



photo: Bruce Haglund

2018 Retreat goers gathered on the deck of Interlock House (Iowa State's 2009 entry to the Solar Decathlon) for a group photo op.

## SBSE RETREAT 2019—FRONTIERS

### TEACHING BUILDING SCIENCE IN THE 21ST CENTURY

The SBSE 2019 retreat “Frontiers: Teaching Building Science in the 21st Century” will convene July 22–25, 2019, at the Taft–Nicholson Center (TNC) in Montana’s Centennial Valley, a pristine landscape located in the Greater Yellowstone Ecosystem. TNC is a field campus for the College of Humanities, University of Utah <<https://taft-nicholson.utah.edu/>>. From this place of extreme beauty, solitude, and endless horizons, we will have the opportunity to consider the frontiers of knowledge and practice around teaching environmental building science in the 21st Century.

This retreat location offers unparalleled opportunities to explore the West with close proximity to Yellowstone and Grand Teton National Parks. We recommend flying into Bozeman, MT, or Idaho Falls, ID (~3 hour drive) and spending some time in the region before or after the retreat. You may also fly into Salt Lake City (~5 hour drive).

Frontiers for topical workshops and sessions include:

- **Digital & Technology:** how are we using data collection and visualization, BIM, modeling, programming, and smart devices?
- **Disciplinary:** are we stepping outside our silos to engage disciplines such as computer programming, environmental sciences, engineering, art, and literature?
- **Pedagogical:** how do we teach this new generation of tech-savvy students?
- **Design:** what are methods to engage traditional design or construction faculty?
- **Material:** what low carbon materials are emerging and how do we integrate them?
- **Political:** are we addressing contemporary political issues such as climate change, and the value of science?

• continued next column



photo: Ryan Smith

• **Place and Experience:** how does place and experience inform our teaching, research, and practice?

• **Ecosystems:** how can building science education integrate a systems approach to analyzing and designing the built environment?

We invite proposals for 30-minute presentations or 60-minute workshops on any of the theme’s topics. Proposals must include innovative pedagogical content that relates to teaching and learning for design studio, lecture, or seminar courses. Sessions will take place in parallel. We are looking for 15–20 workshops and presentations for the retreat, selected through a review process that will balance content and schedule. 🙌

—Ryan Smith

## LETTERS TO THE EDITOR

Thanks for the mention of Roast; it is much appreciated. We are tracking our Aug 16 release date and looking forward to a healthy crop of educational users this fall.

—Roderick Bates, Kieran Timberlake

*Great news! We loved it and plan on future use. Et tu SBSEer? Also check out the raison d'être for Roast at <<http://www.hpbmagazine.org/Ortlieds-Bottling-House/>>.-ed.*



Is there potential in the future for establishing international chapters for SBSE? Would love to start one in Egypt. I can name at least 10 faculty members who would join. I am already on something similar at the AIA Middle East Chapter which is based in Dubai, but it is more professionally oriented than faculty and teaching.

—Khaled Tarabieh, AU Cairo

*SBSE's by-laws have no provisions for chapters, but Ulrike says the board may consider making provision for chapters. In the meantime collaborate with your peers in Egypt and beyond, stage events, and invite the SBSE community to join in!-ed.*



I have posted all the images and illustrations from my book, *Integral Sustainable Design: transformative perspectives*, for free download at <<https://greenvisionstudio.org>>.

—Mark DeKay

*Thanks Mark.-ed.*



Nice stamp on the summer *SBSE News*... these are some serious authors. 🖨️

—Walter Grondzik

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## SO HOW WAS THE 2018 RETREAT?

Thanks to SBSE for awarding me the Jeffrey Cook Fellowship funding my travel and lodging for the retreat. I had a fantastic experience with my colleagues from the U.S. and beyond. Truly, this group of building science educators is an exceptional one, a resource for all junior faculty aspiring to succeed in the field of building science. My sincere gratitude and thanks goes to the SBSE current president Ulrike Passe and the board members for their generous support and splendid selection of activities, engaging discussions, lectures, and field visits during this excellent retreat. In this report, I'll share some highlights with a few comments and reflections.

