, OPSIS.

Registration and lodging information is at <http://reynoldssymposium.uoregon.edu>. Early-bird registration ended 6 Sep and regular registration will close on Oct 4. AIA/CES units will be available. —Alison Kwok, John Reynolds, Isabel Rivera

SBSEERS IN THE NEWS

DESIGNING FOR THE SENSES: NEW PERSPECTIVES IN HOSPITALITY

The art of balancing guests’ different desires took center stage at the Seattle offices of Olson Kundig, where Metropolis editor-in-chief Avinash Rajagopal moderated a discussion with architects and experts [including SBSEer Barbara Erwine—ed.].

The hospitality industry faces a conundrum when it comes to pleasing clients. Travelers today have diverse expectations—while some wish to unwind and relax, others might be yearning for exciting adventures—and want personalized experiences no matter where they go. Hoteliers are waking up to the challenge of providing something for everyone, while also making sure their facilities are healthy and nurturing for all. While Rajagopal acknowledged a basic first principle for the industry—“hospitality spaces should be designed for pleasure”—the thinking on designing sensory experiences offers considerable nuance on how to achieve that goal.

For Barbara Erwine, author of Creating Sensory Spaces: The Architecture of the Invisible, the biggest challenge is not letting the intuitive nature of design yield too much in the sensory realm to the exacting standards of engineering, which might set one-size-fits-all temperature or acoustic standards. “The design of the sensory realm falls between those two disciplines,” she said.

The panelists (from left to right): Kevin Kudo-King, Olson Kundig; Heather Burpee, University of Washington IDL; Barbara Erwine; and Judith Heerwagen, University of Washington, led by Metropolis editor-in-chief Avinash Rajagopal.

Check it out at <https://www.metropolismag.com/interiors/hospitality-interiors/olson-kundig-new-perspectives-hospitality/?utm_source=Main+List&utm_campaign=0af6c471-EMAIL_CAMPAIGN_2019_06_18_04_01&utm_medium=email&utm_term=0_c657f0f6-aaf6c471-201906180401&mc_cid=0af6c471&mc_eid=987d3ca8c1>. —Greg Scruggs

Warming up for the Retreat poetry slam. Fire is required!
BEYOND BEENOW AND...

MESSAGES FROM THE GURUS—DAN AND DON

It’s great to see “Bee” happening: now we can celebrate the stopping of decades of head butting into walls...ha.

At least one next step remains to center these standards in the discussion of climate change and design interventions and that is SCALE. Sustainable design metrics applied at the urban, regional, and continental scales are a critical intervention. We called it “beyond buildings.” Is anybody interested in helping move that needle?

—Daniel Williams

Grand Question! To do so, all you have to do is be a Dean of a School with the faculty and funds to create the curriculum. I am working on a book that addresses same and similar...it might or might not see print before sunset.

My premises are:

- climate change is the single issue facing humanity (no news there, and luckily I am not alone with this view...more and more are reading the memo [Including Greta!—ed.])
- limiting and managing the destruction of the biosphere will require a unity of effort across disciplines (possible—we have those models and tools for the task)
- across cultures (we know how to do that—PLEA continues to, as does the UN)
- across years (centuries ahead)...(the monasteries of the Dark Ages served as the library of Christian teachings for several centuries...the same for other traditions and religions)
- and then, there is governance...does the sacred and hard won chalice of liberty and justice for all have to be broken to be refashioned for rapid and unified global action? Otherwise the free-fall of the free-for-all.

To your point, whether architecture can grow to master the issues at regional scale in research and practices, I don’t see evidence of that growth in the mainstream, but there is evidence in small grad programs and in interdisciplinary AEC firms that are dominating the market (Arup, Atkins, Genslers on the world stage). The good news is the individual work of many researchers and practitioners with the global view.

The image to the right is one of three that illustrate the WMO taxonomy of climate threats plotted to 44 “climate actions” compiled by ARUP from 12,000 projects worldwide. The links indicate which action each discipline is prepared with knowledge, research, and practice skills to address (based on curriculum and requirements for professional practices).

