A gaggle of 2021 SBSE Retreat-goers pauses on their river walk for a group photo. Is that Canada in the background?

A retreat is a retreat, not a conference. Thus, the SBSE Board had a hard time imagining another online retreat. A retreat is an event and a location where SBSEers come together in one space to discuss pedagogy. Thus, a convergence of people in space and time—essential to a retreat—was on the agenda again to engage and to discuss, not merely consume and attend presentations. A retreat focused on building science, related design pedagogy, and the scholarship of learning and teaching requires hands-on workshops. Therefore, SBSE organized a real, in-person retreat in early August.

The event was hosted by two faculty, Kris Nelson and James Leach (University of Detroit Mercy) at the Manresa Jesuit Retreat in Bloomfield Hills, a shaded park in a suburb outside Detroit, near Cranbrook with plenty of opportunities to step into nature. Thus, here we were: 15 in-person participants and an agenda filled with excellent and thoughtful workshops on issues such as team-based learning, where I learned how to use scratch cards as a pedagogical tool, the benefits of passive house pedagogy integration into an architecture curriculum, and how to keep students engaged in the Solar Decathlon design competition, to name but a few.

We also learned a lot about Detroit, for example during the evening lectures by Dan Pitera (FAIA) and Charles Cross (ASLA) about the Detroit Future City Process and the Fitzgerald neighborhood as a case study developed with the Detroit Collaborative Design Center (DCDC) <https://www.dcdc-udm.org/> with a vivid follow up discussion.

On our last day a few of us visited the East Market District and adjacent community gardens, learned about stormwater management, local food systems, and new development, in addition to the mechanisms instituted to keep local businesses local. The danger of gentrification looms. Now, I also know how the F-150 is assembled at the Rouge factory, but I still would not drive one. [Electric? Lack of Biden-like swagger!—ed.] On the last evening, we had the best Middle Eastern food I have ever tasted outside the Middle East. Thus,

2021 RETREAT—TWO VIEWS X 2

TWO VIEWS FROM FACULTY

This odd year (2021) we have a Russian-style slate [1 candidate/position + I live in Moscow—ed.] of candidates for SBSE office:

- President-Elect: Alex Rempel
- Secretary: Clarke Snell
- Treasurer: Tom Collins

Candidates’ statements and mug shots are available on the SBSE web site. The polls will open on 1 Oct. If you desire drama in this election, it’s time to mount a robust write-in campaign!

—Bruce Haglund

SBSE Election Year
LETTERS TO THE EDITOR

Passive cooling for the masses made it to the Washington Post in the context of how to survive extreme heat with an article quoting SBSEer Alex Rempel at length. Check out <https://www.washingtonpost.com/climate-solutions/2021/07/23/passive-cooling-heat-wave/>. I imagine that Alex enjoys your features like the one on page 3! —ed.

SOLAR DECATHLON

October Deadline for Design and Build Challenges

The Solar Decathlon Competition Guide, 2022 Design Challenge Rules, and 2023 Build Challenge Rules are now available to the public. All collegiate institutions are encouraged to apply to participate in the next edition of Solar Decathlon by 26 Oct 2021, at 5:00 p.m. ET. Team Applications can be submitted for both the Design Challenge and the Build Challenge.


—Office of Energy Efficiency & Renewable Energy

2021 RETREAT IN PERSPECTIVE [CONT. FROM P.1]

Although pandemic-related travel restrictions reduced the number of attendees traveling in person to the event, a dozen faculty and students gathered in a bucolic setting to share teaching tips, ongoing projects, and each other’s company. The intimate size of the retreat allowed for schedule flexibility, great discussions among colleagues at meals, and spirited presentations. In addition, several attendees presented remotely during a hybrid session; an option that should be considered for future retreats.

Local tours included a visit to the Detroit Riverwalk (the #1 Riverwalk in the USA!), a Frank Lloyd Wright–designed Usonian house, and a number of other sites in Southeast Michigan after the main event. Guest speakers included representatives from Bees in the D <https://beesinthed.com/> and the Detroit Collaborative Design Center <https://www.dcdc-udm.org/> who encouraged the group to expand the scope of building science to include other species and the urban fabric.