We visited the Iowa Nest: Net Zero Energy House, developed by Peter Krebs, owner and developer of Sefaira, which demonstrated great building performance results in situ and has compared favorably to the earlier simulation performance prediction. We experienced earth cooling while listening to Krebs' lecture. No air conditioning, yet comfortable conditions while it was considerably warmer outside. The most expensive element in the building design and construction was the curtain wall with its minimal mullions and smooth operation while not compromising the great view it overlooks.



photo: Khaled Tarabieh

*SBSEers experiencing the passive coolth of the Iowa Nest during its construction.*

Highlights of the sessions included a presentation on buoyancy ventilation by Alexander Timmer; PhD research presentations by invited student scholars; the roundtable discussion of SBSE board activities by Michael McGlynn, Alison Kwok, and Georg Reichard; daylight visualization by Mary Guzowski; and the wrap up by Ulrike Passe along with her explanation of the Energy Performance Tracking of the Interlock House (built for the U.S. DOE Solar Decathlon in 2009) at Iowa DNR's Honey Creek Resort State Park.

Finally, on the field trip day we had a group lunch at the Des Moines Art Center. Our visit to the Iowa Utilities Board Office of Consumer Advocate Office Building by BNIM revealed the variation of materials that contribute to its healthy office environment—external shades and daylight harvesting along with the lightly sandblasted hard-troweled concrete finish on the interior in lieu of the typical drywall finish.

—Khaled Tarabieh



photo: Khaled Tarabieh

*A bunch of SBSEers enjoyed gourmet lunch in the Des Moines Art Center designed by Saarinen, Pei, and Meier.*

I think one of the most important points for me and students like me was the opportunity that SBSE provided for us to enrich our professional network by meeting and communicating with future potential colleagues. The late evening events were especially helpful in this regard.

Another very productive aspect of the retreat was introducing the online resource of building science materials prepared by educators in our field. I think it is going to be an invaluable repository of thoughts and technical documentations to be used by the building science community.

I suggest including a short student introduction session at the beginning of the program. It would give students the opportunity to present their research at the very beginning of the event, then proceed from there to sharing thoughts with those who are interested.

—Hassan Azad

Prior to attending the retreat I was told the experience was like "Building Science Summer Camp." While this description proved to be accurate (there were kayaks and nature walks), it didn't capture the most valuable part of the event: the camaraderie and generosity of this unique group of educators. As a first-time attendee I hope to be back next year!

—Gabrielle Brainard

The retreat is always a great opportunity to get to know fellow building science educators. In addition to making personal connections, my favorite parts are the informal, yet in-depth, discussions that spring up after each presentation. This year's retreat did not disappoint. 🖨️

—Holly Samuelson

## SBSE ANNUAL MEETING NOTES

SBSE Retreat 2018, Honey Creek Resort, Moravia, IA, July 17, 2018, 9:30–10:30am CDT

**Attending:** Emad Afifi (EA); Jonathan Bean, Awards & Scholarships Chair (JB); Gaby Branaird (GB); Walter Grondzik (WG); Mary Guzowski (MG); Bruce Haglund, Communication Chair (BH); Lisa Iulo (LI); Soo Jeong Jo (SJJ); Alison Kwok (AK); James Leach (JL); Michael McGlynn, Educational Resources Chair (MM); Ulrike Passe, President (UP); Georg Reichard, President-Elect (GR); Holly Samuelson (HS); Khaled Tarabieh (KT); Alex Timmer (AT); Jim Wasley (JW); **Online:** Tom Collins, Treasurer (TC); Shannon McDonald (SM); Emily McGlohn, Secretary (EM); John Reynolds (JR). Contributors cited by initials.

### TREASURER REPORT (TC)

Reporting period: Oct 2017–Jul 2018 \$38,000 in accounts, sufficient to pay obligations with \$18,000 remaining.

3 main sources of income: sun angle calculator, membership dues, donations. Sun angle calculator sales up from \$1,100 to \$6,000. Renewals in progress; (EM) is looking for ways to reach out to lapsed members.

\$14,000 scholarships awarded this year funded by Cook Trust, John Reynolds, and SAC sales.

Retreat paid for through registration fees and AIA. SBSE covered cost difference.

### SCHOLARSHIP COMMITTEE REPORT (JB)

**PLEA Conference.** Healthy number of applications for PLEA (50 applicants). **ASES Conference.** Scholarship did not have enough applications (only 1 eligible). Having trouble finding applicants for this scholarship. Would like to discuss reasons for this. Is there a better allocation for these funds? **Passive House Conference.** 5 applicants, 4 scholarships awarded. **Open Scholarship.** Discussion about how to structure it. Should it be awarded for participation in any related building science conference?

### COOK TRUST SCHOLARSHIP REPORT (UP)

This trust changed the lawyer group that organizes the funding. SBSE is working with the new group to understand application and scholarship payout process. Final report will be required each year. Will give SBSE the opportunity to apply for 3 more years.