Regional planning wins hands down. Architecture is third, behind landscape architecture, in terms of the curriculum or projects in practices required to address the issues at scale. This assessment is not to denigrate architecture, which does very well at its smaller scale...the reason it is happy and proper to remain there—design of the built artifact. They remain a part, but small, compared to the knowledge, skills, and practices required to serve the ultimate design client, which as you have so long taught us, is the biosphere. For that, we are all grateful to you, Dan.猀

—Don Watson

Is your school certified by BEEnow? The Built Environment Education now (BEEnow) certification program will be launched in 2020. This fall BEEnow Certification process is being tested by three universities running pilot certifications. Feedback from these pilots is being used to fine-tune the BEEnow requirements. If your school is producing graduates who have the motivation, knowledge, and skills necessary to design low-energy buildings to fight climate change, please consider applying for certification. Considering the overwhelming vote at the recent AIA convention, where members agreed to do all that is necessary to fight climate change, it is clear that architecture firms will be looking for students from BEEnow-certified schools.

If you are willing to provide academic leadership on climate change, invite your fellow faculty members, department head, dean, and advisory board to support the BEEnow effort. Just as a skyscraper [or any building—ed.] cannot be built on a poor foundation, we cannot achieve a world of very low-energy buildings without appropriately educating our future design professionals. Architecture schools must choose to embrace a leadership role in preventing the worst consequences of climate change.

—Norbert Lechner

PRIZE OPPORTUNITIES

ARCHITECTURE, CLIMATE CHANGE, AND SOCIETY COURSE PRIZE

Education in architecture and urbanism is well positioned creatively and critically to address the exigencies of climate change. However, pedagogical methods that prioritize immediate applicability can come at the expense of teaching and research that explore the sociocultural and ecopolitical dimensions to contribute to the development of intersectional pedagogy on the theme of “Architecture, Climate Change, and Society” in America today. Change begins with connecting the dots. See <http://www.acsa-arch.org/resources/faculty-resources/course-development-prize>. Submission Deadline: 20 Nov 2019.

—Eric Ellis & Jacob Moore

EXTREME DESERT LODGE PRIZE

An International Student Design Competition to design a temporary shelter in the desert. Registration opens 1 Oct. Submission deadline is 1 Apr 2020. See <http://www.extremelodge.org/competition> for details and updates.

—Sue Roaf
SBSE PEOPLE

Tobias Jimenez, under the guidance of Omar Al-Hassawi (WSU), was awarded Honorable Mention for his project Parcelas Verticales in the 2019 ACSA Timber in the City Competition.

Ray Cole was recently awarded the Order of Canada, a national honor in recognition of his work and achievements. Ray has adeptly paired architecture and environmental sustainability, provided leadership in our field, and made strong contributions as a researcher, writer, and educator. It’s an important recognition of Ray and his achievements, as well as the significance of building and environmental issues.

Troy Peters completed his PhD from UMass Amherst, “Predictive Modeling of Automated Building Façade Elements to Attain Thermal Comfort in Passively Conditioned Buildings in Different Climates.” It’s available at <https://scholarworks.umass.edu/dissertations_2/1614>.

Nouredine Zemmouri, a former Fulbright visiting scholar at the USC School of Architecture, has been appointed a Vice-Rector in charge of Postgraduate Studies and Research at the University of Biskra, Algeria.

BOOKS BY SBSEERS

Housing Fit for Purpose: Performance, Feedback, and Learning

Fionn Stevenson’s book was finally published by RIBA on 1 Sep, with a great endorsement from Alison Kwok on its inside cover!

You can obtain it directly at <https://ribabooks.com/item/housing-fit-for-purpose-performance-feedback-and-learning/40077/>.

There is also a short review of it in the UK CIBSE journal at <https://www.cibsejournal.com/uncategorized/book-review-housing-fit-for-purpose-by-fionn-stevenson/>.