Many thanks to the local hosts, Kristin Nelson and James Leach of the University of Detroit Mercy, for organizing and coordinating the event, especially since planning extended over two years!

—Jim Wasley

TWO VIEWS FROM STUDENT SCHOLARSHIP WINNERS

Attending the SBSE Retreat was an informative, inspiring, and relaxing break from my summer internship. It was a great introduction to the world of building science education and an informal introduction to a multitude of professors’ experiences teaching the subject. I immediately noticed how welcoming the other attendees were and how forthcoming people were to share their experiences in the field. The retreat started out with an exciting presentation on bees in the Detroit area by the nonprofit Bees in the D. From there, I had an amazing time listening to and participating in fascinating presentations, being inspired by the presenters’ passion and by the interest and participation from those attending. Additionally, I noticed plenty of enthusiasm from the presenters to share their experiences both in SBSE and in their careers as professors, which I found to be extremely insightful and helpful in navigating my own career path.

In addition to having such an enriching and technical experience, the retreat also offered moments of fun and relaxation through omiyage and tours of the city. I learned a ton about the City of Detroit and was really intrigued to learn about the city’s plans for the future and am excited to see it come to fruition. I found the virtual platform to be a little difficult to navigate, but the access to more information made it worth the effort. This experience was enriching in multiple aspects—in my technical knowledge of the subject, my exposure to people working and teaching in the field, and learning about Detroit. I am so thankful to have been able to attend this learning retreat, and I hope to be able to attend more in the future.

—Kayla Reed

The retreat was my first time going to Detroit, where SBSE provided a very special experience. On the third day of my field trip, we went to Detroit’s downtown—a totally different place than I have ever been to before. Old and new buildings mix together. I can imagine Detroit as a magnificent city. It was a highlight of this trip.

We went to the Frank Lloyd Wright Afleck House, it was my first chance to see Wright’s work. The guide told us the whole building was without any insulation in the walls, but Wright tried to use natural ventilation and sunlight to adjust the interior temperature. The whole building sits on the slope and is part of the landscape. A good sustainable design should be a part of nature, rather than a sculpture in nature. This experience let me think more about how to create a sustainable, valuable, and workable building.

—Ruina Du
MORE LOW-TECH DESIGN

WATER AND COOLING

Our normally temperate Pacific Northwest had bouts of extreme heat this summer, and we’ve been trying many measures to maintain comfort indoors and out. I’ve heard of many instances of the classic ice bucket and box fan, but let’s look at more direct uses of water. One very warm evening, we sat under misters as we visited friends for dinner outdoors on their deck. So evaporation, even misters, can be very effective for cooling in our relatively dry summer climate. With misters, though, the devil is in the details. If the mist is too fine and the air so dry that mist evaporates before landing on one’s skin, the cooling sensation can be delightful, not unlike walking downwind of a waterfall on a hot day. If you think about how our skin’s thermoregulation depends on evaporation of sweat, the moment that the mist becomes a film of warm water on our skin, that wonderful sensation can turn into a clammy mess.

Sitting in the damp mist on that warm evening, thoughts turned to other evaporative systems, such as the soaker hoses running along the top of the WWII metal Quonset hut that housed the original zebra fish experiments at the University of Oregon. It also brought back a memory of a house in Tel Aviv, in the 1970s, where the kitchen floor was cleaned by flooding and squeegeeing the earthenware quarry tiles, which also produced a enveloping, durable sense of coolness. Did the tiles absorb water which then evaporated, over time, for a useful temperature reduction?

Since our back porch is floored in slightly absorbent quarry tiles, the next warm day was a perfect chance to play with this effect. Indeed, adding a little spritz of ambient-temperature water onto the tiles reduced the surface temperature by two to four degrees, very quickly lowering the air temperature on the porch, and also the radiant temperature. The water evaporated very quickly and the tiles are thin, so the change didn’t persist for longer than a couple of minutes. It brought to mind seeing a similar effect on brick paving at a friend’s house across town. On the next hot day, I headed over there for a second experiment, a five-minute research project. This house has a small partly-shaded brick patio. I squirted various areas of sun and shade with about a liter of 90° water, and started taking temperatures and recording results. The 120°F bricks in the sun cooled very quickly to 100°, and the effect persisted well after the surface film had disappeared, still at 100° after ten minutes and long after all visible moisture was gone. The 80°F bricks in the shade were another story, with a smaller temperature reduction to 75°. Perhaps the higher temperature and hot sun increased the evaporation rate on the sunny bricks enough to produce a much larger amount of cooling. This cooling may have been enhanced by the bricks being absorptive enough to store some water, and then release the water as the top surface became fully dry. For follow up, I hope to go back with more time and water, seeing if there is a way to use small amounts of water for evaporation to cool the bricks enough to provide durable cooling on a hot day.