### EDUCATION AND RESOURCE COMMITTEE REPORT (MM)

Educational Resources portal is up and running. Encouraging members to sign up for portal; not automatic with membership or renewal. Long-term goal of the ERC is to share resources efficiently and digitally. Some technical management issues to work through. GR is working on this as president elect. ERC will meet throughout the next 9 months to sort out technical issues. Hope to add more members to the committee to help with management. On the front end, looking for ways to encourage members to participate. Two main strategies from Jul 16 session. Take opportunity at gatherings (retreat, PLEA) to have members sign up and upload. Put out calls for resources via listserve that can direct members to upload specific material.

### COMMUNICATION COMMITTEE REPORT (BH)

Big News! We have the new web page. Legacy information from old site is being transferred to new site. Looking for volunteers to provide information to social media sites.

### MEMBERSHIP SURVEY PRELIMINARY RESULTS (UP)

Success! Preliminary report: more than 50 responses to 110 invitations, 10 bounced back. Jun–Jul most popular months for retreat, some feedback that it could be every 2 years. Cost to attend a challenge due to tightening budgets at universities. Will continue conversation to consider an SBSE conference. UP will write a full report, and we can look into results and suggestions. Survey is still open, a reminder can be sent out to members for more feedback.

### NEW ACTIVITIES: CONFERENCES (UP)

Discussion about SBSE having its own conference ensued. See minutes on line for details.

### REYNOLDS SYMPOSIUM (AK)

John Reynolds and Alison Kwok organizing a one-day symposium for the fall of 2019 at the University of Oregon. JR established an endowment for sustainability symposium, first held in 2015. 2017 Charlie Brown had the Festschrift. 2019 symposium topic/name to be determined. Anticipated Oct 18–19, 2019. Peer reviewed abstracts for presentations and poster presentation. Invited papers for an edited book. 🐾

—Emily McGlohn

## SOCIETY NEWS

### JOHN REYNOLDS SYMPOSIUM

The SBSE Board agreed to support 2019 Reynolds Symposium with \$5,000. In return we request to be a named sponsor for a portion of the symposium, perhaps the dinner.

In addition we will sponsor 3 to 5 faculty fellowships for emerging faculty in the early stages of their career at \$500 each. Stay tuned.



photo: Michael Turek

*Shipwreck Lodge (2018) by Nina Maritz Architects at Skeleton Coast National Park in Namibia*

UO has also secured funding (\$5,000) from the Jeffrey Cook Charitable Trust to bring in Nina Maritz from Namibia as one of the keynotes. 🐾

—Ulrike Passe

### PLEA 2017 PROCEEDINGS AND MORE FREEBIES



photo: Bruce Haglund

On our home page <<https://plea2017.net/>> you will find three great downloads:

- The introduction to ASR61.5, “Place, Time and Architecture: the growth of new traditions,” which includes twelve great papers from PLEA 2017.
- PLEA 2017 Legacy Document, which provides overviews of each of the 31 different forums held at the conference, written by each of the 31 forum leaders.
- PLEA 2017 Proceedings—All three volumes of the full proceedings can be downloaded in high or low resolution.

You may also like to check out some great papers on Thermal Comfort in the downloadable *Proceedings and Workshop Reviews of the 10th Windsor Conference* at <<http://windsorconference.com/>>. 🐾

—Sue Roaf

## SBSE PEOPLE

✦ **Simi Hoque** has been invited on behalf of the U.S. National Academy of Sciences to participate in the sixth Arab–American Frontiers of Science, Engineering, and Medicine symposium, held in partnership with the Kuwait Foundation for the Advancement of Sciences and hosted at the Kuwait National Library in Kuwait City, Nov 4–6, 2018. The symposium is made possible thanks to the support of the Kuwait Foundation for the Advancement of Sciences, the United States Agency for International Development, the National Science Foundation, and The National Aeronautics and Space Administration. The Arab–American Frontiers symposium brings together researchers from many different disciplines to explore the frontiers of research in the fields of water systems, big data, the microbiome, air quality, and next-generation buildings and infrastructure.

✦ **Alison Kwok** will be a Visiting Shimizu Professor at Stanford University during her Fall term sabbatical.