The publisher claims, “Housing Fit for Purpose sets out a research-focused approach to looking at the challenges facing the built environment in approaching the design, construction, and management of housing. This book uses original research by the author on housing performance evaluation and distills it for built environment professionals, arguing that learning from feedback should be taking place at every stage of the housing project lifecycle, improving outcomes for endusers.

“Drawing on active research, this book shows why and how the design, construction, and management of housing can be linked to feedback and actual evidence of how people choose and learn to use their homes. It examines the key concepts which underlie participatory design, occupancy feedback and learning, and CSA Timber in the City including a practical primer on how to undertake housing occupancy feedback.”

—Bruce Haglund

FOR FUTURE SBSEERS, AKA JOB OPS

RYERSON UNIVERSITY

The Department of Architectural Science invites applications for a Tier 2 Canada Research Chair (CRC) in Building Science. The candidate will be appointed to a tenure-track position at the rank of Assistant Professor, subject to final budgetary approval.

Our department is unique in North America with an interdisciplinary model that integrates three disciplines: Architecture, Building Science, and Project Management with a multidisciplinary faculty and student body dedicated to the pursuit of integrated and sustainable approaches to the design and development of the built environment.

Candidates must have a Ph.D. degree in Building Science (Building Physics) or a related discipline and will be expected to develop and maintain a strong, independent, externally funded research program; supervise graduate students; contribute to the teaching of undergraduate and graduate courses; and engage in collegial service.

For more information please see <https://hr.cf.ryerson.ca/ams/faculty/preview.cfm?posting_id=526526>. Deadline to apply: Thursday, 10 Oct 2019.

—Mark Gorgolewski

PENN STATE UNIVERSITY

The Architectural Engineering Department is hiring multiple faculty positions in the building science area. For position details see <https://psu.jobs/job/89995> (tenure-track faculty positions open to all ranks in Smart and Connected Buildings and Communities; Human-Building Interaction; and Construction Automation, Sensing, and Robotics) and <https://psu.jobs/job/90343> (non-tenured Assistant or Associate Teaching Professor position in building electrical systems).

—Julian Wang
RESEARCH REPORTS: OXFORD BROOKES U

LOCAL ENERGY OXFORDSHIRE

A cutting-edge smart and local energy system demonstrator. Project LEO is a £40 million research initiative (funded by the government’s Innovate UK) that demonstrates how solar energy can be used effectively. With the rapid growth of solar PV and battery technologies, smart local energy systems are becoming increasingly popular for their ability to maximize the use of distributed energy resources and improve grid stability. Project LEO was funded by Innovate UK (2015–2017) to demonstrate how smart battery storage can also be reduced. Against this context, Project ERIC (Energy Resources for Integrated Communities) was funded by Innovate UK (2015–2017) to demonstrate how smart battery storage can also be reduced.

Project LEO will be one of the most wide-ranging and holistic smart grid trials conducted in the UK. The project aims to balance local demand with local supply in a real-world environment, helping to test markets, inform investment models and, ultimately, assess the benefits of flexibility to the energy system. It will develop new local flexibility and energy markets to maximize the use of distributed generation, load, storage, and network assets. The aim is to ensure value for consumers and opportunities for communities and market providers. Researchers from Oxford Brookes University and University of Oxford will deliver a model for future local energy system mapping across all energy vectors through the use of multiple data sources and analysis tools.

ACHIEVING LOCAL ENERGY RESILIENCE THROUGH SMART SOLAR STORAGE, SHARING AND TRADING

The challenge: Renewables alone don’t guarantee resilience. With the pressing need to transition to a low-carbon economy, planning and preparing for energy resilience is becoming increasingly important in an energy system consisting of a significant proportion of decentralized renewable energy sources and a decarbonized power system. On their own, renewable energy systems provide little resilience since the power output from renewable sources is intermittent and cannot be easily controlled. Energy storage systems have been identified as a physical means to achieve resilience.