A major issue with any evaporative cooling system is the raw material—water. As the climate heats up and droughts become more frequent, water use for cooling must be balanced against other needs. Our low-tech methods have the advantage of being able to use lower-quality water such as gray water (albeit with filtration). A quite different and more water-efficient cooling approach, yet still low-tech in innovative ways, was developed for the Carnegie Institute’s Department of Global Ecology building at Stanford University, a 2007 COTE Top Ten winner (architects: EHDD; mechanical design: Peter Rumsey). This building uses radiation for heat transfer instead of evaporation, thus conserving most of the water. This small research building generates cool water by circulating it over the corrugated metal roof at night. The very cold radiant temperature of outer space cools the metal, which in turn cools the water sprayed over it. A 12,000 gallon storage tank of cooled water is used during the day to cool the building via chilled beams, and works quite well on clear nights, reducing chiller loads by 90%. It works less well if clouds, pollution, or wildfire smoke block a clear view of outer space, in which case a back-up chiller kicks in.

BOOK NOOK

VISUAL DELIGHT IN ARCHITECTURE

You read our review in the summer SBSE News and now Architectural Record has chimed in with another perspective. Read their nicely illustrated review at <https://www.architectmagazine.com/design/exhibits-books-etc/visual-delight-in-architecture-review_o?utm_source=newsletter&utm_content=Article&utm_medium=email&utm_campaign=AN_0817211&>.

—Fred Tepfer

RESEARCH METHODS IN BUILDING SCIENCE AND TECHNOLOGY


—Hazem Rashed–Ali

[My students are enjoying this text as the companion for my Natural Lighting seminar.—ed.]
**SBSE PEOPLE**

- **Rajat Gupta**, Professor of Sustainable Architecture and Climate Change at Oxford Brookes University (Oxford, UK) has been appointed to the UK Government’s Department for Environment, Food and Rural Affairs (DEFRA) Air Quality Expert Group (AQEG). The group provides independent scientific advice to DEFRA on air quality issues such as emission sources and characteristics of air pollutants in the UK. Rajat is also contributing author to the recently-launched Climate Change Risk Assessment Report <https://www.ukclimaterisk.org/wp-content/uploads/2021/06/CCRA3-Chapter-5-FINAL.pdf>, with his work on summertime overheating in residential dwellings and care homes heavily cited.

- **Kyle Konis** has been named Director of the Graduate Building Science program at the USC School of Architecture.

- **Hazam Rashed–Ali** accepted the position of Associate Dean of Research and Innovation at Texas Tech University College of Architecture.

- **Michael Zaretsky** is now Architecture Department Head at UOregon.

**SBSE RETREAT 2022 PROPOSAL**

**BIOCENTRIC & BIO-INSPIRED DESIGN: BIOPHILIC, BIOMIMETIC, AND BIOCLIMATIC PERSPECTIVES**

*“Without positive benefits and associated attachment to buildings and places, people rarely exercise responsibility or stewardship to keep them in existence over the long run. Biophilic [bi-inspire] design is, thus, viewed as the largely missing link in prevailing approaches to sustainable design.”*  
Stephen R. Kellert

**Question:** How might we clarify the “foundation and first-principles” of biocentric and bio-inspired design and their intersections with sustainable and regenerative design for the benefit of humans, other species, and the planet?

**Questions and Prompts:** Contemporary themes for design? Existential threats?

- Why do biocentric and bio-inspired approaches to design education and practice matter?
- What are the potential ecological, experiential, and design benefits given current challenges?
- What are the best practices, tools, and methods?
- What are the education and practice gaps?