✦ Design Intelligence has named two with SBSE roots among its Top 25 Most Admired Educators—**Mark Mistur** and **Doug Noble**. *[Doug is an Associate Professor. Everyone else, including Mark, in this top 25 is an administrator. Well done, Doug!—ed.]* 🖐

## JOB OPPORTUNITY

### PACIFIC INSTITUTE FOR CLIMATE SOLUTIONS

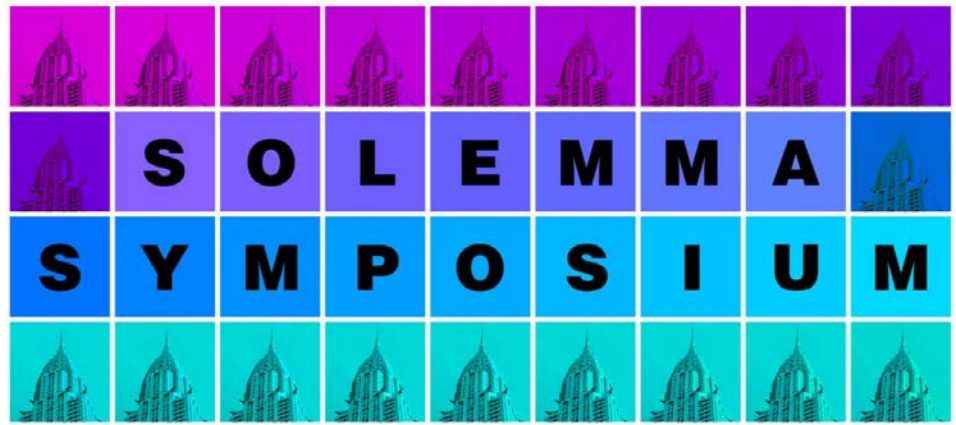
Our new Researcher in Residence position offers an exceptional opportunity to be at the nexus of climate solutions research and engagement focusing on climate solutions in the built environment. We are a multi-university institute encompassing the four major research-intensive universities in BC—University of Victoria, University of British Columbia, Simon Fraser University, University of Northern British Columbia. Our mandate is to produce leading climate solutions research that is actively used by decision-makers to develop effective mitigation and adaptation policies and actions.

See <[https://pics.uvic.ca/sites/default/files/PICS%20Researcher%20in%20Residence%20June%2020%202018\\_0.pdf](https://pics.uvic.ca/sites/default/files/PICS%20Researcher%20in%20Residence%20June%2020%202018_0.pdf)>.

The application deadline is Sep 30. 🖐

## UPCOMING EVENTS

### SOLEMMA SYMPOSIUM, OCT 23-24, NYC



This annual symposium brings together practicing architects, sustainability consultants, and building science educators to share their work and learn from each other. This year, we will again dive into the field of circadian lighting design with a session that reviews the underlying science as well as early examples of how the full-spectrum ALFA tool is being used to design healthier daylighted environments. The second session will feature (day)lighting case studies ranging from individual spaces to neighborhoods. The third session will be dedicated to methods for teaching environmental performance tools to architects. We will be closing the day with brief introductions to the fields of urban building energy modeling and building integrated agriculture followed by a panel discussion of leading environmental design consultants on whether today's market is ready to embrace these still evolving methods. <<https://www.solemma.com/Events.htm>>.

For those of you who are using DIVA for your teaching, I am happy to report that the latest version is fully compatible with Rhino 6. On day two of the Solemma Symposium we will be providing training on circadian lighting design as well as the DIVA Simulation Game for the classroom.

—Christoph Reinhart

### SIMAUD 2019 IS COMING TO GEORGIA TECH IN APRIL.



The 10th annual Symposium on Simulation for Architecture and Urban Design (SimAUD) offers a platform to unite researchers and practitioners in the fields of architecture, urban design, urban planning, building science, and data science. SimAUD 2019 invites submissions across a range of topics related to simulation with a special emphasis on methods that bridge disciplinary gaps between design, construction, operations, resource management, human behavior, and performance analytics across building and urban scales. For details see <<http://simaud.com/2019/index.php>>.

Check out the video of last year's event, which was held in TU Delft <<https://www.youtube.com/watch?v=MN1zNrHw-Sc>>. 🖐

—Siobhan Rockcastle and Tarek Rakha

## ARCC OPPORTUNITIES

### ARCC 2019 CONFERENCE

The call for submissions is now out for ARCC 2019: Future Praxis: Applied Research as a Bridge Between Theory and Practice. The conference will be hosted by Ryerson University and will be held in Toronto, May 29–Jun 1, 2019. You can find more information about the conference including submission deadlines at <<http://www.arcc-arch.org/arcc-2019-request-for-submissions/>>.