The idea: Use smart batteries to benefit communities. The quick response of domestic storage technologies such as home batteries (having discharge time in milliseconds) means that they can rapidly respond to disruptions in electricity supply such as brownouts (intentional or unintentional drops in supply voltage) and blackouts (total power outage). When integrated with decentralized renewable energy sources, domestic storage can potentially increase self-consumption of the generated power which means demand from the grid during peak periods can also be reduced. Against this context, Project ERIC (Energy Resources for Integrated Communities) was funded by Innovate UK (2015–2017) to demonstrate how smart battery technology could help a community in Oxford get more direct benefit from solar PV and reduce their impact on the local electricity network, ultimately making it possible to install more renewable power generation locally.

The research was conducted in 82 homes in Oxford. Researchers from the Low Carbon Building Research Group of Oxford Brookes University empirically evaluated the outcomes of the project which deployed smart batteries (internet enabled and controllable) and solar PVs across a cluster of 82 dwellings in a community in East Oxford. The evaluation approach comprised dwelling and household surveys, along with high-frequency monitoring of household electricity consumption, solar PV generation, and battery charge and discharge data.

Key finding 1: Smart batteries increased self-consumption 6% on average. Solar PV systems were found to have performed well, generating on average 5.5–6kWh/day in the summer, equating to 51% self-consumption before storage. However, peak generation did not meet peak consumption, demonstrating the need for battery technology. The smart batteries were found to increase self-consumption of PV electricity and offset grid demand through discharge of stored PV electricity at an average of 6%, depending on the size of the PV system, surplus PV electricity available, and size of the battery.

Key finding 2: Community aggregation reduced peak demand as much as 8%. Electricity use was found to vary widely making a strong case for community-scale energy management. Aggregating solar generation and storage at a community level showed that peak grid electricity demand between 17:00 and 19:00 was reduced by 8% through the use of smart batteries across 74 dwellings.

Key finding 3: Don’t forget data connectivity. Interestingly, data communications was found to be a challenge. This issue of connectivity should not be underestimated, particularly with vulnerable and elderly tenants who are typically less likely to have an internet connection.

A promising “store and trade” future—and it won’t need a solar panel on every home. Aggregating and controlling domestic storage in clusters could provide additional benefit in the form of increased self-consumption and dispatchable stored energy for grid services.

A local energy sharing and trading scheme could be developed wherein not all dwellings would need solar PV systems, but rather have internet-enabled batteries that could be monitored and controlled virtually, improving the business case and economics of both solar PV and home batteries. Further details about the study are described in the recently published paper <https://www.sciencedirect.com/science/article/pii/S037877818330482?via%3Dihub>.

—Rajat Gupta

* continued next column
**MORE ABSTRACT CALLS**

**35TH PLEA CONFERENCE**

PLEA 2020 Planning Post-Carbon Cities
A Coruña, Spain 1–3 Sep 2020


—conference secretariat

**FINAL WINDSOR CONFERENCE ON THERMAL COMFORT**

The last ever will be held 16–19 Apr 2020, on the grounds of Windsor Great Park. The website is now open for abstracts <http://www.windsorconference.com>. The deadline for abstracts is 7 Oct 2019.

—Sue Roaf

**NIBS BUILDING INNOVATION 2020**

This year’s conference will take place 6–9 Apr 2020 at the at the Renaissance Arlington (VA) Capital View Hotel. Abstracts are due by Friday, 11 Oct 2019.

Speakers should plan for presentations to run 20–30 minutes, with an additional 10–15 minutes for Q&A.

Speakers may submit an abstract for either an individual presentation or multi-person panel. Interested parties should submit a 200-word abstract, 150-word biography, learning objectives, and five keywords describing their presentation via the online form. NIBS strongly recommends submitting a video of a recent speaking presentation.