**Retreat Format:** Combination of on-site workshops and special sessions with SBSE members, firms, and guest experts to explore the following topics and issues to develop SBSE Shared Resources:

- Definitions and Terms: What are the definitions and distinctions between biocentric and bio-inspired theories and strategies for biophilia, biomimicry, and bioclimatic+ design?
- Design Foundations: What are biocentric and bio-inspired approaches to design? What are the underlying theories and strategies (e.g., biophilia, biomimicry, and/or bioclimatic design)?
- First Principles: What are the essential design intentions, strategies, and outcomes?
- Case Studies: What architecture and landscape case studies reveal the intersections between biocentric and bio-inspired approaches to design?
- Research and Practice: What biocentric and bio-inspired design innovations in research and/or practice could support innovations in teaching and learning?
- Other?

**Potential Outcomes:**

- Shared Resources and Benefits: Best biocentric and bio-inspired teaching and design resources (organizations, videos, films, books, design strategies, guidelines, methods, tools, etc.)
- ACSA/AIA: Intersections Conference? AIA Convention or other conferences to share?
- Local–Regional–National–International Working Groups? (e.g., Carbon Neutral Design Project)

**Proposed Location and dates:** Seattle, WA; dates to be determined.

—Mary Guzowski, Margot McDonald, Sandy Stannard

**JOB OPS**

**HARVARD**

Please see the following link for an open Academic Fellow position at the Harvard Center for Green Buildings and Cities. (Cross-posted) <https://academicpositions.harvard.edu/postings/10438>. The appointment(s) is/are expected to start in Fall 2022. Deadline for application is 1 Oct 2021.

—Holly Samuelson

**UNIVERSITY OF CALIFORNIA**

The Center for the Built Environment (CBE) is seeking an Assistant Professional Researcher to lead research on heating, ventilation, and air conditioning (HVAC) systems, building performance simulations, occupancy detection, and plug load management. For details see <https://aprecruit.berkeley.edu/JPF03038>. First review is 4 Oct and late applications accepted until 15 Nov 2021.

—Paul Raftery

**USC**

The USC School of Architecture invites applicants for adjunct faculty positions in high-performance building enclosures. See the details at <https://usccareers.usc.edu/job/los-angeles/adjunct-lecturer-in-building-enclosure-technology/1209/13511261072>. No end date posted.

—Kyle Konis
CBE Clima Tool

Select Weather File Climate Summary Temperature and Humidity Sun and Clouds Wind Psychrometric Chart Natural Ventilation Outdoor Comfort Data Explorer

Select a variable: Dry bulb temperature

Clima output: annual temperature plot for Haglund’s morphed 2080 Boston EPW file.

Research News

University of California

Clima, an online climate visualization tool, debuted in summer 2021. The primary objective of this work was to develop an easy-to-use online tool that transforms freely available weather data into an understandable set of graphics that may be tailored to the needs of the environmentally-conscious building designers and other stakeholders. CBE Clima gives easy access through an interactive map to ~30,000 high-quality weather files for building performance simulation worldwide. The data are sourced from the Department of Energy weather data and OneBuilding.org. It also allows a user to upload proprietary or other weather files. [I tried it with a future climate file in EPW format that I created for Boston and it worked without a flaw! – ed.]

Clima uses graphs produced using the open-source graphing library Plotly and served using Dash. In the calculation of many variables derived from those contained in EPW files, this tool takes advantage of the open-source library PyThermalComfort also developed by CBE.

Try Clima at <https://clima.cbe.berkeley.edu/>.

—Giovanni Betti

University of Minnesota

Mary Guzowski from the School of Architecture is collaborating on a three-year grant with Emilie Snell Rood (PI) and a team of faculty from the College of Biological Sciences and Landscape Architecture on a new grant entitled, “A Framework for Function in Biology and Bio-Inspired Design,” funded by the John Templeton Foundation. The project brings together faculty and students from the Colleges of Biological Sciences and of Design to develop, test, and apply a conceptual framework of “function, form and function, and emergent function” in biology and bio-inspired design to support engineers and designers with conceptual tools to navigate biological space. This effort is part of a larger national initiative entitled, “Agency, Directionality, and Function: Foundations for a Science of Purpose” under the leadership of Alan Love (PI) in the Department of Philosophy at the University of Minnesota.