### ARCC RESEARCH INCENTIVE AWARDS

The deadline for our new ARCC Research Incentive Award program is Sep 1, 2019. We hope you encourage your faculty to apply to the program. Only faculty from ARCC member institutions are eligible for this award. You can find more information about the program and submission requirements at <<http://www.arcc-arch.org/arcc-research-incentive-award/>>.

### ARCC JOURNAL FOR ARCHITECTURAL RESEARCH

*ENQ, The ARCC Journal for Architectural Research* is soliciting proposals for guest editorship of themed issues on topics of particular interest to members of the architectural research community. Only faculty from ARCC member institutions are eligible. More details about can be found at <<http://www.arcc-arch.org/enquiry-call-for-guest-editors-special-themed-editions/>>. 🖐



— Hazem Rashed-Ali

## CALLS FOR PAPERS

### AIA 2019 CONFERENCE

The Call for Abstracts submission link for the next AIA Conference, Jun 6–8, 2019, Las Vegas, NV, is live at <<https://www.aia.org/events/210171-intersections-symposium---2019-call-for-ab>>. The theme is Bottom-Up Social Change: Materials, Buildings, Community. Our co-chairs are Elizabeth Golden (UWashington) and Joshua Vermillion (UNLV). We had a great turnout at the 2018 Intersections Symposium with almost 500 attendees at the three sessions.

The deadline to submit your abstract for blind, peer-review is Wednesday, Sep 26, 2018 – soon!

—Nissa Dahlin-Brown

### PLDC 2019

Submit your paper and be selected as a PLDC speaker and share your knowledge with an international audience. The Call for Papers will be open until 16 Nov, 2018, 11 pm/GMT.

This call addresses both experienced practicing professional lighting designers as well as the new generation of lighting professionals, plus dedicated researchers and educators, industry representatives, and professionals from related disciplines whose work affects and involves professional lighting designers. PLDC is an educational event which encourages lighting professionals to share their insight and know-how, and where even the most skilled masters of the art can learn from newcomers.

Traditionally, there have been four tracks including Professional Practice Issues, Lighting Application Case Studies and Research. The fourth track for Rotterdam will be Office & Retail.

Previously published/presented papers will not be accepted.

As an addition to the conference papers, the organizers will again offer Experience Rooms/Spaces to encourage attendees to actively experience light (and darkness).

Read the full Call for Papers and submit your paper at <<https://2019.pld-c.com/call-for-papers/>>. 🖐

## DESIGNBUILDER WEBINAR

The latest DesignBuilder release builds on the data visualization, daylighting, LEED, façade modelling, and LCA features from earlier v5 releases. The free webinar on Aug 30 focused on the latest tools and top tips for getting the most out of the software. You can still register and watch the recording. Register for the free webinar: DesignBuilder Update Webinar at <<https://register.gotowebinar.com/register/8972145017552155139>>.

New and enhanced software capabilities featured during this webinar include:

- Some great new additions to the geometry modelling toolset, including: gbXML export, import of 2-D elevation drawings for tracing façade openings etc, selective ghosting of blocks to provide unobstructed editing of any block, and a new way to show building surfaces, zones and blocks in the context of the rest of the building.
- New data visualization tools allowing results to be color-rendered onto the 3-D model.
- Advanced façade modelling, including an introduction to the new Saint Gobain SageGlass dynamic electrochromic glazing capabilities.
- The latest climate-based daylight modelling tools and reports.
- Construction cost reporting, with options for RICS NRM1 and ASTM UNIFORMAT II outputs.
- The latest automation tools built into DesignBuilder for fast and efficient LEED and ASHRAE 90.1 modelling.
- New HVAC capabilities, including more flexible modelling of radiant surfaces with reversible heating/cooling.
- Assess LEED v4 and BREEAM Life Cycle Analysis (LCA) credits through the One-Click LCA system directly from your DesignBuilder model.

For those attending the ASHRAE-IBPSA SimBuild Conference in Chicago, Sep 26–28, you may also be interested to know that DesignBuilder will be running a 2-day pre-conference workshop. You can find more details on the conference <<https://www.ashrae.org/conferences/topical-conferences/2018-building-performance-analysis-conference-and-simbuild>>. 🖐

—David Cocking

## SABBATICAL REPORT

photo: Mark DeKay



Susan and Mark enjoying the Scottish countryside.