—conference website

**JOURNAL ARTICLE OP**

I will be guest editing a Special Issue of *Sustainability*. The focus of the Special Issue will be Environmental Impact Assessment of Buildings for Deep Impact Reductions. Please use this link for the invitation for submission details <https://www.mdpi.com/journal/sustainability/special_issues/EABDIR>.

Deadline for submission is set for 30 Jun 2020.

—Getachew Assefa

**CALL FOR ABSTRACTS**

**MAY 14–16, 2020**

**DESIGN FOR CLIMATE ACTION**

**2020 AIA/ACSA INTERSECTIONS SYMPOSIUM**

The American Institute of Architects (AIA) and the Association of Collegiate Schools of Architecture (ACSA) are pleased to announce a partnership dedicated to the intersection of Education, Research, and Practice. A series of educational sessions at the 2020 AIA Conference on Architecture in Los Angeles will feature exemplary research projects that address the symposium theme, “Design for Climate Action.” It’s time to submit an abstract for the symposium. See <http://www.acsa-arch.org/programs-events/conferences/intersections-symposium/2020-intersections-symposium>. [Full disclosure: Kyle is co-chairing this symposium with Phoebe Crisman, University of Virginia.—ed.]

The symposium will explore Design for Climate Action from multiple, intertwined perspectives. In support of the recent AIA Resolution for Urgent and Sustained Climate Action, we encourage submissions of research and projects that explore intersections between the following questions and that address climate change across scales—from building to community, to the planet.

- How are specific issues of climate justice and environmental equity being identified, prioritized, and addressed through design, architectural research, education, practice, and advocacy?
- What innovative economic models and practices might transform decision-making and hasten the decarbonization of the built environment?
- How can the imperative for Climate Action be translated and scaled from the production of relatively few, singular works of sustainable architecture to evidence-based processes for achieving climate goals across virtually all buildings, landscapes, and infrastructure?
- What new theories, research, tools, technologies, processes, and collaborations are needed to educate and support architects in designing and implementing effective interventions?
- How can architects help foster and realize community-based visions of equitable development and climate responsive design?

Educators, practitioners, researchers, and students are all encouraged to submit abstracts.

Abstract submission deadline is 25 Sep 2019.

—Kyle Konis
**CONFERENCE OPPORTUNITIES**

**GETTING TO ZERO FORUM**

We’ve posted a new Schedule-at-a-Glance at [https://gettingtozeroforum.org/schedule-at-a-glance/](https://gettingtozeroforum.org/schedule-at-a-glance/) with updated session times.

This year’s forum features a number of themed tracks, but we have created a “featured track” page at [https://gettingtozeroforum.org/featured-tracks/](https://gettingtozeroforum.org/featured-tracks/).

1. Getting to Zero Carbon in California
2. Effective Policies for Cities and States to Get to Zero-Energy and Carbon
3. Pathways to Grid-Enabled Buildings

As a community partner, SBSE has a 10% off code (GTZ19SBSE10).

—Leada Fuller-Marashi

**2020 BUILDING PERFORMANCE ANALYSIS CONFERENCE AND SIMBUILD**

ASHRAE and IBPSA–USA will host their fourth joint conference 12–14 Aug 2020 at the Westin River North in Chicago, Illinois. They are convening the 2020 Building Performance Analysis Conference and SimBuild to improve the industry’s ability to accurately model building performance. The focus is to make better decisions through the application of simulation and modeling over the entire building life cycle, from the earliest concept through operation and maintenance to achieve the goals of zero energy, zero carbon, or other high performance targets. The conference brings together the building energy analysis and performance simulation community for three days of discussions, seminars, and short courses. Practitioners, vendors, researchers, utility and government officials, and owners will address the practices of energy modeling and building performance simulation using existing simulation tools, software development, and future simulation research and applications.