—Mary Guzowski

Washington State University

The U.S. Department of Energy (DOE) announced nearly $83 million in funding to 44 projects that will lower Americans’ energy bills by investing in new energy-efficient building technologies, construction practices, and the U.S. buildings-sector workforce. The full list is in alphabetical order with WSU’s grant listed last. See <https://www.energy.gov/eere/buildings/articles/bto-announces-its-buildings-energy-efficiency-frontiers-innovation>. DOE’s Building Technologies Office competitively selected these projects from its Buildings Energy Efficiency Frontiers & Innovation Technologies (BENEFIT) funding opportunity announcement.

In the Advanced Workforce for Advanced Technology category, Omar Al–Hassawi (WSU) will develop a curriculum on the design and construction of high-performing, energy-efficient resid-

—Omar Al–Hassawi

Research News [cont.]

Events

2023 ARCC International Conf.

Call for Proposals to be Host Institution for ARCC 2023: Letters of Interest and Intent should be submitted by 31 Oct 2021

Each year the Architectural Research Centers Consortium holds an important international conference on architectural research, broadly and inclusively defined. ARCC conferences are held in partnership with an academic host institution. Every other year, ARCC partners with EAAE (European Association for Architectural Education) to hold a joint US–EU conference. 2023 is not a joint ARCC–EAAE year.


—Chris Jarrett

2022 ARCC International Conf.


An important part of the ARCC mission is to support the production and dissemination of graduate student research. ARCC is pleased to offer a limited number of graduate student scholarships in the amount of $500 to attend ARCC-EAAE 2022.


The application deadline is 15 Nov 2021.

—Adil Sharag–Eldin

Re search News [cont.]

• continued next column
**STUFF FOR YOU**

### IEQ TOOLS

When we created the Building Science Lab to Advance Teaching (BUILT) at Portland State, we tried out a number of off-the-shelf IEQ tools to find those that could be used readily by first- and second-year students. You can see a complete list on our web site <http://www.builtpdx.org>. Here’s a direct link to the equipment page <https://buildingsciencelab.weebly.com/field-data-collection.html>.

There are HOBO dataloggers for the more advanced students, but we found that the Vernier LabQuest system was awesome for introducing students (and faculty) to collecting IEQ data using a variety of plug and play sensors (including CO₂). The system is great as it shows data real time and can act as a logger. The best part is they have wifi and allow you to email data files directly from the device. The sensors are high enough quality for student research projects. The web site contains “quick sheets” that we developed to help students and faculty checking out the tools to get them up and running as fast as possible.

We also worked with faculty to develop an exercise where students build Arduino-based CO₂ sensors—that project isn’t on the web site, but if you are interested, I can connect you with the folks who worked on it.

—Corey Gracie-Griffin

### CBE EVENT AND SUMMARY

The free, virtual Symposium on Research and Design Related to Window Views will be 13 Oct 9am-12:30pm. Details at <https://cbe.berkeley.edu/event/symposium-research-and-design-practice-window-views/>.

In March, we published a summary of 20 years of CBE Occupant Survey <https://cbe.berkeley.edu/centerline/lessons-learned-from-20-years-of-cbe-occupant-surveys/>. The graphical abstract and this short summary may also be of interest.

—Stephano Shiavon

**REYNOLDS SYMPOSIUM 2022**

### AALTO : LIGHT

The year 2020 marked the 50th anniversary of the completion of Finnish architect Alvar Aalto’s Library at Mount Angel Abbey. After postponing our planned event due to coronavirus, we will be celebrating this milestone, honoring the beautiful and impactful ways that Aalto made daylighting an integral part of his designs, at the 2022 Reynolds Symposium, Aalto : Light, in Portland, OR, and at nearby Mt. Angel Abbey Library, 21–22 May 2022.