Glasgow was awesome. On what UT calls “faculty development leave” I was working at IES, the software company that makes Virtual Environments. A module of VE called Gaia does a climatic analysis of hourly weather files and then recommends strategies from *Sun, Wind & Light* and Givoni that probably will work in that climate. I learned a lot about their approach to software and how a mission-driven, agile company operates.

At UT I’m often the “tech guy,” but working in a company with physicists, mathematicians, programmers, and engineers, I was the soft, fuzzy design guy. It was fascinating to learn about thinking in a very different way while offering IES an architectural perspective. I learned that I do a lot of “empirical thinking” about what works, what has certain limits on the variables involved. Others think more in terms of simulation as the means to answer a question about a specific problem in a specific case. I used to think of engineers as “portable thinkers” who wanted to apply their abstractions (formulas) to a particular problem while architects were “particular thinkers” who solved for the unique situation of client, site, program, and climate and then generated their abstractions post-facto. I’m having to reverse that now, or at least hybridize it, because it was the engineers who were thinking in particulars while I was being portable.

I worked mostly on an urban-scale energy tool that has not been released. I met two fun engineers who had developed a cloud-based plug-in for SketchUp to do site and urban microclimate analysis. We worked on a paper together that has been submitted to PLEA 2018 in Hong Kong. Mostly I was inspired by a large company motivated every day to make a difference to how buildings and cities use energy. 🖐

—Mark DeKay

## CONFERENCE REVIEWS

### ASES SOLAR 2018: SBSEERS RECOGNIZED

Over 400 registrants again made the trip to Colorado for Solar 2018 in Boulder. The ride is beautiful going up into the foothills and feeling like you’re in solar country, then reinforced by the NREL types in attendance who contributed quite a few of the papers and won several awards.

This SBSE involvement was reflected, in part, in the awards ceremony this year. The Charles Greeley Abbott Award went to Ralph Knowles from USC. Ralph has been doing research on solar and buildings for 50 years. To many, he is known as the “inventor” of the solar envelope, a volume which limits construction to maintain solar access for adjacent sites. It has been included in various forms in codes and restrictions around the world. Ralph will turn 90 this year, and was unable to attend, so John Reynolds accepted the award and gave a concise, but profound, summary of Ralph’s work.

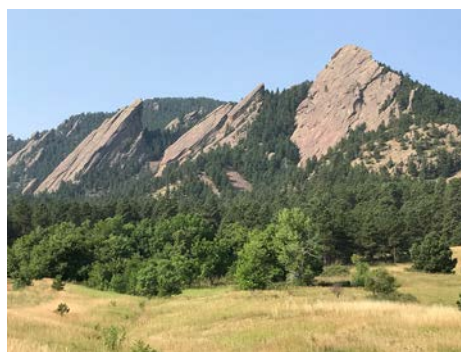
The 2018 Passive Solar Pioneer Award went to another SBSEer, Walter Grondzik, “for his tireless work as an educator and researcher in the area of passive design.” His is a great range of work, both in the fields of architecture and architectural education and in service to the profession. Walter is co-author, with Alison Kwok (2017 Solar Pioneer) of *Mechanical and Electrical Equipment in Buildings* [“The best text book in the universe.” Google “MEEB Like This.”—ed.] and *The Green Studio Handbook*. He co-authored *Earth Shelter Technologies*, with Lester Boyer and is the sole author of *Principles of Commissioning*.

One of the unusual themes of the conference was Solar for Resilience, Preparedness, and Recovery (RPR), including case studies of disaster response with renewables. Another interesting initiative is the TINY WATTS program. “Think solar backpacks and suitcases for charging cell phones and laptops; solar lights; solar cookers; low-tech solar water heaters, food dryers and much more.” This focus is not new, but is deemed something that could benefit from organization and promotion as it is a topic that is piecemeal and falling through the cracks. See <<https://www.ases.org/tinywatts/>>.

The NREL tour was sold out before the conference began, not a surprise. The surprise was how warm (and humid?) it felt as soon as you hiked around a bit. All in all, the conference, although modest, was deemed a success. And the surroundings were wonderful.

For a complete record of the presentations, see: <<https://www.ases.org/wp-content/uploads/2018/08/Solar-2018-Program-for-web.pdf>>. 🖐

—Marc Schiler



Colorado’s Flat Iron Range.



John Reynolds at the podium with Ralph Knowles’ solar envelope writ large.



