



Industry Advisory Board Meeting: October 18-19, 2018

Thursday, October 18: Plenary Session Pauley Ballroom, UC Berkeley

*Open to Industry Partners (seven per supporting firm or team; three for small business partners),
Invited Research Affiliates, and Guests*

- 8:30 am Continental breakfast and registration
- 9:00 am Announcements and introductions
- 9:30 am Director's Message
- 9:40 am **RESEARCH PRESENTATIONS AND DISCUSSION**
1. **Fans Are Cool...But Exactly How Cool?** (*Paul Raftery and Dana Miller*)
Design tool development for ceiling fans based on results from lab and field studies, and recent updates on field study interventions for the EPIC Fan project.
 2. **Rad Tool** (*Carlos Duarte*)
An interactive web-based tool for early stage design of high-thermal mass radiant systems.
 3. **Artificial Intelligence for Efficient Thermal Comfort Management** (*Ali Ghahramani*)
Review of current applications of intelligent systems for various building types, and proposed improvements to AI devices.
- 10:40 am Morning Break
- 11:00am **RESEARCH PRESENTATIONS AND DISCUSSION CONTINUED**
4. **Cost Comparison of HVAC Systems** (*Dove Feng, Taylor Engineering*)
Comparison of construction and energy costs for radiant versus variable air volume (VAV) systems.
- 11:25 am **LIGHTNING SESSIONS FIVE-MINUTE PROJECT UPDATES AND SUMMARY RESULTS**
5. **A Conversation on Climate Change Adaptation in the Built Environment** (*Arfa Aijazi*)
Practitioners weigh in on climate change, and discuss recently published results.

- 6. **ASHRAE Global Thermal Comfort Database II** (*Tom Parkinson*)
A demonstration of two new interactive online tools to encourage design of climate-responsive, comfortable, and low energy buildings.
 - 7. **Is the Reading on Your Thermostat Fake News?** (*Megan Dawe*)
Investigating the relationship of mean radiant temperature and air temperature using a large dataset of measurements from buildings in operation.
 - 8. **Modern Web-Based Application for Visualizing Climate Data** (*Noah Pitts*)
Learn how to use a new web tool for creating, editing, and exporting climate data charts and visualizations.
- 11:50 am** **NEW PARTNER PRESENTATIONS:** Introductions from our newest industry partners: PAE Engineers, RMW Architecture and Interiors, and Sanken.
- 12:10 pm** Lunch
- 1:10 pm** **KEYNOTE: Two Degrees: A Crisis of Efficiency: From Zero Carbon Buildings to Climate Positive Communities**
Cole Roberts, Associate Principal and Americas Energy Business Leader at Arup
- 2:00 pm** **BREAKOUT SESSION: Roundtable Research Discussions**
CBE team members and industry partners will moderate roundtable discussions on research topics for feedback and discussion of potential resources and collaborations.
- 2:50 pm** Afternoon Break
- 3:15 pm** **NEW PARTNER PRESENTATIONS:** Introductions from our newest industry partners: SmithGroup and TEECOM.
- 3:30 pm** **RESEARCH PRESENTATIONS AND DISCUSSION CONTINUED**
- 9. **Psychology of Space** (*Lindsay Graham*)
Occupant survey updates and new research directions.
 - 10. **Are Radiant Systems Well-Suited for Natural Ventilation Night Pre-Cooling?** (*Jonathan Woolley*)
Results from comparison experiments of all air and radiant systems for typical conditions at the FLEXLAB facility.
 - 11. **Assessing Visual Comfort** (*Luis Santos*)
A simulation-based approach for early to intermediary design phases.
 - 12. **Comfort Program Overview** (*Edward Arens and Maohui Luo*)
Work focused on personal and thermal comfort, automotive research, and updates to standards.
- 5:00 pm** **ADJOURN PLENARY SESSION**
- 5:30 pm** **HAPPY HOUR AND DINNER:** Berkeley City Club, 2315 Durant Avenue

Friday, October 19: Executive Session
David Brower Center, 2150 Allston Way, Berkeley

*Open to Primary Industry Partner Representatives
(Two per supporting firm or team; one for small business partners)*

- 8:00 am** Continental breakfast
- 8:15 am** Introductions and partner impressions
- 9:00 am** Director's Report: Edward Arens
- 9:15 am** **ADVISORY BOARD MEETING**
Moderators: CBE Partner Chair, Gwelen Paliaga; and CBE Partner Vice Chair, Andrew Reilman
Review new research ideas for FY 2019-20
- 10:30 am** Break
- 10:45 am** **ADVISORY BOARD MEETING CONTINUED**
Review new research ideas for FY 2019-20 (continued)
Partner discussion
- 11:45 am** Confirm next Industry Advisory Board Conference: April 24-26, 2019
Closing comments
- 12:00 pm** **ADJOURN EXECUTIVE SESSION**