Aalto has been named “a master of light.” His architecture is among the most well-regarded of the mid-twentieth century for his innovative use of daylight, an integral part of his architectural language. While the majority of his built work is in Finland and northern Europe, two of his buildings are located in the United States—in Cambridge, MA, at MIT and in Oregon, at Mt. Angel Abbey. During his career, Aalto designed 10 libraries and a number of reading spaces within other buildings, from Viipuri Library, in Vyborg, Russia, in 1935 to Mt. Angel Library in 1970. Arguably the Mt. Angel library is his best, and it is certainly the most sophisticated in terms of its luminous design.

The library at Mt. Angel has recently undergone repairs of its skylight and is once again in pristine condition. In celebration of this anniversary and of the role that this magnificently daylighted building has played in the lives of architecture students and faculty at the University of Oregon, and beyond, the 4th John Reynolds Symposium will focus on Aalto and light in architecture.

The Symposium will launch on Friday with an evening keynote and reception in Portland at the White Stag Building, and run the full day on Saturday at the Mount Angel Abbey Library, Mt. Angel, OR.

**Speakers include:**

- **Juhani Pallasmaa**, one of Finland’s foremost architects and architectural theorists, has taught at numerous universities in Finland and in the U.S. He is author of two dozen books and over 300 essays in 30 languages. He has frequently written on and lectured about the work of Alvar Aalto.

- **Tommi Lindh**, the managing director of the Alvar Aalto Foundation, served as architect and keeper of antiquities at the Finnish National Board of Antiquities from 1998 to 2010. He has also had his own architectural practice.

- **Sirkkaliisa and Jari Jetsonen** have collaborated on numerous books and exhibitions on the architecture of Aalto. Their most recent book, *Alvar Aalto Libraries*, published in 2018, covers all of Aalto’s libraries and other book spaces such as the Academic Bookstore in Helsinki. Sirkkaliisa is an architect who teaches at Aalto University and at Washington University. She works at the Finnish National Board of Antiquities. Jari is a photographer specializing in architectural works.

For full information see <https://reynoldssymposium.uoregon.edu>.

—Virginia Cartwright, Nancy Cheng, John Reynolds, Philip Speranza
IBUILD FELLOWSHIP

The IBUILD: Innovation in Buildings Graduate Research Fellowship will begin accepting new applications starting on 22 Sep 2021. The fellowship, now in its second year, is open to master’s and doctoral students researching in the area of building sciences. The broad goal is to increase the presence of diverse perspectives supporting the larger mission of building energy efficiency and building decarbonization. Of particular interest in this year’s solicitation are students working on deployment and market barriers research as well as those conducting collaborative research to increase market adoption around building energy efficiency and building decarbonization technologies.

IBUILD Fellows receive a competitive financial award package supporting the proposed research at their home institution and participate in professional development activities that provide access to a network of mentors and potential internships with national laboratories or industry. The IBUILD Fellowship is renewable for up to 3 years.

The application window will close on 1 Dec 2021, with selected Fellows beginning their appointments in Summer/Fall 2022.


VENICE BIENNALE IN REVIEW

HOW WILL WE LIVE TOGETHER?

I cannot state strongly enough how fitting the theme of this year’s Architecture Biennale felt during the pandemic. I was able to attend during a moment this summer, when there was hope that COVID-19 might be behind us. Flying to Frankfurt, when the U.S. was not a high-risk country, the airline’s diligent check of vaccination cards and test results with no further entry requirements felt like a luxury. Masks became a constant feature, not an issue of political dispute. How wonderful to step on the vaporetto without the expected long line. The pandemic allowed Venice to reconsider its attitude toward cruise ships and now has banned them forever.

How will we live together? We should accept certain rules for the greater public good. It worked in Venice, it worked in Berlin, where I also hung out. There I was (after 15 months in my house in Ames) having my temperature checked at the Arsenale entrance, and off into the exhibition. What did I see in 2 days? What did I remember? What impressed?—a model of the Alps melting, a large timber structure to bring indigenous and colonial Chileans together, a structure made from formerly unknown sponge material that inspired housing projects from the global south, doors as symbols of the soul, small fragile tree saplings that were supposed to become a forest after the exhibition. Lots has already been said about the U.S. pavilion, lots has been criticized, but the huge 2x4 timber frame structure that closed up its neoclassical courtyard gave a rather impressive new view of how Americans live together.