Walter accepts the Passive Pioneer Award from ASES’s Executive Director Carly Rixham.

photo: Alex Rempel

photos: Alison Kwok

## SOLAR DECATHLON COMPETITION GUIDE

The U.S. Department of Energy (DOE) is excited to release the Solar Decathlon 2019–2020 Competition Guide, which provides detailed information on competition rules and how to apply. The competition continues to “push the envelope” on the design of the most high-performance, efficient, affordable, innovative buildings while leveraging opportunities to showcase student innovation and STEM education, as well as to foster workforce development opportunities. See <<https://www.solardecathlon.gov/assets/pdfs/sd-competition-guide.pdf>>.

Solar Decathlon 2019–2020 will offer two tracks [Fig. 1] that build on the strengths of previous DOE student competitions: (1) an annual “Design Challenge,” formerly Race to Zero Student Design Competition, and (2) a “Build Challenge” that expands on the original Solar Decathlon. Teams in both tracks will present their projects at a single expert-juried event in April 2019. The expert jury will select winners of the Design Challenge and separately approve Build Challenge teams to move on to the construction phase. The Build Challenge teams will then go on to build and showcase their designs at public and industry events in 2020, where final Build Challenge winners will be announced.

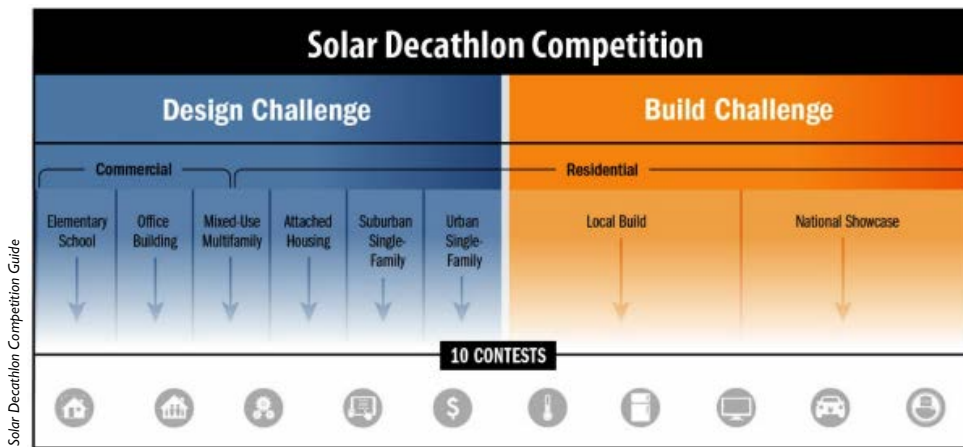


Figure 1. Structure of the Solar Decathlon

DOE will host three upcoming Solar Decathlon webinars. The first one will provide an overview of the competition. The following two will discuss competition requirements and answer questions. If you’ve missed the webinars, they will be archived on the decathlon web site.

- Kick Start Your Solar Decathlon Competition! Aug 22, 2018, 1:00–2:30 p.m. ET
- Solar Decathlon Design Challenge Sep 12, 2018, 3:00–4:30 p.m. ET
- Solar Decathlon Build Challenge Sep 13, 2018, 3:00–4:30 p.m. ET

Solar Decathlon is a collegiate competition that challenges student teams to either design or design and build high-performance, energy-efficient buildings. The winners of the competition are the teams that best blend design excellence and smart energy use with innovation, market potential, and building efficiency.

Additional details are at <<https://www.solardecathlon.gov/>>. DOE is excited to work with the next generation of building science professionals! 🙌

—DOE



The UC Davis house with its bicycle tire rim brise soleil at the 2017 Solar Decathlon.

## BUILDING PHYSICS

The Technical Program Committee of the 7th International Building Physics Conference invites all members of SBSE to Syracuse, NY, on Sep 23–26 for IBPC2018! Hosted by Syracuse University, it will be the first time IBPC is being held in the U.S.

Confirmed keynote speakers include Michelle Addington, University of Texas at Austin; Jan Carmeliet, ETH Zurich; Patricia J. Culligan, Columbia University; Richard deDear, University of Sydney; Yuguo Li, University of Hong Kong; and Vivian Loftness, Carnegie Mellon University. We’re looking forward to a great conference and would love to see more abstract submissions from SBSEers. More information at <<http://ibpc2018.org/>>. We hope many of you can join us!

—Chetna Chianese

## IMPACT FACTORS & BRI

For those of you who are interested in impact factors (IF), the latest (2017) IF for *Building Research & Information* (BRI) is 3.468, representing an increase over the previous year’s 3.136.