The theme of the conference is “Integrated Building Design and Analysis to Achieve Zero Carbon.” In addition to refereed papers, the conference will include informal seminar presentations. A call for a presentation-only track will be circulated in early 2020 with abstracts due in February. The 6th Annual LowDown Showdown, vendor workshops, and invited speakers will complete the conference program. For more information see [ashrae.org/BuildPerform2020](http://ashrae.org/BuildPerform2020).

—Carrie Brown

**STUFF AVAILABLE**

**UCLA ENERGY DESIGN TOOLS UPDATED**

UCLA has posted the latest updates of their suite of Energy Design Tools [http://www.energy-design-tools.aud.ucla.edu](http://www.energy-design-tools.aud.ucla.edu), including HEED (Home Energy Efficient Design), SBEED (Small Building Energy Efficient Design), OPAQUE, and ClimateConsultant. They are intended for use in either studio courses or a lecture course to show your students how to design zero net energy buildings, that specifically take advantage of the unique attributes of your local climate.

A unique new feature of OPAQUE allows the inclusion of micro encapsulated Phase Change Material (PCM) in one of the layers of the composite surface. OPAQUE uses an efficient approximation algorithm to calculate average daily Energy Reduction when PCM is included. Tutorials are available on YouTube to explain the Psychrometric Chart, or various ways to use HEED or SBEED. Some are available in Spanish.

—Murray Milne
lyle center 25th anniversary!
I would like to warmly invite all SBSEers to three免费 events celebrating the 25th anniversary of the Lyle Center for Regenerative Studies.

October 11, 3–5pm, Lyle Center Commons & Outdoor Area (Building 209)
Experts Dialogue: “The Future of Regenerative Design” with David Hertz, David Hertz Architects Studio of Environmental Architecture; Debra Guenther, Mithun; Edward Mazria, Architecture 2030; and moderator Andy Wilcox, Landscape Architecture CPP. Followed by the 25th Anniversary Reception, 5–7pm.

October 15, 6–8pm, Lyle Center Commons (Building 209)

October 17, 5–8pm, Don B. Huntley Gallery, 4th Floor University Library at Cal Poly Pomona (Building 15)

For more information and to register for the events see <http://env.cpp.edu/rs/25th-anniversary>.

—Pablo La Roche

Research Opportunities
The Low Carbon Building Research Group at Oxford Brookes University is expanding. We’ve created a number of new research posts as part of our research grant successes in Local Energy Oxfordshire (LEO) project, UK Government-funded projects, and EPSRC-funded UK–India Residential building energy demand reduction in India (RESIDE) project.

For further information about the research posts, please visit:


—Rajat Gupta

SBSE Calendar

2019
Oct 9–11 Getting to Zero Forum/Oakland, CA, USA
Oct 18–19 Reynolds Symposium/Portland, OR, USA
Nov 4–7 Solar World Congress/Santiago, CHILE
Nov 15–17 Buildings, Cities, Performances/Chicago, IL, USA
Dec 2–4 BEO’2019 Symposium/Biskra, ALGERIA

2020
Apr 6–9 NIBS Bldg Innovation 2020/Arlington, VA, USA
Apr 16–19 Windsor Conf on Thermal Comfort/Windsor, UK
May 14–16 AIA/ACSA Symposium/Los Angeles, CA, USA
Jun 10–13 EAAE–ARCC Intl Conf/Bari, ITALY
Jun 22–26 ASES Solar 2020/Washington, DC, USA
Aug 3–6 SBSE Retreat/Bloomfield Hills, MI, USA
Aug 12–14 BPAC & SimBuild/Chicago, IL, USA
Sep 1–3 PLEA2020/A Coruña, SPAIN

Winter Issue Submittal Deadline—December 1

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TO: SBSE Members & Friends
Planet-Wide

* Participation in the Climate Strike can take many forms. You can #StandWithGreta for 30 to 60 minutes on 20 Sep—longer if possible—in a public place or outside your office, with a sign in support of Greta and the world’s youth. Whatever form your strike takes, send a picture of it to @architectsadvocate and share it on social media with the hashtag #StandWithGreta.