My favorite pavilion staged the environment in a phenomenological way—the Danish pavilion’s water was collected on the roof, channeled in multiple aesthetically interesting ways into the interior of the pavilion, herbs were grown in the windows and dried hanging from the ceiling, tea was served, random visitors shared a cup of tea in a breezy porch at social distance of course. The pavilion of the Nordic countries was converted into a co-housing space where visitors could test out how close they would want to live with others. Children played.

Climate change, resources, resilience, materials, how to live more in harmony with nature were large reoccurring themes. Architects and planners seem to finally address the climate crisis, not a minute too late.

—Ulrike Passe

MORE STUFF

ARCC 2021 PROCEEDINGS

The ARCC Board of Directors is pleased to present a no-cost, digital version of the Proceedings of the ARCC 2021 Conference, hosted by the University of Arizona, 7-10 Apr 2021 at <http://www.arcc-arch.org/arcc-2021-proceedings-performative-environments-hosted-by-the-university-of-arizona/>.

—ARCC Board

BIRD-FRIENDLY GLASS MANUAL

Bird-friendly building laws in Washington State, Oregon, and California are wide-ranging and evolving. Architects need to be up-to-date with these laws when planning new projects. The AviProtek® Pacific Coast e-book of bird-friendly glass was developed to be your go-to reference for project design decisions under current regulations in the Pacific Coast states.

You can get a free digital copy at <https://www.walkerglass.com/aviprotek_ebook/>.

—Walker Glass

VENICE BIENNALE [CONT.]

climate change, resources, resilience, materials, how to live more in harmony with nature were large reoccurring themes. Architects and planners seem to finally address the climate crisis, not a minute too late.

—Ulrike Passe
ASES SOLAR 2022

SAVE THE DATE

ASES SOLAR 2022
Energy Transition with Economic Justice
In Partnership with NMSEA
June 21-24, 2022 | Albuquerque, NM

ASES is getting ready for the 51st Annual National Solar Conference, SOLAR 2022: Energy Transition with Economic Justice. This conference is in partnership with the New Mexico Solar Energy Association (NMSEA) who will be celebrating their 50th anniversary at the event.

SOLAR 2022 will offer many opportunities for participation through special events and programs, plus workshops and courses. Join us in Albuquerque, NM 21–24 Jun 2022! 🌟

—ASES

ED MAZRIA AWARDED 2021 AIA GOLD MEDAL

Ed Mazria responded to his Gold Medal in predictable fashion—with a challenge to his fellow architects:

“These are extraordinary times. The awarding of the AIA Gold Medal this year signals a break with the past and looks to the immediate future where architecture, planning, and design confront and prioritize practices that address the most significant crisis of our time: climate change. It portends an architecture not just on the Earth, but of the Earth, manifesting in unprecedented design opportunities and possibilities that dramatically expand architecture’s scope and unique role in the world.

“This particular award reexamines architecture and brings with it a serious discussion and a new way of thinking, looking at the global picture and major challenges we face, while mobilizing and motivating the profession to take actions to ensure we continue to coexist with the natural and biological world. The time scales to act are short, meaning how quickly we transform as a profession may very well determine the sustainability of the planet.

“The 2021 Gold Medal challenges us to achieve that which will be our most important legacy.” 🌍

—Ed Mazria in May/June Architect magazine, p. 89

SBSE CALENDAR [COVID-19 RESTRICTIONS MAY CAUSE CANCELLATIONS]

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<th>Year</th>
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<td>Oct 24-26</td>
<td>CATE 2021 Conf/virtual</td>
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<td>Oct 27-29</td>
<td>Built Environment Summit/London, UK</td>
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<td>May 21-22</td>
<td>Reynolds Symp 2022/Portland and Mt. Angel, OR, USA (new date)</td>
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<td>Jun 21-24</td>
<td>ASES Solar 2022/Albuquerque, NM, USA</td>
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WINTER ISSUE SUBMITTAL DEADLINE—DEC 1

SBSE News
c/o Bruce Haglund
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To: SBSE Members & Friends
Planet-wide

UO brags up Mike Z. at <https://archenvironment.uoregon.edu/school-architecture-environment-welcomes-michael-zaretsky-new-department-architecture-head>.