BRI is ranked 11 of 62 in the field of “Construction and Building Technology” by Clarivate Analytics.

However, I would caution you from using the Impact Factor as a metric for rating the research in any given journal. Nor should IF influence your decision on where to publish.

The Declaration on Research Assessment (DORA) recognizes the need to improve the ways in which the outputs of scholarly research are evaluated. See <<https://sfedora.org/read/>>.

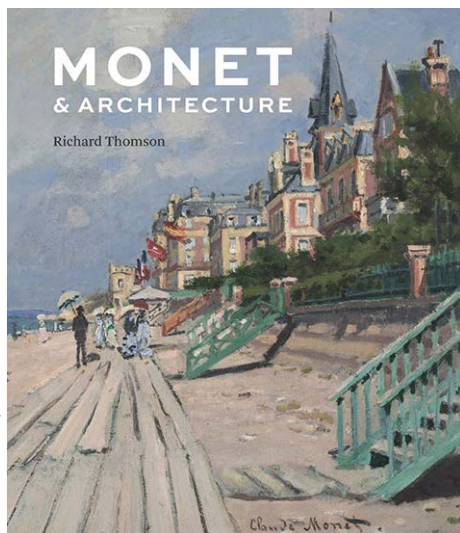
Key points of DORA are:

- the need to assess research on its own merits rather than on the basis of the journal in which the research is published
- the need to eliminate the use of journal-based metrics, such as Journal Impact Factors, in funding, appointment, and promotion considerations.

We need to become more savvy about the use and abuse of metrics! 🙌

—Richard Lorch

## INSPIRATION



Monet often observed buildings from a high vantage point and wrote, "I want to paint the air that surrounds the bridge, the house, the boat—the beauty of the light [and colors] in which they exist." 🖐

## SBSEERS GAIN THE NUCKOLLS FUND AWARDS

The Nuckolls Fund for Lighting Education has named eight winners of grants and awards for 2018 totaling \$90,000, the largest annual distribution in its 29-year history. This year's total brings the Fund's support for lighting education since its founding to \$1.145 million.

"The Fund's Board of Directors felt that because more proposals submitted for 2018 demonstrated significant merit, the decision was made for an increase in the number of grants that were given," says Fund president Jeffrey A. Milham. Submittals were received from lighting educators in colleges and universities throughout North America.

- A \$20,000 Nuckolls Fund Grant was given to the University of Minnesota to assist in the development of a Lighting Design minor, plus the introduction of a new advanced lighting course titled, "Lighting Design Innovations and Technological Advances," to be offered by the University's College of Design. Abimbola Asojo will be the principal investigator with Mary Guzowski as the co-principal investigator for this grant.
- A second \$20,000 Nuckolls Fund Grant was awarded to the University of Oregon for the development and delivery of a new course, "Virtual Lighting Design." Siobhan Rockcastle, chair of the Baker Lighting Lab, will be the principal investigator with support by a team comprised of Kevin Van Den Wymelenberg, David Grigsby, Zachary Suchara, Nathaniel Jones, and Naomi Miller.

The Nuckolls Fund website is a major resource for lighting instruction. All Fund-sponsored educational materials are posted on its website, available worldwide at no charge. For information, visit <<http://www.nuckollsfund.org>>. For 2019, the Nuckolls Fund has changed its deadline for receipt of applications grants and awards to Nov 30, 2018. 🖐

—The Nuckolls Fund

## SBSE CALENDAR

## 2018

Sep 23–26	Int'l Bldg Physics Conf 2018/Syracuse, NY, USA
Sep 26–28	ASHRAE-IEPSA Sim Build Conf/Chicago, IL, USA
Oct 23–24	Solemnia Symposium/New York, NY, USA
Oct 25–27	PLDC 2018/SINGAPORE
Dec 4–7	SASBE 2018/Sydney, AUSTRALIA
Dec 10–12	PLEA 2018/Hong Kong, CHINA

## 2019

Apr 7–9	SimAud 2019/Atlanta, GA, USA
May 29–Jun 1	ARCC 2019/Toronto, CANADA
Jun 6–8	AIA 2019/Las Vegas, NV, USA
Jul 22–25	SBSE Retreat/Centennial Valley, MT, USA
Jul 24–26	Int'l Conf Structures & Architecture/Lisbon, PORTUGAL 🖐

## WINTER ISSUE SUBMITTAL DEADLINE—DECEMBER 1



SBSE NEWS  
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TO: SBSE MEMBERS & FRIENDS  
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